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ABSTRACT

This dissertation focuses on digital platforms and apps connecting pools of workers, employers and clients instantaneously. These working arrangements call into question the suitability and effectiveness of the current employment legislation. The emerging literature reveals pervasive commands, reinforced surveillance, constant monitoring, arbitrary disciplinary action and very little or no workers' discretion in deciding how to complete a task. Standard methods of social science research and legal analysis are applied in the investigation, accompanied by a strong interdisciplinary approach. With a law-in-context methodology, this study revolves around four main sections, each of them looking at platform-mediated work from a particular angle.

After describing the theoretical antecedents of hierarchical outsourcing and relational contracts, SECTION 1 contributes to the literature on the "nature" of the "non-standard firm" by applying the economic analysis of transaction costs. Building on models on the disarticulation of the employing entity and the pulverisation of work-related responsibilities, this chapter conceptualises the prototypical business model of these new economic and social actors. The expression "Cerberus firm" is used to define a network company built as an online middleman that reduces information asymmetries, minimises organisational costs and engages a pool of providers (virtually recruited, effectively directed and persistently disciplined) through rapid transactions on the market with an authoritative attitude.

SECTION 2 carries out a critical scrutiny of two myths: technological displacement and the crisis of the standard employment relationship. This assessment also requires looking into the contractual arrangements. The typologies of employment generated by the on-demand economy are part of a broader class of non-standard forms of work emerging from digitalisation. These organisational patterns manifestly exclude workers from employment protections and social security benefits. Accordingly, a picture of the spread of precarious employment is drawn, by taking into account as many alternative working formats as possible including self-employment work, economically dependent self-employment and disguised employment relationship. This review concludes by representing the employment relationship as a resilient and flexible tool, capable of adapting to the incessantly changing nature of production systems.

SECTION 3 maps a kaleidoscopic array of app-distributed arrangements, clustering the findings into three main subsets (passenger transport services, professional crowdsourcing, on-demand work at the client's premises). In doing so, the relationship between a worker and the platform is assessed along five main critical stages of the process, starting with the registration and ending with the payment. Several initiatives aimed at promoting fair and decent work in the collaborative economy are scrutinised, namely (i) the European Commission's Communication 356/2016, (ii) the principles enshrined in the European Pillar of Social Rights, and (iii) the ruling by the European Court of Justice on the nature of the service provided by Uber. Furthermore, existing regulatory schemes, ranging from the Directives on atypical employment to other casual work templates, are assessed to test their resilience against this background.

SECTION 4 investigates the legal status of platform-coordinated workers by considering what is at stake in pending litigations. In the end, this dissertation intends to "normalise" the discourses surrounding the digital transformation of work, by also contrasting the sense that new realities of work have outgrown legal concepts. This thesis argues that, before exploring captivating hypotheses for reforms, lawyers and scholars must seek to square this fast-evolving phenomenon with the existing legal framework. There is indeed the need for a balance between safeguarding social rights and unleashing authentic societal improvements. Several available legal notions and tools, which can adequately address this challenge, are discussed with a view of advancing a tentative regulative framework of platform-mediated labour.

*To Paola, Irene and Claudio Regeni.
In memory of Giulio,
"more alive than most anyone".*

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SEIZING THE MOMENT, GAINING MOMENTUM: THE IMPACT OF DIGITAL TRANSFORMATION ON LABOUR LAW

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1. Background, research hypothesis and methodology.

If the future of work is uncertain or even unpredictable, understanding its present can be far more stimulating. As catalysts of change and challenges, technology-driven innovations currently pervade all facets of society, giving rise to new jobs in rapidly rising industries or reinventing more traditional occupations, while making other tasks automatable or even redundant¹. Concomitantly, labour law has been denoted as the “frontier area” in which transformational new realities have revealed their fiercest impact². The importance of this aspect becomes crystal clear if the advent of mechanisation, at first, digitisation, subsequently, and artificial intelligence, lastly, is taken into account. Shifts occurring in the labour market may profoundly differ in their legal implications, yet most of the time can be disentangled by looking at the interplay between new organisational patterns, regulatory frameworks, contractual arrangements and, not least, working conditions.

This research will focus on emerging digital platforms that enable the matching of labour demand and supply, through highly efficient infrastructure connecting pools of workers, employers and clients instantaneously. Without making too broad a generalisation, the dominant business model is organised by fragmenting jobs into several separate tasks, commonly referred to as “gigs”, which can be easily parcelled out to individuals just when they are requested. It can therefore be argued that casual and unstable positions are prevalent, personal outsourcing is facilitated thanks to low transaction costs, and contracted out work is the norm. As a result, firms engage with “providers”, arguably and invariably classified as self-employed, on a hyper-volatile basis. Moreover, many of these self-proclaimed intermediaries exert some degree of managerial powers, albeit in a more sophisticated form, over the transacted activity, while avoiding the obligations of direct employment.

¹ See generally VALENDUC G. and VENDRAMIN P. (2017), *Digitalisation, between disruption and evolution in Transfer: European Review of Labour and Research*, 23(2), pp. 121-134.

² D'ANTONA M. (1998), *Diritto del lavoro di fine secolo: una crisi di identità* in *Riv. giur. lav.*, pp. 311-331.

The very core of this research will be the role played by electronically transmittable or locally delivered labour. Fuelled by “conflictual rhetoric and public controversies, legal disputes, and even violent protests”³, some old problems have gained new prominence in times of digital transformation of work. The number of entrepreneurial initiatives adopting a decentralised and coordinated network of service production and distribution is on the rise. More interestingly, by carving out a niche of the market, pioneers such as the ride-hailing company *Uber*, the on-demand delivery multinationals *Deliveroo* and *Foodora*, the cleaning services firm *Taskrabbit* or the professional freelancing dispatcher *UpWork* serve as emblematic prototypes of broader trends that are reshaping the world of work. Bold strokes are not appropriate for such complex issues, however literature identifies a number of concomitant causes. These practices take shape in tandem with – and are often made possible by the joint effect of – the tertiarisation of economy, the casualisation and flexibilisation of work, the spread of ubiquitous devices and porous workplaces, let alone shifts in lifestyle and generational preferences. Such far-reaching vicissitudes hold great perils, but also huge potential. Conceivably, it is nearly impossible to harness these global forces influencing management practices, all the more so because “ultimately the choice of contractual arrangement rests with the firm”⁴.

In the midst of these novel developments, anyway, the discussion seems to be dominated by two easily recognisable fronts: techno-fantasists who foretell a “digital Eldorado” offering agile opportunities for everyone, on the one side, and sceptical analysts who depict a soon-to-be “workless society” due to mass (tech) displacement, on the other. This research will strive to move beyond these polarising visions, by debunking several myths. In particular, it cannot be underestimated that the lack of compliance with labour-related, fiscal and social security duties constitutes platforms’ main competitive advantage vis-à-vis their competitors. This regulatory arbitrage results in an aggravation of existing conceptual tension and, what is worse, in an exacerbation of social vulnerabilities as platform workers have very limited access to labour protection. Thus, such hybrid arrangements call into question the suitability and effectiveness of the current employment legislation. There is indeed the need for a balance between safeguarding social rights and unleashing authentic societal improvements.

³ CODAGNONE C., BIAGI F. and ABADIE F. (2016), *The Passions and the Interests: Unpacking the ‘Sharing Economy’*, JRC Science Policy Report, p. 6.

⁴ BERG J., ALEKSYNKA M., DE STEFANO V. and HUMBLET M. (forthcoming), *Non-standard employment around the world: regulatory answers to face its challenges* in *Bulletin of Comparative Industrial Relations*.

To sum it up, if the technology is (apparently or genuinely) new, the challenges it presents are not completely so. First and foremost, since the late 1990s, a great number of vertically disintegrated firms using alternatively classified or self-employed workers have been established, not only in the low-income labour market, “a site of intensive regulatory experimentation and reinvention”⁵. At the same time, the rise of platform-mediated labour threatens the income security and welfare framework where social security is provided mainly through employment in “standard” jobs. Seen as a part of a universal shift of work towards less secure, precarious and even exploitative working arrangements, the rapid emergence of platform companies suggests that the model may be capable of adapting itself to a wider range of markets and sectors. Whatever the future of work holds, atypical work formats seem to be here to stay and transform the labour market, perhaps irreversibly. As can be undoubtedly proven, these phenomena embody systemic change. Therefore, the “platformisation of work” should not be underestimated as it raises the possibility of asset-light intermediaries ending up in cannibalising competing payroll businesses and waged standard employment in many industries. Tellingly, this leads to the growing visibility of several legal dilemmas regarding the demarcation of the relevant market, the nature of services provided, the proper classification of workers and the level of protection afforded.

Existing literature reveals pervasive commands, reinforced surveillance, constant monitoring, arbitrary disciplinary action and very little or no workers’ discretion in deciding how to complete a task. The model does not contain any entitlement such as overtime, paid holiday leave, maternity leave, sickness payments and statutory minimum wages. Furthermore, workers are excluded from fundamental principles and rights at work such as freedom of association, collective bargaining or protection against discrimination. At the moment, platforms are using legal flaws to misclassify workers. As a result, advantages such as job market activation, enhanced flexibility and frictionless mobility are coupled with harsh working conditions, income insecurity, less work-related benefits. Digital matching firms, paraded as icons of the *new “new economy”*, claim to be operating in a legal void and to be exempt from the current normative framework. Conversely, it is worth emphasising that, despite all these problems, many existing legal notions and tools can be used to adequately regulate such arrangements.

⁵ PECK J. and THEODORE N. (2012), *Politicizing Contingent Work: Countering Neoliberal Labor Market Regulation... from the Bottom Up?* in *South Atlantic Quarterly*, 111(4), pp. 741-761.

The reasons for this study, however, go deeper as gig-work is just a promising or rather worrisome reminder of what the world of work may resemble in the next decades. The intention is also to place a set of massive transformations in a broader picture, by contrasting the assertion that current changes are unprecedented. In brief, this investigation will offer both a compelling legal conceptualisation of platform-mediated work and a detailed analysis of the most heated legal issues concerning particularly the nature of the employment relationship. Concomitantly, existing normative schemes will be reviewed in order to test their resilience.

Too often, research on digitally distributed work tends to rely on popular perceptions and anecdotal evidence rather than systematic scrutiny. To gain a better understanding of its implications, standard methods of social science research and legal analysis will be combined to outline the regulatory and contractual templates, which can easily accommodate modern organisational patterns. The research is also based on a far-reaching review of the most up-to-date and significant literature, including policy reports, official positions and soft law measures, litigations, actions by labour or sectoral inspectorates, and some references to media outlet article as the issue is very much contemporary. In order to cover the vastest range of questions possible, this work is predominantly based on a theoretical methodology and accompanied by a strong interdisciplinary descriptive approach, also encompassing sociological studies. In certain respects, this doctoral thesis falls within the ambit of comparative labour law, as much can be gained from adopting a cross-State perspective. The geographic scope of the research is EU Member States with comparison to the United States when appropriate.

1.1. What we talk about when we talk about “platform-mediated labour”.

As said above, this research focuses on non-standard forms of employment (NSFE) facilitated by online platforms, in an attempt to demystify both deceitful alarmism and apologetic narratives. While constituting the backbone of a new paradigm, the worldwide phenomenon, which is meant to demarcate, is still slow to emerge from ambiguity. Despite precedent detailed analyses on alternative business strategies, something different is happening at a frantic pace and must be investigated in depth. Yet one of the key challenges, maybe the most important one, to the research on this topic is the lack of a common understanding and conceptualisation. Given the novelty and the constant change of this economic segment, there is not a unique and official classification. The preliminary question to be addressed is thus the following: how to define platform-mediated labour?

To begin with, when it comes to describing digitally enabled forms of work in the variously named “collaborative”, “sharing”, “on-demand”, “platform” economy or even “crowd-based capitalism”⁶, anyone would struggle⁷. To further complicate matters, buzzwords never come alone. However, this consumer-centric vocabulary should be challenged for several reasons. On the one hand, the very concept behind this unbelievably long catalogue of definitions seems to be rather imprecise⁸, on the other, stretching labels to one’s advantage has become common practice⁹. For the sake of simplicity, “platform-mediated labour” may represent a quite precise definition. Indeed, focusing on the distribution channel, which is not a legal criterion for distinction, is convenient for academic reasons¹⁰. At the same time, it has to be acknowledged that the label proposed covers various kinds of economic activities that might have widely different normative basis and social implications, while sharing a significant number of features. Therefore, referring to platform-mediated labour as to a monolithic category causes many commentators and practitioners to be

⁶ SUNDARARAJAN A. (2017), *The Collaborative Economy: Socioeconomic, Regulatory and Policy Issues*, Directorate General for Internal Policies Policy Department, Economic and Scientific Policy, Brussels, p. 11 (proposing the use of “crowd-based capitalism” as “the most precise label for this subject matter”).

⁷ Whilst representing seducing catchphrases, these formulas have reached a large consensus and they are therefore well suited to indicate this economic segment. See also SCHOR J. (2016), *Debating the sharing economy* in *Journal of Self-Governance & Management Economics*, 4(3), p. 9 (arguing that “coming up with a solid definition [...] is nearly impossible. There is great diversity among activities as well as baffling boundaries drawn by participants”). The collaborative economy is also known in everyday parlance as the “gig-economy”, evoking artists who jump from a concert to another. See also TULLINI P. (2016), *Economia digitale e lavoro non-standard* in *Labour & Law Issues*, 2(2), p. 3 (noting a sort of “taste for excess of semantic equivalents”). The sharing economy “surfaced in the public consciousness shortly after the financial crisis of 2007” according to HUWS U. (2017), *Where did online platforms come from? The virtualization of work organization and the new policy challenges it raises* in MEIL P. and KIROV V. (Eds.), *Policy Implications of Virtual Work*, London, p. 29. For a complete overview of definitions and trends, see SELLONI D. (2017), *New Forms of Economies: Sharing Economy, Collaborative Consumption, Peer-to-Peer Economy* in EAD., *CoDesign for Public-Interest Services*, Milano, p. 15.

⁸ STEWART A. and STANFORD J. (2017), *Regulating work in the gig economy: What are the options?* in *The Economic and Labour Relations Review*, 28(3), pp. 420-437.

⁹ Each name derives from some of the perceived characteristics. The list of definitions grows day by day, together with the number of businesses and people involved in the sector. In this dissertation, notwithstanding the nuances of meanings, the above definitions will be used interchangeably.

¹⁰ VOZA R. (2017), *Il lavoro reso mediante piattaforme digitali tra qualificazione e regolazione* in *Riv. giur. lav.*, 2, p. 72. Many commentators have tried to demonstrate how the “tent definition” is being used to lump together very different arrangements for convenient expositive reasons. See VALENDUC G. and VENDRAMIN P. (1999), *Technology-induced Atypical Work-Forms, Working document for the STOA Panel*, p. 5 (arguing that “the unifying theme [...] is the role of information and communication technology (ICT) in stimulating and supporting change”). See also KENNEY M. and ZYSMAN J. (2016), *The rise of the Platform Economy in Issues in Science and Technology*, 32(3), pp. 61-69.

confused about what exactly is being described or studied. Since this topic is going viral, it is worthwhile to recognise boundaries and demarcate a reasoned perimeter for theoretical, regulatory and business purposes. To cut to the chase, and renouncing to the utopia of crafting a definition which everybody agrees with, a far-reaching notion could be constructed by borrowing the European Commission's definition which brings platforms at the core of the debate on the future of work:

“business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods and services often provided by private individuals”¹¹.

It should quickly become evident, though, that the apparently altruistic aspiration – suggested by a strict interpretation of the words “collaborative” or “sharing” – has made room for purely commercial and lucrative arrangements involving the provision of labour¹². More importantly, not all workers address platforms for amateur purposes; on the contrary, they often rely on these intermediaries for their principal source of income, according to a survey carried out on crowd-workers

¹¹ See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A European Agenda for the Collaborative Economy, COM/2016/0356 final (hereinafter “the Communication”).

¹² See RANCHORDÁS S. (2017), *On Sharing and Quasi-Sharing: The Tension Between Sharing-Economy Practices, Public Policy and Regulation* in ALBINSSON P. A. and PERERA Y. (Eds.), *The Sharing Economy: Possibilities, Challenges, and the Way Forward*, Santa Barbara, CA. See also CHERRY M. A. (2016). *Beyond Misclassification: The Digital Transformation of Work in Comp. Lab. L. & Pol'y J.*, 37(3), p. 587 (arguing that “many of the ‘sharing’ companies of yesteryear have moved away from ‘sharing’ and in fact are fully for-profit businesses pursuing a shareholder value maximization model at all costs, often driven by the demands of their venture capitalist investors”). It is “a misnomer”, as in reality nothing is shared, according to ROGERS B. (2015), *The social costs of Uber* in *U. Chi. L. Rev. Dialogue*, 82(1), p. 87. Researches have long witnessed a trend from acquiring to accessing, even in the case of labour. See for instance CEFKIN M., ANYA O. and MOORE R. (2014), *A perfect storm? Reimagining work in the era of the end of the job* in *Ethnographic Praxis in Industry Conference Proceedings*, 1, p. 4. Although the plethora of online platforms define themselves as a part of this trend, the label of “sharing economy” is now disgraced for misrepresenting the reality. See CODAGNONE C., BIAGI F. and ABADIE F. (2016), *The Passions and the Interests: Unpacking the Sharing Economy*, JRC Science for Policy Report, Luxembourg. Regrettably, public debate “has tended to agglomerate around a small number of commercially successful platforms, such as *AirBnB* and *Uber*”, thus exaggerating certain issues not applicable to smaller, often local, services. See NEWLANDS G., LUTZ C. and FIESELER C. (2017), *Power in the Sharing Economy. Report from the EU H2020 Research Project Ps2Share: Participation, Privacy, and Power in the Sharing Economy*. This dominant view should not lead to neglect the existence of an area of true sharing. It has to be acknowledged that non-commercial platforms are re-emerging as a part of an alternative, informal local urban economy. See also STROWEL A. and VERGOTE W. (2016), *Digital Platforms: to regulate or not to regulate?*, Document for the EU Internal Market Sub-Committee, House of Lords, available at <https://goo.gl/av8hh1> (arguing that “myriad of [authentic] community exchanges [...] have developed at local level”).

using two of the main operators¹³. Nevertheless, it is contentious whether contracts in the collaborative economy are concluded in order to alleviate the high rate of unemployment or rather because of the total absence of more stable and permanent alternatives. It is beyond the scope of this research to speculate on such wider questions. In considering the background, scholarship has traced three main causes explaining the rise of the platform-facilitated workforce: (i) the need to cope with short-run fluctuations on the demand side, (ii) the desire to reduce labour costs¹⁴, (iii) the urgency to meet market pressures on short-term results and efficiency¹⁵.

Clearing up any misunderstanding on this issue, it is worth emphasising the professional nature of the performances rendered through labour platforms. Building on a strong sense of denial, there has been a sustained attempt to depict gig work as something related to generosity or rather volunteerism¹⁶, thus excluded from the scope of labour law. Irrespective of the reason behind the decision to engage with a platform or app, the accomplishment of contingent tasks shall not be considered merely as an act of good neighbourly relations or a spare-time activity. Neither such motivations should have any impact on workers' treatment or on their actual working conditions.

¹³ A relatively noteworthy part of them are permanent employees, engaging in these activities on top of their principal employment. In light of this, platform companies try to sketch an ideal person who loves this kind of working structure, in accordance with his generational or even societal values. This narrative has been proved wrong. See BERG J. (2016), *Income Security in the On-Demand Economy: Findings and Policy Lessons from a Survey of Crowdworkers* in *Comp. Lab. L. & Pol'y J.*, 37(3), pp. 543-576 (reporting the main results of a survey which shows that almost 40% of respondents – out of a sample of crowdworkers on the *Amazon Mechanical Turk* and on *Crowdfunder* – rely on platforms as their principal source of sustenance). Anyway, as rightly pointed out, the fact that a type of activity might match some lifestyle preferences or personality traits has little to do with whether or not that activity is work. Moreover, as observed by Berg, the claim about workers using platforms for “pin money” is a revival of the rhetoric used few decades ago when the new temporary agency industry in the US was depicted as “employing just middle class wives killing time” and earning supplementary income. See also CODAGNONE C., ABADIE F. and BIAGI F. (2016), *The Future of Work in the 'Sharing Economy'. Market Efficiency and Equitable. Opportunities or Unfair Precarisation?*, JRC Science for Policy Report, Luxembourg, p. 13.

¹⁴ See, for instance, WEIL D. (2015), *Afterword: Learning from a Fissured World-Reflections on International Essays regarding the Fissured Workplace* in *Comp. Lab. L. & Pol'y J.*, 37(1), p. 211 (arguing that “labor cost are often the first place employers look to reduce expenses to remain competitive, even at the cost of compliance”).

¹⁵ DOKKA J., MUNFORD M. and SCHANZENBACH D. W. (2015), *Workers and the Online Gig Economy*, The Hamilton Project.

¹⁶ For a dual definition of “free labour”, see ARMANO E. and MURGIA A. (2017), *Introduzione* in ARMANO E., MURGIA A. and TELI M. (Eds.), *Platform Capitalism e confini del lavoro negli spazi digitali*, Sesto San Giovanni (MI), pp. 7-16.

However, for the purpose of this work, the scope of the abovementioned formula used in the European Commission's Communication has to be restricted by focusing exclusively on those platforms¹⁷:

(1) that work as digital marketplaces for non-standard and contingent work; (2) where services of various nature are produced using preponderantly the labour factor (as opposed to selling goods or renting property or a car); (3) where labour (i.e. the produced services) is exchanged for money; (4) where the matching is digitally mediated and administered although performance and delivery of labour can be electronically transmitted or be physical; (5) where the allocation of labour and money is determined by a collection of buyers and sellers operating within a price system.

It follows that the labour platforms of current interest are those engaging in temporary relationships and coordinating the exchange between the worker and the requester of such odd job, to be distributed by open-call rather than by job role assignment, both online and offline. As further clarified in Part 3, the specific conceptualisation of platform-mediated labour distinguishing between "crowdworking" and "work on-demand via app" determines the scope of the research.

With this working definition in mind, three groups of economic actors involved in this subset of transactions can be identified, namely (i) workers or "providers" (they can be private individuals or professional services providers); (ii) clients or "requesters" (they can be individuals, families or businesses); and (iii) digitally enabled firms that bring together demand and supply of labour and exercise a certain degree of control and organisation over the material execution of jobs, as it will be demonstrated at a later stage¹⁸. In theory at least, these contractual arrangements could allow more freedom and better-quality work-life balance. Whilst creating potentially new opportunities for workers (the so-called labour market activation effect)¹⁹, platform-based labour arrangements may determine serious

¹⁷ CODAGNONE C., ABADIE F. and BIAGI F. (2016), *The Future of Work in the 'Sharing Economy'. Market Efficiency and Equitable. Opportunities or Unfair Precarisation?*, op. cit., p. 17. See also HORTON J. J. (2010), *Online Labor Markets* in SABERI A. (Ed.), *Internet and Network Economics*, Stanford, CA, pp. 515-522.

¹⁸ See SMORTO G. (2017), *Critical assessment of European Agenda for the collaborative economy*, Directorate General For Internal Policies, In-Depth Analysis, available at: <https://goo.gl/FXnZkm>.

¹⁹ See SÖDERQVIST F. (2017), *A Nordic approach to regulating intermediary online labour platforms in Transfer: European Review of Labour and Research*, 23(3), p. 350 (arguing that "firms that utilise platforms to improve the way work is organised to deliver higher quality goods and services should be tolerated and even promoted"). The evidence regarding the demographic composition of platform workers is still fragmented. Data from the US indicate that platform workers tend to be male, young, belong to a

shortcomings, such as unstable schedules and low incomes, and precarious employment, jobs that lack security and benefits. They also blur boundaries between traditional classifications such as work and personal time²⁰, amateurism and professionalism, subordinate and autonomous relationships²¹, full employment and casual labour, previously considered binary opposites.

Surprisingly enough, when the phenomenon first emerged, it was not even seen as relating to employment²². Clearly, this “understatement” cannot apply to duties such as driving a car, cleaning flats, translating documents, drawing up a budget and completing secretarial work, just because they are allocated thanks to the Internet²³. To this extent, a clean-up exercise is due. Using newspeak such as “Runners”, “Riders”, “Taskers”, “Roos”, “Clickers”, “Authors”, “Hourlies”, “Ninjas” or even “Friends” is a subtle try to counterfeit the reality by hiding the fact that human labour is at stake or, at least, to gather good arguments to be sustained in a potential lawsuit²⁴. On top of that, the dominant narratives about the cultural and political effects of platforms have been too celebratory. Besides the remarkable efficiencies and benefits for customers²⁵, more recently, a counter-narrative has started revealing

racial or ethnic minority and live in cities. See IPEIROTIS P. G. (2010), *Demographics of Mechanical Turk*, Working paper CeDER-10-01, NYU, Stern School of Business (finding that around 47% 1,000 of workers surveyed are based in the United States, 34% in India and 20% elsewhere. They are quite young: about 45% of the US workers and 66% of the Indians were born after 1980).

²⁰ See MARAZZI C. (1998), *E il denaro va: esodo e rivoluzione dei mercati finanziari*, Torino, p. 110.

²¹ While it is correct to maintain that, in theory at least, digital labour platforms may expand competitiveness (but also competition), increase choice and create growth opportunities, a series of concerns has been raised on the potential erosion of rights, protections and social security. See generally EUROFOUND (2015), *New forms of employment*, Luxembourg.

²² HUWS U. and JOYCE S. (2016), *The economic and social situation of crowd workers and their legal status in Europe in International Labor Brief*.

²³ See CHERRY M. A. (2016), *Virtual work and invisible labor* in CRAIN M., POSTER W. and CHERRY M. A. (Eds.), *Invisible Labor: Hidden Work in the Contemporary World*, Oakland, CA, p. 72 (describing the misrepresentation of “labor as a service, digital labor, peer production, microlabor, or ‘playbor’”).

²⁴ Recently, an internal dictionary drafted by a food delivery company has been leaked to the press (“Do say: Onboarding. Don’t say: Hiring” or “Do say: Termination. Don’t say: Firing/sacking/resignation”). Although this is an isolated case, it has revealed stratagems aimed at conveying a sense of non-remunerated activities. See BUTLER S. (2017, April 5), *Deliveroo accused of ‘creating vocabulary’ to avoid calling couriers employees*, retrieved from <https://gu.com/p/68cj8>. See also HOUSE OF COMMON, WORK AND PENSIONS COMMITTEE (2017), *Self-employment and the gig economy*, London, p. 10 (contrasting the misrepresentation of the exchange of labour that lies at the very heart of these socio-economic patterns).

²⁵ According to several studies, consumers welcome the trend because of lower prices, more choice, and greater accessibility. Interestingly enough, new economic players have immense potential to trigger competition and subvert entrenched business interests. Many fragmented and uncoordinated

the “broken promise” of managing a steadily temporary workforce mobilised on a just-in-time and just-in-case basis, thus spawning new climate of criticism and analysis²⁶.

Having provided a consolidated terminology in order to apprehend a socioeconomic phenomenon under constant mutation, a preliminary assessment of its dimensions will be carried out. Obviously, the platform economy is a fairly recent phenomenon and its potential has not been completely unleashed yet. Consistent estimates are hard to come by. Nevertheless, despite the scant knowledge about its official scale²⁷, what is clear from the data is that digital platform labour appears to be “statistically non marginal”²⁸. Many analyses seem to point out unanimously that platform-distributed labour is constantly on the rise. This economic segment seems to be growing by 25% a year. According to more generous estimates, its value in Europe exceeds €20 billion²⁹. A very detailed document finds that the platform economy amounts to nearly €4 billion in revenues and has intermediated €28 billion of transactions (85% of this value being gained by the providers/workers)³⁰. In

incumbents that have enjoyed a quasi-monopolistic advantage are now being positively “infected” by the innovation virus. For instance, *Uber* may be seen as an improvement over the urban transport sector, which is difficult to regulate. In addition, there is no lack of initiatives to update the most obsolete regulations to accommodate new digitally-enabled business models in many jurisdictions.

²⁶ PASQUALE F. (2017), *Two Narratives of Platform Capitalism* in *Yale Law & Policy Review*, 35(1), p. 309 ff.

²⁷ Data is largely based on estimates. Moreover, the value of the collaborative economy in the EU varies from survey to survey, from report to report: different methodologies may result in divergent assessment. For instance, the number of users on a platform may not be a reliable indicator. It is hard to overcome many intrinsic problems such as the unclear distinction between active and non-active accounts or the use of multiple identities to register on different platforms. For a review of these issues, see HARDIE M. (2016), *The feasibility of measuring the sharing economy*, UK Office for National Statistics, available at <https://goo.gl/bq8Hs6> (describing “a number of challenges faced when attempting to measure [this phenomenon], including classifying activit[ies], capturing sharing activity between individuals and measuring non-monetary transactions”).

²⁸ CODAGNONE C., ABADIE F. and BIAGI F. (2016), *The Future of Work in the ‘Sharing Economy’. Market Efficiency and Equitable. Opportunities or Unfair Precarisation?*, op. cit., p. 5.

²⁹ GERON T. (2013, January 23), *Airbnb and the unstoppable rise of the share economy*, retrieved from <https://goo.gl/QQq3fr>. Reports reveal how online platforms are not generating sufficient income. Moreover, it has to be said that “[v]ery few of the digital platform companies currently make profits, but the very high market capitalisation of these companies obviously means that the stock market believes that they will do so sometime in the future”. See EUROFOUND (2017), *Non-standard forms of employment: Recent trends and future prospects*, Dublin, p. 22.

³⁰ VAUGHAN R. and DAVERIO R. (2016), *Assessing the size and presence of the collaborative economy in Europe*, PwC UK, *Impulse paper for the European Commission*. The report identifies five key sectors (peer-to-peer accommodation, peer-to-peer transportation, on-demand households service, on-demand

addition to that, it should be said that participation in the collaborative economy is “relatively small – but growing”: between 5% and 9% of European citizens have already participated in this framework, making no more than €1000 (the median of earning stands at around €300)³¹. According to a report commissioned by the European Commission³², there would be approximately 100,000 active workers in the European platform economy, representing 0.05% of the total workforce. Other available estimates of the size of the platform-mediated workforce show that 1% of employed people in the UK had “an employment status of gig employed” at some time in 2016 (i.e. platform-based arrangements being their main job)³³. Moreover, 52% of all EU citizens are aware of the services offered by the collaborative economy³⁴, according to a recent Eurobarometer survey.

To conclude, it must be said that there is considerable agreement among experts on the platform-based labour’s propensity to scale quickly across sector and borders: the phenomenon is everything but “too peripheral and ephemeral to justify close attention at this stage”³⁵.

professional services, collaborative finance). The study indicates that there are 275 collaborative economy platforms in 9 states (Belgium, France, Germany, Italy, Poland, Spain, Sweden, The Netherlands, and UK).

³¹ A preliminary survey implemented in the UK, Sweden, Germany, Austria and the Netherlands in the first two quarters of 2016 has been updated in November 2017. HUWS U., SPENCER N. H., SYRDAL D. S. and HOLTS K. (2017), *Work in the European Gig Economy. Research Results from The UK, Sweden, Germany, Austria, The Netherlands, Switzerland and Italy*, Foundation for European Progressive Studies.

³² DE GROEN W. P. and MASELLI I. (2016), *The Impact of the Collaborative Economy on the Labour Market*, CEPS Special Report No. 138. The empirical strategy is based on the frequency of Google searches for words related to online platforms. It is worth noting, however, that the estimate is “significantly less than the 0.4% to 1% of employees that is assumed to be participating in the US”. Simply put, the platforms appeared later in the EU and “[took] more time to develop due to fragmented markets and regulation, as well as the fact that labour is more protected and sector concerns may be more regulated”, see DE GROEN W. P., LENAERTS K., BOSCH R. and PAQUIER F. (2017), *Impact of Digitalisation and the On-Demand Economy on Labour Markets and the Consequences for Employment and Industrial Relations, Study prepared for the European Economic and Social Committee*, Brussels, p. 9.

³³ See CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT (2017), *To gig or not to gig? Stories from the modern economy*, London (showing that 4% of working population used an online intermediary at any time in 2016, with 1% of interviewees stating that it was the main source of income).

³⁴ EUROPEAN COMMISSION (2016), *The use of collaborative platforms*, Flash Eurobarometer, No. 438. Survey requested by the European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs and co-ordinated by the Directorate-General for Communication.

³⁵ The platform economy is based on powerful network models of work based on instant scalability. HEALY J., NICHOLSON D. and PEKAREK A. (2017), *Should we take the gig economy seriously? in Labour & Industry: a Journal of the Social and Economic Relations of Work*, 27(3), p. 234.

1.2. A pragmatic agenda for the platform economy: from precarity to protections.

Significantly, potential risks and opportunities embodied by the on-demand economy far outweigh its relevance as a current source of employment³⁶. A large body of research has been devoted to the fundamental issue of legal implications resulting from technological disruption. One of the most crucial questions of these days is what the employment relationship will look like in the coming years once the “perfect storm” has more fully struck its fatal attack on certain fundamental concepts in labour law. To date, less attention has been paid to the suitability of the current legal framework, and to how the transformations in the organisation of work epitomised by companies such as *Uber*, *Deliveroo* or *UpWork* are impacting upon the notions of the firm and the traditional categories of employment law. Accordingly, this research endeavours to deepen the understanding of rapidly growing phenomenon of platform-mediated work, by showing how it represents both continuity and change with the past. With a law-in-context approach, this multifaceted analysis revolves around four main sections, each of them looking at platform-mediated work from a particular angle. In an attempt to extend the literature on these non-standard forms of work, the investigation proceeds as follows.

SECTION 1 will describe the theoretical antecedents of dislocating business practices such as outsourcing, downsizing and restructuring. The main phases in the evolution of legal thinking about the topic of outsourcing in Italy and, more generally, in Europe will be reviewed. In an attempt to avoid “presentism”, or what historians consider blindness to the past, the evolution of the firm will be portrayed in accordance with a simplified timeline moving from the introduction of early automation to the rise of robotics, cloud computing and artificial intelligence. The chapter will contribute to the literature on the “nature” of the “platform firm” by extending the framework on its foundation with a transactional costs economics approach. Notably, the economist Coase offered an explanation for the growth of the vertically integrated firm and the development of the standard employment relationship which remains a valid basis to elucidate the interrelations between economic actors and their choices. After reviewing the prevailing discourse on the potential overlapping between “hierarchies” and the contract of employment, on the

³⁶ JOHNSTON H. and LAND-KAZLAUSKAS C. (2018), *On Demand and Organized: Developing Collective Agency, Representation and Bargaining in the Gig Economy*, ILO Conditions of Work and Employment Series No. 94, p. 4

one hand, and “markets” and contract work, on the other, the common business model will be conceptualised as a combination between three templates, namely markets, hierarchy and networks. The expression “*Cerberus* firm” will be used to define a network company built as an online middleman which, thanks to rapid transactions on the market minimising operation and organisational costs, engages a pool of workers (that can be virtually recruited, effectively directed and persistently disciplined), while providing a wide range of services to any interested buyer, whether individual or commercial, in the context of a multi-sided market.

Understanding the platforms’ business models might help ascertain whether workers are employed or self-employed. In most cases, indeed, potential power asymmetry and relational outsourcing are the prices for apparent flexibility. To this extent, a platform-oriented reading on “contractual integration” and “relational contracts” will be deployed. In doing so, reference will be made to the “fissuring” process (i.e. employers pushing more work outside their organisations and engaging a rising number of contractors, temporary workers and freelancers) that the archetype of the firm is currently undergoing in many industries. Based on potent managerial prerogatives and liquid responsibilities, such pattern contributes to the definition of an updated and sophisticated version of Taylor’s principles of “scientific management”. To sum it up, the first section aims to supplement the perspectives on platforms by giving a legal and economic history of non-standard firms and (digital) technology, while recognising the unresolved tensions inherent in the contemporary world of work which may spill over to other sectors and disrupt more traditional industries³⁷.

SECTION 2 will carry out an insightful analysis on technological displacement, casualisation of work and the crisis of the standard employment relationship. This section will debunk new concerns that automation is “stealing” human jobs by arguing that occupations consist of a multiplicity of tasks, often hard to automate. At first glance, answering the apocalyptic question whether the technological obsolescence of human labour is likely to arrive is particularly challenging. One approach might be to consider firms’ options in cases where automation is simply impossible. If the *Cerberus* firm model grows as a percentage of the economy (about which more below), then that model might be adopted by a larger number of firms as a means of keeping labour costs down for jobs that cannot be automated. It is

³⁷ KORNELAKIS A. and PETRAKAKI A. (2017, December 16), *Digitalisation of work: blessing for some, curse for others*, retrieved from <https://goo.gl/FESAj5>.

therefore important to focus on the actual interaction between the modes of production and the modes of organisation. This assessment also requires looking into the contractual arrangements. Against this background, the coming end of the human work is often used as an alibi to accelerate the process of circumvention of statutory provisions in the field of labour and social law³⁸.

The (new) world of work is characterised by an increased tendency towards relationships that are not based on direct employment contracts. Whereas earlier industrialisation determined a process of de-casualisation and standardisation of employment thanks to a shift towards more stable and secure relationships³⁹, the ongoing “post-industrial” revolution may be yielding a reverse change: new contractual arrangements take the form of (“less regulated”) commercial contracts between a contract worker and a business or an individual client, thus putting the standard employment relationship under pressure⁴⁰. As a consequence, traditional jobs, understood as performed in the framework of a formal, full-time and open-ended arrangement in a subordinate employment relationship, have come to be at risk. The typologies of employment generated by the on-demand economy are part of a broader class of non-standard forms of work emerging from digitalisation⁴¹. These popular organisational patterns manifestly exclude workers from welfare benefits and employment protections. Accordingly, a picture of the reasons and trajectories of the spread of precarious employment will be drawn⁴², by taking into account as many alternative working formats as possible including self-employment work, economically dependent self-employment and disguised employment relationship. In this vein, particular attention will be devoted to the case of “midway” situations.

Lastly, it will be demonstrated how it is feasible to temper the impulse to digital distinctiveness with actions to safeguard workers’ rights. In particular, the

³⁸ DAVIDOV G. (2017), *The status of Uber drivers: A purposive approach in Spanish Labour Law and Employment Relations Journal*, 6(1-2), p. 6.

³⁹ See MEDA D. (2016), *The future of work: the meaning and value of work in Europe*, op. cit., p. 8 (showing how this advanced model has “produced growing job insecurity among employees” by “discard[ing] internal flexibility in favour of external flexibility”).

⁴⁰ For a detailed analysis, see ROBINSON P. (1999), *Explaining the Relationship between Flexible Employment and Labour Market Regulation* in FELSTEAD A. and JEWSON N. (Eds.), *Global Trends in Flexible Labour*, London, pp. 84-99.

⁴¹ See generally LENAERTS K., BEBLAVÝ M. and KILHOFFER Z. (2017), *Government Responses to the Platform Economy: Where do we stand?*, CEPS Policy Insights, No. 30.

⁴² GALLINO L. (2014), *Vite rinviate: Lo scandalo del lavoro precario*, Roma and Bari.

employment relationship will be represented as a resilient tool, capable of adapting to the incessantly changing nature of production systems. Presenting the allegation according to which the contract of employment is antiquated, as it could not cope with most recent technological advancements, will serve a dual purpose. On the one hand, the link between 20th century method of production based on assembly line and the “mass prototype” of the subordinate worker needs to be broken. On the other, it will be illustrated how the deployment of managerial prerogatives is the main legal determinant of the employment relationship, whatever means is chosen, whether traditional or innovative, direct or algorithmic.

SECTION 3 will attempt to bridge Sections 1 and 2 by zooming in on the situation of platform workers. To fully appreciate the variety of services that fall under the notion of platform-mediated labour, this chapter will map a kaleidoscopic array of app-distributed employment arrangements, clustering the findings into three main subsets (passenger transport services, professional crowdsourcing, on-demand work at the client’s premises). To this end, scrutinising the concrete operation of the on-demand platforms could help scholars, practitioners and policymakers in addressing more complex issues concerning the scope of employment law and, broadly, the state of play of the social compact. In doing so, the relation between a worker and the platform will be considered along five main critical stages: (i) access to the platform and registration, (ii) selection process and hiring, (iii) performance execution and command power, (iv) rating and ranking, monitoring and disciplinary power, (v) payment rewards for completed tasks⁴³. Although the description of specific circumstances does not allow for generalisations, this multi-stage scrutiny will provide a complete picture of the research question at stake.

In addition to this, only few European States have adopted specific regulations to address the numerous issues stemming from the advent of the collaborative economy: the model is mercurial in nature and a hefty intervention may provoke its premature asphyxiation. Accordingly, before proposing universal or horizontal regulatory schemes, it would be useful to validate the appropriateness of existing labour law categories, by delving into labour law fitness to these new realities without ignoring the sheer heterogeneity of this phenomenon⁴⁴. While specific

⁴³ This dissertation is the result of extensive research conducted between May 2015 and October 2017.

⁴⁴ See WAAS B. (2017), *Introduction* in WAAS B., LIEBMAN W. B., LYUBARSKY A. and KEZUKA K., *Crowdwork – A Comparative Law Perspective*, Frankfurt, p. 20 (arguing that “[platform work] needs to be

legislative and regulatory responses to these issues lag behind, the research will review legislation as well as national practices with regard to platform-facilitated arrangements and new forms of (web-based or -mediated) work. Several European initiatives aimed at promoting decent work in the collaborative economy will receive a high level of attention, namely (i) the European Commission's Communication 356/2016 setting a range of factors in order to distinguish professional services from "true-sharing", (ii) the principles enshrined in the European Pillar of Social Rights, and (iii) the ruling by the European Court of Justice on the nature of the service provided by the ride-hailing company *Uber*. Moreover, existing regulatory schemes, ranging from European Directives on atypical employment to casual work templates such as zero-hours or voucher-based contracts, will be investigated.

To conclude, **SECTION 4** will investigate the legal status of platform-coordinated workers by considering what is at stake in pending litigation on the proper worker classification. Recent and potential outcomes will be sketched. As pointed out by some scholars, digital intermediaries are quickly and partly redesigning the way work and firms are organised, by developing at the fringes of regulation. Contrary to what is often said, though, it will be argued that the contract of employment and, more in general, current legal formats such as the employer-employee relationship are not undergoing an irreparable crisis. In the end, this dissertation intends to "normalise" the discourses surrounding the digital transformation of work, by also contrasting the sense that new realities of work have outgrown legal concepts. Before exploring captivating hypothesis for reforms, legal experts must seek to square this fast-evolving phenomenon with the existing regulatory framework.

As a final remark, legislative or judicial interventions will be welcomed to fill the authentic legal loophole where platforms are operating and accumulating their business advantage. In a nutshell, it is argued that technology is a stunning accelerator and needs to be actively adopted, provided that it unleashes opportunities, liberates human energies and alleviates precarisation. The goal, indeed, is to identify economically and socially sustainable ecosystems where high-quality employment and competitiveness mutually reinforce. This is the future of work citizens deserve and strive for.

captured in a precise and above all differentiated manner if the problems are to be correctly identified").

HIERARCHIES WITHOUT FIRMS? VERTICAL DISINTEGRATION, OUTSOURCING AND THE PLATFORM BUSINESS MODEL

TABLE OF CONTENTS: 1. The decomposition of the firm and the deconstruction of labour law: platforms as a self-fulfilling prophecy. – 1.1. The discomfort towards the dissolution of the firm. Reactions from the Italian legal scholarship. – 1.2. No country for labour lawyers? Why employment law is really future-proof. – 2. The industrial revolution(s) and the continuous metamorphosis of the firm. Sorting the old from the new. – 2.1. Hierarchical outsourcing in a broader context: snapshots from the “fissured workplace”. – 2.2. From hierarchy to market to network, and back. No need to reinvent the wheel. – 2.3. Contractual integration: a “platform-oriented” reading. – 3. Why the collaborative economy is everything but collaborative. Taking “platformisation” (more) seriously. – 3.1. The rise of the “Cerberus firm”, a plural and effective combination of pre-existing models. – 3.2. The platform business model. Does *Uberisation* redefine the notion of the firm?

1. The decomposition of the firm and the deconstruction of labour law: platforms as a self-fulfilling prophecy.

Radical transformations have occurred in labour law, social security and industrial relations over the past decades, fuelled by globalisation, trade, changing population dynamics and enhanced technology⁴⁵. Such structural changes are remodelling the structure of the firm, the organisation of the work and, perhaps more importantly, the relationships between contractual parties. Unsurprisingly, they will be “disruptive” factors also in the future⁴⁶. That said, it is common belief that the notion of platform labour should be read in accordance with theories and studies on outsourcing and similar dislocating business practices leading to a reconfiguration of the permeable boundaries of the firm, such as outsourcing, networking, sub-contracting, remote working, to name but a few⁴⁷.

⁴⁵ See also OECD (2017), *Science, Technology and Industry Scoreboard 2017: The digital transformation*, Paris. The tech revolution and the growth in global trade can be considered interrelated events. To give an idea of its significance, the “digital economy” was worth 15.5% of global GDP in 2016, almost doubling in size since the year 2000. See LANGILLE B. (1998), *Labour law is not a commodity in Industrial Law Journal*, 19(5), pp. 1002-1016 (providing a “map” to navigate trade and globalisation). See also DAU-SCHMIDT K. G. (2001), *Employment in the new age of trade and technology: Implications for labor and employment law in Industrial Law Journal*, 76(1), pp. 1-28.

⁴⁶ Although frequently abused, the term “disruption” turned out to be a synonym for “impactful innovations”. For a more detailed (perhaps too optimistic) analysis, see DOWNES L. and NUNES P. (2014), *Big bang disruption: Strategy in the age of devastating innovation*, London.

⁴⁷ “Tertiarisation”, defined as the delegation of certain functions to external service providers, and “outsourcing” have been used interchangeably in Italian, although the latter does not involve a transfer of machinery and equipment. VALENTINI S. (2004), *Gestire l’outsourcing. I passi fondamentali per*

In this respect, literature on theoretical predecessors of platform-mediated working arrangements is particularly vast⁴⁸, thereby allowing to address the wide-ranging question dispassionately and rationally as desired. To understand the magnitude of this phenomenon, it is essential to review and further develop the analytical and multi-dimensional debate by focusing on the impact of digitisation on industrial policies and work management decisions. In particular, the firm can be seen partly as an active propeller and partly as a target of a broad array of transformations. Concerns by legal scholars about the effects of the massive use of digital innovations – the common denominator of several economic segments – are not new: it is striking how one could trace the cyclical emergence of this sort of considerations in connection with a set of advances in ICT devices⁴⁹. In addition, this might be the very first time that anybody could question whether the novelty of this changes is authentic⁵⁰, due to the cyclical re-emergence of lasting problems.

avere successo in un processo di ottimizzazione, Milano. See the section on case-studies in CUNEO G. (1997), *Il successo degli altri*, Milano, p. 88 ff. See also VALLAURI M. L. (2002), *Outsourcing e rapporti di lavoro in Dig. disc. priv., sez. comm.*, p. 722 ff. (making a distinction between (i) formulas describing the fragmentation, such as “decentralisation” and “downsizing”, (ii) technical tools enabling entrepreneurial choices, such as “outsourcing” and “spin-off”, (iii) legal instruments used for implementing the abovementioned practices, such as transfer of undertaking and subcontracting).

⁴⁸ Suffice it here to refer to the researches on activities performed by clients, customers and shoppers, e.g. HUWS U. (2014), *Labor in the global digital economy: The cybertariat comes of age*, New York (using the expression “consumption work”). See also DUJARIER M. A. (2014), *Le travail du consommateur: De Mac Do à eBay: comment nous coproduisons ce que nous achetons*, Paris; RITZER G. and JURGENSON N. (2010), *Production, consumption, prosumption: The nature of capitalism in the age of the digital ‘prosumer’* in *Journal of Consumer Culture*, 10(1), p. 13. Many platforms have been built on a “prosumer” model in which those who work for the platform (producers) also comprise the audience (the consumers). The term originally appeared in TOFFLER A. (1980), *The Third Wave*, New York. See also ROBERTSHAW S. (2015), *The collaborative economy impact and potential of Collaborative Internet and Additive Manufacturing*, EPRS, Scientific Foresight Unit (describing the “conflation of producer and consumer”). For a broader picture, see STANFORD J. (2017), *The resurgence of gig work: Historical and theoretical perspectives* in *The Economic and Labour Relations Review*, 28(3), p. 4 (arguing that the case of producers supplying their own equipment “is a long-standing feature of work in many industries, including transportation, resource harvesting, construction and personal services”). This paradigm shift has been also described in RIFKIN J. (2000), *The Age of Access*, New York.

⁴⁹ Moreover, it is a hard to award the title of ground-breaking innovation to a specific tool; the word “technology” is used as a metonym referring to an effective combination of powerful instruments allowing an effective synergy between resources, moving “in convergent directions”. See also VALENDUC G. and VENDRAMIN P. (1999), *Technology-induced atypical work-forms*, op. cit., p. 5 (defining technology as “the driving force”).

⁵⁰ It is necessary to admit that being right down into the eye of the on-going transformation may alter the perception of the phenomenon (due to the so-called “hindsight bias”), thus resulting in underestimating its consequences or, rather, considering it a long-lasting breakthrough. See CORAZZA

In the last decade, there has been a surge of interest in the impact of the digital transformation of work, also in the light of the advent of the so-called on-demand economy where “gigs” (that is odd jobs) are the norm. This, however, does not come as a surprise: even though these new (immaterial) infrastructure represents the backbone for alternative working arrangements and models, it is important to try to put them in a more systematic picture⁵¹. This effort may also help rebutting the claim that platforms are operating in an unregulated area of law or, as it is often put, in a “grey zone”. From a certain point of view, “providers” in the collaborative economy share working conditions with a wider group of non-standard workers in the “fissured workplace”, a trend undermining social protections and reducing wages. Therefore, the points made about these situations could be stretched to some extent to other forms of non-standard and unprotected employment.

In this context, labour intermediation via digital intermediaries can be understood as the ultimate blatant showing of a long-lasting process of dissolution of the firm and “disorganisation of labour law”⁵². The hallmark of the on-going transition is that technological channels are being used to distribute small jobs through a local / global assembly line⁵³, in a very inexpensive way⁵⁴. Understandably, services provided “just-in-case” and compensated on a “pay-as-you-go” basis have a strong impact on the nature and organisation of the employing entity and, above all, on the relationship between employers and employees (or between workers and clients).

L. and ROMEI R. (2014), *Il puzzle delle trasformazioni* in CORAZZA L. and ROMEI R. (Eds.), *Diritto del lavoro in trasformazione*, Bologna, p. 7.

⁵¹ See, among others, MARIUCCI L. (1979), *Il lavoro decentrato. Discipline legislative e contrattuali*, Milano, p. 39. See also STONE K. V. W. (2004), *From widgets to digits: Employment regulation for the changing workplace*, Cambridge, MA and New York.

⁵² Labour law as a scholarly discipline is widely believed to be under attack. VALDÉS DAL-RÉ F. (2002), *Decentralisation productive et desorganisation du droit du travail* in LYON-CAEN A. and PERULLI A. (Eds.), *Trasformazione dell'impresa e rapporti di lavoro: atti del seminario dottorale internazionale, Venezia 17-21 giugno*, Padova, pp. 53-71. See also SIMITIS S. (1997), *Il diritto del lavoro ha ancora un futuro?* in *Giorn. dir. lav. rel. ind.*, 79, p. 617 (claiming that the “demise” of standard work is eroding the fundamental foundations of labour law). A very similar definition, “deconstruction”, has been used to discuss temporary work agency by CARABELLI U. (1999), *Flessibilizzazione o destrutturazione del mercato del lavoro? Il lavoro interinale in Italia ed in Europa* in LISO F. and CARABELLI U. (Eds.), *Il lavoro temporaneo. Commento alla legge n. 196/1997*, Milano.

⁵³ The expression is also used in WEISS M. (2016), *Digitalizzazione: sfide e prospettive per il diritto del lavoro* in *Dir. rel. ind.*, 3, p. 661.

⁵⁴ However, reduced prices might carry greater socio-political costs, see ROGERS B. (2015), *The social costs of Uber*, op. cit., p. 102 (forecasting a “future in which the many are supplicant to the few, and the few are licensed to disregard ordinary rules”).

Those who support this paradigm shift claim that the flexibility and the ease of being engaged in the platform economy must be lauded. In their view, a redefinition of the once biunique employment relationship is needed both to cope with market volatility and to offer flexible opportunities for younger generations⁵⁵. According to critics, conversely, the rise of “digital matching firms” could be read as a slice of an intentional business strategy aimed at developing and implementing drastically new staff policies in conditions of uncertainty⁵⁶.

These admittedly simplistic comments may be appropriate to illustrate that the reality of work has changed dramatically in combination with old trends. Thus, instead of advocating a selective or partial enforcement of legal rules, it is important to understand the broader picture where “innovative practices” are taking place and keep things in perspective. In this sense, an attempt will be made to demonstrate that the growth of platforms is intimately linked to the topic – hardly a new problem – of the redefinition of the employing entity, now increasingly multiform and slippery⁵⁷. Spinning out this line of thought, it could be useful to reconcile the challenges of today with the lessons from the past on several issues, namely digital transformation, vertical disintegration, work casualisation, income insecurity and the disguise of what is in substance an employment arrangement (as done in the following sections).

As already flagged above, the goal of this chapter is to explore the main phases in the evolution of legal thinking about the topic of outsourcing in Italy and, more generally, in Europe and in the U.S.A. While in the past, after a preliminary moment of uncertainty, these strategies redefining the boundaries of the firm have been either justified in the light of the freedom of economic initiative or condemned as elusive practices, it could be said that, more recently, the fragmentation of the traditional pattern comes to be taken as an attractive and feasible organisational option, on the

⁵⁵ For instance, Directive 2008/104/EC endorses non-standard forms of employment as an effective tool to “contribute to job creation” and reduce unemployment. This flawed rhetoric has been fiercely contrasted in DE STEFANO V. (2014), *A tale of oversimplification and deregulation: the mainstream approach to labour market segmentation and recent responses to the crisis in European countries* in *Industrial Law Journal*, 43(3), p. 253.

⁵⁶ PURCELL K. and PURCELL J. (1998), *In-sourcing, outsourcing, and the growth of contingent labour as evidence of flexible employment strategies* in *European Journal of Work and Organizational Psychology*, 7(1), p. 39.

⁵⁷ Taking a critical view, see JENSEN M. C. and MECKLING W. H. (1976), *Theory of the firm: Managerial behavior, agency costs and ownership structure* in *Journal of financial economics*, 3(4), p. 305 (deconstructing the concept of the business firm and arguing that the firm only exists as a “metaphor” for the contractual relations between a set of components).

basis of the supposedly unprecedented nature of new digital players⁵⁸. Similarly, whereas theorists long ago focused on the swinging movement of outsourcing and re-sourcing⁵⁹, nowadays it is more common for an entrepreneur to establish an undertaking by merely connecting independent contractors with end users and relying on the inherent “hierarchical market relationship”⁶⁰.

It is demonstrated within this work that a demand for the so-called alternative working arrangements has been accelerated because of “changes in management practices induced by competitive pressures such as the need for lean and flexible firms”⁶¹. The underlying assumption is that “the pressure of cost reduction has become a decisive element in today’s management strategies” of firms’ dismemberment⁶². At the same time, thanks to extra-legal mechanisms favouring both hierarchy and flexibility, platforms are able to take advantage of a stronger business position towards workers or providers. In this respect, COLLIN’S reflections on the substitution of commercial contracts (such as contracting, subcontracting and non-standard working contracts) for employment relations, given a substantial position of bureaucratic subordination and socio-economic dependence, will be

⁵⁸ The following sections will demonstrate how most of the factors invoked as evidence of the uniqueness of the platforms economy are common features of many other services.

⁵⁹ CIUCCIOVINO S. (2000), *Trasferimento di ramo d’azienda ed esternalizzazione* in *Arg. dir. lav.*, 2, p. 402 (claiming that the double relationship should be considered and studied jointly).

⁶⁰ Through the mechanisms of control and dependency, hierarchy returns into the relationship and opportunism is avoided in the context of outsourced labour. See, among others, MUEHLBERGER U. and BERTOLINI S. (2007), *The organizational governance of work relationships between employment and self-employment* in *Socio-Economic Review*, 6(3), pp. 449-472 (arguing that “employers have established informal relational contracts that, in combination with formal contracts, reduce the threat of opportunism while simultaneously allowing a certain amount of control over the worker”).

⁶¹ MHONE G. C. (1998), *Atypical forms of work and employment and their policy implications* in *Industrial Law Journal*, 19(2), p. 216. For the sake of completeness, the author also refers to “changes in lifestyles, attitudes [and] technology that have made it easier to exploit atypical forms of work”. See also BARBERA M. (2010), *Trasformazioni della figura del datore di lavoro e flessibilizzazione delle regole del diritto* in *Giorn. dir. lav. rel. ind.*, 126, p. 216 (arguing that regulatory choices may have favoured the negotiating autonomy of the entrepreneur offering cheap alternative to the standard contract). For a detailed description of the lean production, see RIFKIN J. (1995), *The end of work: Technology, jobs, and your future*, New York, p. 96 ff.

⁶² WEISS M. (2006), *The Implications of the Services Directive on Labour Law: A German Perspective* in BLANPAIN R. (Ed.), *Freedom of services in the European Union: labour and social security law: the Bolkestein initiative*, 58, The Hague, p. 85.

further developed in the light of the expansion of the service work (mostly, retail, health and social services) and the inordinate pervasiveness of digital tools⁶³.

To evaluate the initial assumptions, this chapter will provide a theoretical compass to assist in navigating the gig-economy. Before analysing the so-called non-standard forms of work, it could be useful to study the non-standard forms of firm. In the same vein, the seismic movements that have fractured the firm, hence redrawing labour law's borders will be investigated. The exploration is organised as follows. First and foremost, attention will be devoted to the doctrinal debate on the fragmentation of the firm and the decentralisation of the production cycle⁶⁴. Looking to the past, indeed, may uncover some of the previous experiments, attainments and concerns for addressing phenomena of this kind. In the following paragraph, the "fissurisation" of the workplace will be presented as a complementary way to interpret the advent of platforms. Concomitantly, theories on relational contracts will be examined in order to offer a theoretical framework for platform-enabled working arrangements, defined as quasi-hierarchy models. At first glance, this latest wave of ICT-enabled outsourcing⁶⁵ calls for greater, more thorough scrutiny⁶⁶. In particular, an attempt to update the sharp and incomplete dichotomy between "market" and "hierarchy" (or tricotomy, if "network" is taken into account) will be made. Building on the enduring legacy of the work of Coase and Williamson – but especially on

⁶³ It has to be noted that today between 75% and 85% of the total labor force is engaged in work in the tertiary sector, according to OECD data. See OECD (2015), *OECD Labour Force Statistics 2014*, Paris.

⁶⁴ Defined as "(i) the expulsion of work formerly carried out in large factories to a network of small firms, artisans or domestic out-workers; (ii) the division of large integrated plants into small specialised production units; (iii) the development of a dense small firm economy in certain regions such as the Veneto and the Emilia Romagna in Italy" according to MURRAY F. (1983), *The decentralisation of production – the decline of the mass-collective worker?* in *Capital & Class*, 7(1), p. 76. See also BRUSCO S. (1982), *The Emilian model: productive decentralisation and social integration* in *Cambridge Journal of Economics*, 6(2), pp. 167-184.

⁶⁵ For a complete analysis, see EUROPEAN FOUNDATION FOR THE IMPROVEMENT OF LIVING AND WORKING CONDITIONS (2004), *Outsourcing of ICT and Related Services in the EU: A status report*, Office for Official Publications of the European Union.

⁶⁶ Needless to say, the economic crisis has exacerbated the conflict. More recently, the deterioration of the economic situation has become something "structural", not transitory. DE LUCA TAMAJO R. (Ed.) (1979), *Il diritto del lavoro nell'emergenza*, Napoli. See also FERRARESE M. R. (2000). *Il diritto al presente: globalizzazione e tempo delle istituzioni*, Bologna. For an update on the role of unionisation, see LEHNDORFF S., DRIBBUSCH H. and SCHULTEN T. (Eds.) (2017), *Rough waters: European trade unions in a time of crises*, Brussels, p. 7 (describing crisis as "an ongoing story with long-lasting damage to the labour market", especially in southern Europe).

Powell's adaptation⁶⁷ – an alternative model combining previously existing schemes will be presented in order to portray the most common business model in the on-demand economy. The expressions “*Cerberus*” is understood to define a company built as an online middleman which, in a framework of strong linkages and interdependencies and thanks to fast transactions on the market, engages a pool of workers that can be virtually recruited, effectively directed and persistently controlled, while providing a wide range of services to any interested buyer, whether individual or commercial.

When it comes to platforms, it is quite uncommon to think that there will be nothing new under the sun⁶⁸. One central conclusion that can be drawn from the analysis is that, by taking into account the new patterns of human resource management, platforms can be described as unparalleled organisations lying half-way between markets, firms and networks. Since the onset of industrialisation and automation, very little has changed. Yet, a paradigm shift, to tell the truth, has occurred, namely the transition from the post-Fordist model to the hyper-Taylorist one⁶⁹. Whether this is a threat or an opportunity for labour law remains to be determined⁷⁰. More importantly, this leads to the question how far the traditional notions of firm and worker are still appropriate to cope with this unstable reality of work, whether minor or major adaptations might be applicable or whether a total “re-invention of labour law” is needed in order to accommodate new organisational formats properly⁷¹.

⁶⁷ The “re-invention” of the firm is considered the necessary precondition for the proliferation in non-standards contracts. A similar interpretation can be found in CARABELLI U. (2004), *Organizzazione del lavoro e professionalità: una riflessione su contratto di lavoro e post-taylorismo* in *Giorn. dir. lav. rel. ind.*, 4, pp. 1-99 (describing the advent of hybrid forms of production in a context of “federal job structure” and arguing that the goal of flexibility has been satisfied thanks to a diversification of contracts such as which have apparently reduced the tecno-functional subordination but increased the level of dependency). See also STANDING G. (1999), *Global labour flexibility: Seeking distributive justice*, Basingstoke and London.

⁶⁸ Nothing about this is new. See generally FELSTEAD A. (1993), *The corporate paradox: power and control in the business franchise*, London.

⁶⁹ For a very complete review on the issue, see generally LODIGIANI R. and MARTINELLI M. (Eds.) (2002), *Dentro e oltre i post-fordismi. Impresa e lavoro in mutamento tra analisi teorica e ricerca empirica*, Milano.

⁷⁰ See also WEISS M. (2016), *Digitalizzazione: sfide e prospettive per il diritto del lavoro* in *Dir. rel. ind.*, 3, p. 654.

⁷¹ The expression is borrowed from WEISS M. (2009), *Re-Inventing Labour Law?* in DAVIDOV G. and LANGILLE B. (Eds.), *The idea of Labour Law*, Oxford, UK, p. 46.

1.1. *The discomfort towards the dissolution of the firm. Reactions from the Italian legal scholarship.*

Employment law is undergoing a potentially detrimental disassembling⁷², central to these impacts is the role technology has long played. It is needless to say that labour lawyers have pledged to promote a process of re-appropriation of the topic of platform-enabled working arrangements, against a surrender of the language of labour⁷³, that is not only of semantic interest. To this extent, the terminology of emancipation from workplace obligations and long hours has played a pivotal role in justifying the upsurge of vertically disintegrated forms of firm. “Work whenever you want!”⁷⁴, “Be your own boss!”⁷⁵, “Become an auto-entrepreneur” condense the ideological refrain, using flexibility as an expedient to possibly conceal the elusion of labour law regulations⁷⁶. As developed below, the most common contractual classification in this context deprives workers of social benefits since the eligibilities afforded to those who are non-standardly employed are significantly lower than in the case of those in traditional open-ended employment. Although this crucial issue

⁷² At least, employment law as it was conceived in the “industrial era”. CARINCI F. (1985), *Rivoluzione tecnologica e diritto del lavoro: il rapporto individuale* in *Giorn. dir. lav. rel. ind.*, p. 211 (arguing that this body of law was developed around small and medium-sized enterprises, taking into account a rigid distinction between “office” and “factory”, a precise working organisation and a certain level of “professionalism related to jobs and tasks”).

⁷³ The common narrative describes such jobs as side-activities for young students or unemployed people – this has been proven to be incorrect or, at least, imprecise. See OECD (2016), *Working Party on Measurement and Analysis of the Digital Economy, New forms of work in the digital economy*. See TULLINI P. (2016), *Digitalizzazione dell'economia e frammentazione dell'occupazione. Il lavoro instabile discontinuo informale: tendenze in atto* in *Riv. giur. lav.*, 4, p. 748 (providing a holistic overview of a young generation of “digital natives” providers).

⁷⁴ “The language of freedom, flexibility, and autonomy abounds, and can seem like a win for workers. But the reality of our research shows something very different” according to WELLS K., CULLEN D. and ATTOH K. (2017, August 8), *The work lives of Uber drivers. Worse than you think*, retrieved from <https://www.lawcha.org/2017/08/08/work-lives-uber-drivers-worse-think/>.

⁷⁵ “Minimal entrepreneurs” is the expression used by SIMITIS S. (1997), *Il diritto del lavoro ha ancora un futuro?*, op. cit., pp. 609-641. See also GORZ A. (2003), *L'immateriale. Conoscenza, valore e capitale*, Torino, p. 18 (anticipating the advent of the “auto-entrepreneur” and the disappearance of salaried employment).

⁷⁶ Furthermore, it has to be noted that the vocabulary employed by the main collaborative economy operators misrepresent the exchange of labour that lies at the very heart of these socio-economic patterns: “gigs”, “rides”, “tasks”, “favours” are elusive euphemisms in lieu of “jobs”, aimed at conveying a sense of non-remunerated activities and obscuring the reality of the underlying arrangements. The result is “a dehumanized view of these workers”. See DE STEFANO V. (2016), *Introduction: Crowdsourcing, the Gig-Economy, and the Law* in *Comp. Lab. L. & Pol'y J.*, 37(3), p. 461.

will be given an in-depth treatment in Part 2 and in Part 3, it is important already at this stage to give a brief overview of this phenomenon.

The externalisation processes have been considered to pose a threat to the legitimacy of labour law⁷⁷. Therefore, this phenomenon has been greeted with “open hostility” by most scholars, in an attempt to self-defence⁷⁸. The uncomfortable feeling can be understood: centrifugal forces could pull the rug out from under the labour lawyers’ feet, who run the risk of finding themselves without a precise point of reference. This may lead to a potential marginalisation of the scope and the effectiveness of this branch of law⁷⁹. It is not unusual to study the configuration of the firm⁸⁰, whose destiny is indissolubly linked to the one of the worker, since “in several legal systems the boundaries of the legal concept of employer have been drawn so as to coincide with the boundaries of the economic organisation within which the work is performed”⁸¹.

As a consequence, production decentralisation, outsourcing or subcontracting were considered a toolkit of shortcuts aimed at shedding responsibilities and looked at with mistrust⁸². Moreover, it has been argued that outsourcing could represent an inevitable rupture of the standard employment model, given that centrifugal changes are commonly promoted unilaterally, thus entailing a sort of subtraction of several decisions from the area of intervention by the collective forces (through participative

⁷⁷ GAROFALO M. G. (1999), *Un profilo ideologico del diritto del lavoro* in *Giorn. dir. lav. rel. ind.*, 21, pp. 9-31.

⁷⁸ MARIUCCI L. (1979), *Il lavoro decentrato: discipline legislative e contrattuali*, Milano, p. 157. An analogous expression is used in PERULLI A. (2017), *Lavoro e tecnica al tempo di Uber* in *Riv. giur. lav.*, 1, p. 199.

⁷⁹ Borrowing the definition used by DEL PUNTA R. (2000), *Mercato o gerarchia? Il disagio del diritto del lavoro nell'era delle esternalizzazioni* in *Dir. Merc. Lav.*, 1, p. 49. Nevertheless, it has to be admitted the outsourcing *per se* would not shrink the scope of application of labour law as long as workers continue to be classified as employee. Regrettably, it is argued here, this conclusion would be inaccurate as, especially in the context of labour platforms, this is not always the case.

⁸⁰ Or, better, the company, “which is a juridical notion founded on the principles of the legal personality, of limited liability, of fully transferable shares, shared ownership by contributors, and on governance structure”, see PERULLI A. (2017), *The theories of the firm between Economy and law* in PERULLI A. and TREU T. (Eds.), *Enterprise and Social Rights*, Alphen aan den Rijn, The Netherlands, p. 352.

⁸¹ CORAZZA L. and RAZZOLINI O. (2014), *Who is an employer?*, WP C.S.D.L.E. “Massimo D’Antona”.INT, 110, p. 4.

⁸² See GHERA E. (2013), *Il contratto di lavoro oggi: flessibilità e crisi economica* in *Giorn. dir. lav. rel. ind.*, 4, p. 687 (describing the erosion of rights and benefits as a direct consequence of the technological progress).

conflict or negotiation)⁸³. Delving deeper, a large part of these alternative contractual structures may hide a diversionary tactic aimed at reducing the firepower of the social partners and, more in general, the constraints and obligations stemming out from labour law provisions⁸⁴. The substitution of the employment contract with private- or commercial-law contracts determines a potential reduction in salaries – turning the wage-setting issue into a mere contracting decision⁸⁵ – and, more in general, the failure to implement clauses laid down in the collective agreements⁸⁶. Outsourcing could be deliberately used to cover up the need to obtain a large pool of workers abating sunk costs and assembling a flexible organisation⁸⁷. Therefore, these

⁸³ Needless to say, the dispersal of the workforce may also disintegrate the “community” that determines a higher relevance of the “mass” rather than the mere sum of individuals. It has been noted the several outsourcing processes may result in the displacement of workers in firms where the power of labour unions is less effective. See BUSACCA B. (2005). *Decentramento produttivo e processi di esternalizzazione: il mutamento dell’organizzazione produttiva* in *Dir. rel. ind.*, 2, p. 326. On this issue, see also SPEZIALE V. (2010), *Il datore di lavoro nell’impresa integrata* in *Giorn. dir. lav. rel. ind.*, 1, p. 7 (warning about the risk of a compression of collective rights due to the failure to reach the proper number of employees). This trend has been described as a strategy aimed at crushing the solidarity link in the (potentially confrontational) interrelation between capital and labour. See, among others, SCARPELLI F. (1999), *Esternalizzazioni e diritto del lavoro: il lavoratore non è una merce* in *Dir. rel. ind.*, 3, pp. 351-368.

⁸⁴ In addition to this, labour law, in a sort of self-referential attitude, has predominantly been focused on the so-called “management of the contract”, failing to describe the broader framework and, in particular, the pivotal role of the firm which has recently been turned into a chaotic legal patchwork. Traditionally, it can be said that labour lawyers have neglected the urgency of studying the structure of firm and its role in influencing internal relations, focusing mainly on the notion of the workplace. When they did, the debate was monopolised by the topic of the dimension of the undertaking, for the purpose of the application of certain regulations. As a consequence, the core of academic interest in the firm has rapidly become the “size threshold”. See ROMEI R. (2016), *Il diritto del lavoro e l’organizzazione dell’impresa* in PERULLI A. (Ed.), *L’idea di diritto del lavoro oggi*, Padova, p. 507. On issues related to the “size threshold” see, *inter alii*, BIAGI M. (1978), *La dimensione dell’impresa nel diritto del lavoro*, Milano. In the second half of the past century, the automation of the office received a great deal of attention. See also CARINCI F. (1985), *Rivoluzione tecnologica e diritto del lavoro: il rapporto individuale*, op. cit., p. 221 and VARDARO G. (1986), *Tecnica, tecnologia e ideologia della tecnica nel diritto del lavoro* in GAETA L., MARCHITELLO A. R. and PASCUCCI P. (Eds.) (1989), *Itinerari*, Milano, pp. 231-308. Obviously, there are notable exceptions. See, for instance, PERSIANI M. (1966), *Contratto di lavoro e organizzazione*, Padova.

⁸⁵ See WEIL D. (2014), *The Fissured Workplace: why work became so bad for so many and what can be done to improve it*, Cambridge, MA and London, p. 4.

⁸⁶ ICHINO P. (1999), *Il diritto del lavoro e i confini dell’impresa* in *Giorn. dir. lav. rel. ind.*, 2/3, p. 237 ff.

⁸⁷ For an extensive analysis, see MARIUCCI L. (1979), *Il lavoro decentrato. Discipline legislative e contrattuali*, Milano. See also LISO F. (1992), *La fuga dal diritto del lavoro* in *Industria e sindacato*, 28, p. 1, now in GHERA E., PANICCIA U. and SABA V. (Eds.) (1998), *Dialoghi sul sistema. Le relazioni industriali in venti anni della rivista Industria e Sindacato (1977-1996)*, Milano. As a matter of fact, in the last decades, these processes have been carried out through “visible” and regulated contracts. Nowadays, the fragmentation of the vertically integrated firm seems to be more underhanded and vicious, as whole

processes have been treated with fundamental disapproval, but also with “insatiable curiosity and inevitable delay”⁸⁸.

More recently, after a long period of restrictive application, the ban on indirect employment has been removed and the relevant prohibitions have been relaxed⁸⁹, thus making outsourcing legitimate⁹⁰, while trying to control the segmentation

companies are designed in order to avoid the application of labour law. See DAU-SCHMIDT K. G. (2001), *Employment in the new age of trade and technology: Implications for labor and employment law*, op. cit., p. 12 (pinpointing that “the ‘best’ management practices identified by managers and academics are those that focus on flexibility and an immediate orientation to the market”).

⁸⁸ CORAZZA L. (2004), “Contractual integration” e rapporti di lavoro. *Uno studio sulle tecniche di tutela del lavoratore*, Padova, p. 1. As a reaction, there has been a sort of *favor legis* towards the vertically integrated firm, see BROLO M. (1990), *Il “lavoro decentrato” nella dottrina e nella giurisprudenza in Dir. lav. rel. ind.*, 8, p. 151.

⁸⁹ A “taboo subject” as defined in DEL PUNTA R. (2000), *Mercato o gerarchia? Il disagio del diritto del lavoro nell’era delle esternalizzazioni*, op. cit., p. 62 ff. (discussing the derogation to the Law 1369/1960 and the subsequent de-structuring logic of triangular schemes). As explained by Menegatti, “the main purpose of the 1960 Act was to distinguish authentic subcontracting from the completely forbidden (at the time) indirect employment, literally called ‘fraudulent interposition in the employment of labour’”, i.e. the hiring of a worker by an entity different from the employer-user, if the a temporary work firm engaged the temporary worker. See also TREU T. (2014), *Labour law in Italy*, 4th ed., Alphen aan den Rijn, The Netherlands, p. 46. For a contract to be legitimate, an organisation with employees, capital, machinery and equipment was necessary. In the absence of such requirements, an irrebuttable presumption applied and all the contractors’ employees were considered employees of the client (criminal penalties were provided, too). Act no. 1369/1960 provided for equal working conditions between the contractor’s employees and those employed by the principal company. This regulatory system ended up in hindering outsourcing in all those cases when the performance was mainly based on ITC services or know-how (due to the lack of organisational patterns requested by the law). Menegatti clarifies how, during the 1980s, this system was slowly abandoned. Firstly, courts neglected the irrebuttable presumption of fraudulent interposition (see, for instance, Cass., labour section, 12 May 12, No. 11022, stating that, in coping with the restrictive legal framework, the legal presumption operated only when employee’s know-how is irrelevant in comparison with the “organisation”). Then, in 1997, Act no. 196 introduced temporary work agencies. Six years later, Act 30/2003 implemented by Decree 276/2003 admitted and regulated the practices of staff leasing and detachment of workers. The use of temporary work was allowed whenever justified by “productive, technical, organisational reasons”. Agencies had to comply with many restrictions before engaging in a contract with the user firm, concerning in particular organisational features, minimum capital requirements and professional qualification of employees. They could perform all types of mediation services. In 2007, Act. No. 257 repealed open-ended agency work contracts, then reinstated in 2009. See MENEGATTI E. (2016), *Mending the Fissured Workplace: The Solutions Provided by Italian Law in Comp. Lab. L. & Pol’y J.*, 37(1), p. 94. See also CARINCI M. T. (2000), *La fornitura di lavoro altrui*, Milano; GRAGNOLI E. and PERULLI A. (Eds.) (2004), *La riforma del mercato del lavoro e i nuovi modelli contrattuali: commentario al decreto legislativo 10 settembre 2003*, Padova (analysing the Italian reform in depth).

⁹⁰ BIAGI M. (2003), *L’outsourcing: una strategia priva di rischi?* in MONTUSCHI L., TIRABOSCHI M. and TREU T. (Eds.), *Marco Biagi: un giurista progettuale*, Milano, p. 272 (advocating a profound reconsideration of the “restrictive” model).

process with stricter rules designed in order to prevent abuses⁹¹. At the same time, indirect employment and labour brokerage have been combatted as illegal hiring. The Italian Act no. 276 draws a line between lawful contracting and irregular agency work: a labour supply or labour subcontracting is still prohibited whenever the service provider is neither a state recognised intermediary agency nor the owner of a genuine and real business organisation⁹², or the rules regarding secondments have not been respected (sham outsourcing)⁹³. That notwithstanding, mistrust persists⁹⁴. Admittedly, the trilateral employment relationships deliberately split the functions of the employer between who enters into the employment contract and the legal entity who exercises the power of direction and control.

Two main theoretical frameworks can be used to explain this residual treatment⁹⁵. First and foremost, the theory of the coincidence of the firm with the employer, according to which one legal entity can be considered the beneficiary of the rights and obligations arising from the employment relationship (and, consequently, the entity performing an economic activity has to bear the risk). Secondly, the prevalence

⁹¹ SPEZIALE V. (2010), *Il datore di lavoro nell'impresa integrata*, op. cit., p. 20.

⁹² Article 29 Act. No. 276 of 2003 provides that the absence of business risk – to be understood as the likelihood that a company will have lower than anticipated profits or that it will experience a loss rather than a profit – determines the unlawfulness of the outsourcing. Article 27 provides a duty of joint liability for all obligations related to future and previous employment contracts, for the period of the “illicit use” of the workforce. The Law also abolished the rule on equal working conditions, including pay, between the contractor’s employees and those of the principal company. See CORAZZA L. (2004), *“Contractual integration” e rapporti di lavoro. Uno studio sulle tecniche di tutela del lavoratore*, op. cit., p. 13 (clarifying that unauthorised agency work is still prohibited). For a complete examination, see also DEL PUNTA R. (2008), *Le molte vite del divieto di interposizione nel rapporto di lavoro* in *Riv. it. dir. lav.*, 2, p. 129 (arguing that the traditional ban on hiring-out of workers for profit is still valid).

⁹³ Several administrative sanctions are made in case of failure to meet these requirements (the authentically entrepreneurial nature of the agency, above all), in order to stop front companies or fictitious agents. This confirms the following general rule: if the power of direction and control is exercised by a legal entity other than the “formal” employer, then it is former that has to be held responsible for employment related obligations. See MAZZOTTA O. (2009), *La dissociazione tra datore di lavoro e utilizzatore della prestazione* in VALLEBONA A. (Ed.), *I contratti di lavoro*, 1, p. 925. For a complete analysis, see NICOLOSI M. (2012), *Il lavoro esternalizzato*, Torino. See also CARINCI M. T. (2008), *Utilizzazione e acquisizione indiretta del lavoro: somministrazione e distacco, appalto e subappalto, trasferimento d'azienda e di ramo*, Torino.

⁹⁴ Cass. S. U., 21 March 1997, No. 2517 (the employer avoids hiring workers under a contract of employment by using a separate legal entity that legally interposes itself between the employer and the employees).

⁹⁵ CARINCI M. T. (2001), *L'interposizione e il lavoro interinale* in CARINCI F. and MISCIONE M., *Il diritto del lavoro dal “Libro Bianco” al Disegno di legge delega*, Milano, p. 21 ff.

of the “single employer dogma” (a unitary concept of the employer⁹⁶) has led to the traditional bilateral and contractual “matrix” of the employment relationship⁹⁷.

Traditionally, an outsourcing process has been described as a two-step procedure, as a pendulum-like oscillation: firstly, an “expulsive” phase allowing the external placement of physical assets (more recently, even immaterial ones) and workforce and, secondly, a stage aimed at reacquiring the same function through contractual instruments (for instance, self-employment contracts)⁹⁸. DE LUCA TAMAJO has portrayed this process by splitting it in two main phases – chronologically distinct but functionally interrelated⁹⁹. In a first moment, the entrepreneur sells a business segment (machines, know-how or a relevant group of workers)¹⁰⁰. In a second moment, a certain kind of product or service is repurchased through a commercial contract and then reassembled internally thanks to a “counter-movement” of buy-back¹⁰¹.

⁹⁶ See SUPPIEJ G. (1982), *Il rapporto di lavoro (costituzione e svolgimento)*, Padova, p. 67.

⁹⁷ See RATTI L. (2008), *Agency work and the idea of dual employership: A comparative perspective in Comp. Lab. L. & Pol’y J.*, 30(4), p. 839. See also BIASI M. (2014), *Dal divieto di interposizione alla codatorialità: le trasformazioni dell’impresa e le risposte dell’ordinamento*, WP C.S.D.L.E. “Massimo D’Antona”.IT, 218, p. 8 (focusing on vertical “networked firm” and “network of firms”).

⁹⁸ The first phase can be carried out by a transfer of a part of undertaking or by a collective dismissal. In most cases, this situation results in a deterioration of working conditions. Even though thoughts may go out mostly to transfer of a part of undertaking or delocalisation, the actual commodity may well be labour. See SPEZIALE V. (2004), *Il contratto commerciale di somministrazione di lavoro in Dir. rel. ind.*, 2, p. 295 (arguing that “*somministrazione*”, the Italian word for temporary employment services, was previously used to refer to material goods).

⁹⁹ DE LUCA TAMAJO R. (2002), *Le esternalizzazioni tra cessione di ramo d’azienda e rapporti di fornitura in DE LUCA TAMAJO R. (Ed.), I processi di esternalizzazione. Opportunità e vincoli giuridici*, Napoli, p. 12 ff. (proposing a new “outsourcing contract” when the two movements occur in quick succession). The same image is used in SIMPSON I. H. (1999), *Historical patterns of workplace organization: from mechanical to electronic control and beyond in Current Sociology*, 47(2), p. 58 (describing the “decoupling of the workplace from the employer” along two different fronts. First, “work is outsourced to settings external to the workplace”, secondly, external employees “are brought into the workplace on short-term contracts”).

¹⁰⁰ In doing so, the employer might also decide to move to another country where legislation is more favourable (i.e. regulatory shopping).

¹⁰¹ Apart from some notable exceptions, the second “pendulum movement” does not materialise at all. Some platform economy companies have already, on their own initiative, engaged in classifying their workers as employees (e.g. *Shyp* or *Zirtual*, a company providing virtual assistants). Companies “like a package delivery service called *Parcel* [and] an on-demand laundry service called *FlyCleaners*, have also made the decision to hire employees, citing their ability to ensure a quality experience”. Other platforms have chosen the employee status from the beginning (e.g. *Hello Alfred*, *Managed by Q*, *Munchery*, *Bridj*, *Mulberrys Garment Care*). See KAMDAR A. (2016, February 19), *Why Some Gig Economy Startups are Reclassifying Workers as Employees*, retrieved from <https://onlabor.org/why-some-gig->

That provided, what is different is that much of growth in in- and out-sourcing is within the modern factory and often involves employees changing their employment contract but still working on the same task and in the same premises, alongside colleagues who are still employed by the original firm¹⁰². The two groups of workers work side by side, but contract labour company may want to separate them into a distinctive unit to avoid problems between those unionised and those non-unionised. Therefore, the employer can combine the need for legal decentralisation with the beneficial physical proximity¹⁰³, while employees pay a high price for this transformation.

As a matter of fact, production decentralisation, even when legitimate¹⁰⁴, has been considered in the same way as a questionable entrepreneurial practice since it makes “employment relationship [...] more tenuous”, as a consequence “responsibility for compliance with laws is shifted and made murky”¹⁰⁵. While legal arrangements such as the transfer of undertaking, the posting of workers, temporary work agency,

[economy-startups-are-reclassifying-workers-as-employees/](#) (arguing that companies seek a better control over training and hours without running into classification issues); KESSLER S. (2015, February 17), *The Gig Economy won't last because it's being sued to death*, retrieved from <https://goo.gl/LmtpKY>. See also CHERRY M. A. and ALOISI A. (2017), “Dependent Contractors” in the Gig Economy: A Comparative Approach in *American University L. R.*, 66(3), p. 684 (discussing how “platform economy can still exist when workers are provided with the rights afforded to employees”). HomeHero, which had switched to the employment status, recently announced the intention to cease the operations. See HILL K. (2017, February 25), *There's no magic in venture-backed home care*, retrieved from <https://goo.gl/LQcoFM>.

¹⁰² Not to be confused with Article 26 of Act No. 81 of 2008. For a clarification of the notion of “internal” subcontracting, see MENEGATTI E. (2016), *Mending the Fissured Workplace: The Solutions Provided by Italian Law*, op. cit., p. 105 ff. See also COLLING T. (1995), *From hierarchy to contract? Subcontracting employment in the service economy* in *Warwick Papers in Industrial & Business*, No. 52. The issue of the so-called “esternalizzazioni intra moenia” (“in-house subcontracting”) has been addressed in DE LUCA TAMAJO R. (1999), *I processi di terzizzazione “intra moenia” ovvero la fabbrica multisocietaria* in *AA.VV., Studi sul lavoro. Scritti in onore di Gino Giugni*, Bari, p. 383 ff.

¹⁰³ DE LUCA TAMAJO R. (2007), *Diritto del lavoro e decentramento produttivo in una prospettiva comparata: scenari e strumenti* in *Riv. it. dir. lav.*, 1, p. 4 (using the image of an airport to refer to the co-presence of different and complex company structures in a circumscribed space).

¹⁰⁴ PERULLI A. (2002), *Modificazioni dell'impresa e rapporti di lavoro: spunti per una riflessione* in LYON-CAEN A. and PERULLI A. (Eds.), *Trasformazione dell'impresa e rapporti di lavoro: atti del seminario dottorale internazionale, Venezia 17-21 giugno, Padova*, pp. 1-21. This attitude has been criticised as “sorrowing” by DEL PUNTA R. (2000), *Mercato o gerarchia? Il disagio del diritto del lavoro nell'era delle esternalizzazioni*, op. cit., p. 49. See also FAIOLI M. (2008), *Il lavoro prestato irregolarmente*, Milano, p. 79.

¹⁰⁵ WEIL D. (2016), *Afterword: Learning from a Fissured World-Reflections on International Essays regarding the Fissured Workplace*, op. cit., p. 211.

outsourcing¹⁰⁶ and offshoring¹⁰⁷ have been already largely screened in literature and even regulated (with various and sometimes unintended consequences), legal scholarship has only recently started scrutinising atypical forms of work in the so-called platform economy, out of trendiness and sophistication, after a first moment of overhyped enthusiasm¹⁰⁸.

The Italian legislator has deterred from the use of externalisation and, consequently, of alternative arrangements¹⁰⁹. In order to guarantee decent working conditions, a unique concept of employer and a monolithic notion of workplace were seen as a precondition to enforce the existing guarantees under labour law and to exercise collective rights¹¹⁰. Being materially *within the firm* has been considered the only criterion thanks to which one can claim protection¹¹¹. The message was clear, outsourcing could be used as a way to enhance flexibility and productiveness, but it

¹⁰⁶ PERULLI A. (2003), *Tecniche di tutela nei fenomeni di esternalizzazione* in *Arg. dir. lav.*, 2, p. 473 (discussing the outsourcing of important operational functions, once carried out internally, to third parties linked by commercial relationships).

¹⁰⁷ See also FORD M. (2015), *Rise of the Robots. Technology and the Threat of a Jobless Future*, New York (introducing the notion of “electronic offshoring”, i.e. the importation of services of a digital nature from abroad).

¹⁰⁸ BOTSMAN R. and ROGERS R. (2011), *What’s mine is yours: how collaborative consumption is changing the way we live*, London. See also EVANS D. S. and SCHMALENSSEE R. (2016), *Matchmakers: the new economics of multisided platforms*, Cambridge, MA (maintaining that certain businesses are “transforming economies [and] making life easier and better for billions of people”).

¹⁰⁹ For a review of the many visions circulating, see CORAZZA L. (2004), “Contractual integration” e rapporti di lavoro. *Uno studio sulle tecniche di tutela del lavoratore*, op. cit., p. 8 (lamenting a regulatory approach aimed at “merely stopping centrifugal forces”).

¹¹⁰ For the gig freelancers, working at home (or in a coffee shop) opens work opportunities with flexible hours, and allows them to work without moving. Employment contracts can be individual, but workplaces are inherently public. Both workplace safety and productive conviviality are available to all in an office but are difficult, or impossible, to produce for workers scattered over the globe. See FRIEDMAN G. (2014), *Workers without employers: shadow corporations and the rise of the gig economy* in *Review of Keynesian Economics*, 2(2), p. 184 (explaining how “workers and the employer lose the benefits of workplace public goods”). See also EUROFOUND and INTERNATIONAL LABOUR OFFICE (2017), *Working anytime, anywhere: The effects on the world of work*, Publications Office of the European Union, Luxembourg, and the International Labour Office, Geneva, Switzerland.

¹¹¹ DAVIES P. L. and FREEDLAND M. (2006), *The Complexities of the Employing Enterprise* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and Frontiers of Labour Law*, Oxford, UK and Portland, OR, p. 257 (arguing that employment law “is imbued with the notion of the employer as a single person – in most cases a legal person rather than a human one”). See DE LUCA TAMAJO R. (2007), *Diritto del lavoro e decentramento produttivo in una prospettiva comparata: scenari e strumenti*, op. cit., p. 4 (describing the firm as a unique building). See also LOI P. (2017), *Il lavoro nella Gig economy nella prospettiva del rischio* in *Riv. giur. lav.*, 2, p. 259 (arguing that employment law is aimed at insuring workers against “social risks” deriving from the execution of the professional activity) and TULLINI P. (2003), *Identità e scomposizione della figura del datore di lavoro (una riflessione sulla struttura del rapporto di lavoro)* in *Arg. dir. lav.*, 1, p. 85.

should not hide a cost-saving strategy¹¹².

1.2. No country for labour lawyers? Why employment law is really future-proof.

As the relationship between innovation and employment is “non-linear, yet not random”¹¹³, the abovementioned phenomena have raised multiple concerns in nearly all legal fields¹¹⁴, from competition to privacy law¹¹⁵, from contract to public law¹¹⁶. Yet, the qualified “autonomy”¹¹⁷ of labour law from private and commercial law can be partly justified in the light of its protective goal¹¹⁸ in the field of productive processes of enterprises and as regards the relationship between an employing entity

¹¹² DEL PUNTA R. (2000), *Mercato o gerarchia? Il disagio del diritto del lavoro nell'era delle esternalizzazioni*, op. cit., p. 63. See also SMITH R. and LEBERSTEIN S. (2015), *Rights on demand: ensuring workplace standards and worker security in the on-demand economy*, National Employment Law Project Report, available at <https://goo.gl/TxZfNt>.

¹¹³ See VISCO I. (2015), *For the times they are a-changin'...*, Lecture at the London School of Economics Institute of Global Affairs, London, 11 November 2015.

¹¹⁴ For a complete overview, see LOBEL O. (2016), *The law of the platform* in *Minn. L. Rev.*, 101(1), pp. 87-166.

¹¹⁵ See PACELLA G. (2017), *Il lavoro nella gig economy e le recensioni on line: come si ripercuote sui e sulle dipendenti il gradimento dell'utenza?* in *Labour & Law Issues*, 3(1), p. 1. See also RANZINI G., ETTER M., LUTZ C. and VERMEULEN I. E. (2017), *Privacy in the sharing economy*, Report for the EU Horizon 2020 project Ps2Share: Participation, Privacy, and Power in the Sharing Economy.

¹¹⁶ See MOSTACCI E. and SOMMA A. (2016), *Il caso Uber. La sharing economy nel confronto tra common law e civil law*, Milano.

¹¹⁷ See CARINCI F. (2007), *Diritto privato e diritto del lavoro*, Torino. See also MENGONI L. (1990), *L'influenza del diritto del lavoro sul diritto civile* in *Dir. rel. ind.*, 5, p. 17. A comprehensive overview can be found in MARIUCCI L. (2016), *Culture e dottrine del giuslavorismo* in *Lav. dir.*, 4, p. 585. For an international perspective, see BOGG A., COSTELLO C., DAVIES A. C. L. and PRASSL J. (Eds.) (2015), *The autonomy of labour law*, Oxford, UK. See also DUKES R. (2014), *The Labour Constitution: The Enduring Idea of Labour Law*, Oxford, UK and HEPPLER B. (Ed.) (1986), *The making of labour law in Europe: a comparative study of nine countries up to 1945*, London.

¹¹⁸ See CLARK J. and WEDDERBURN L. (1987), *Juridification – a Universal Trend: The British Experience in Labor Law* in TEUBNER G. (Ed.), *Juridification of Social Spheres*, Berlin and New York, p. 165 (describing the State intervention limiting the autonomy of individuals to set their own affairs). See also SIMITIS S. (1987), *Juridification of Labor Relations* in TEUBNER G. (Ed.), *Juridification of Social Spheres*, Berlin and New York, p. 124 (arguing that “social conflicts are no longer hidden behind purely formal regulation, but are openly addressed through clear substantive provisions”). Labour law is regarded as having in general an imperative nature for the main reason that is aimed at protecting the worker as the weaker part of the labour relationship. DE LUCA TAMAJO R. (1976), *La norma inderogabile nel diritto del lavoro*, Napoli (illustrating the reason why the “State promotes (and plans) specific model of social reconciliation and organisation”). For a reconceptualisation of “hybrid” labour law, “torn between the old protective function and the new aspiration toward flexibility”, see SCIARRA S. (1998), *How “Global” is Labour Law? The Perspective of Sociale Rights in the European Union* in WILTHAGEN T. (Ed.), *Advancing Theory in Labour Law and Industrial Relations in a Global Context*, Amsterdam, p. 105.

and its employees¹¹⁹. Although the current debate, still at an early stage, is absorbed mostly by the antitrust law-related issues on the alleged unfair competition brought about by platforms in traditionally regulated markets (where companies are subject to more restrictive rules), labour scholars now insist on investigating how platform labour is threatening secure employment relationships and jeopardising workers' rights. Such a perspective is of the utmost importance¹²⁰: for the purposes of this research, the focus will be on the "professionalised" segment of the platform economy¹²¹, bearing in mind that the original scheme "has progressed from a community practice into a profitable business model"¹²².

Being knit together with other branches of knowledge, labour law can be reasonably considered an appropriate lens through which reading the intriguing present and the apparently unpredictable future of work¹²³. In this respect, it could be

¹¹⁹ The framework is thus informed by the notion that labour law serves the purpose to "regulate, to support and to restrain the power of management and the power of organised labour". See KAHN-FREUND O. (1972), *Labour and the Law*, London, p. 5. See also PERULLI A. (2017), *The Notion of 'Employee' in Need of Redefinition, A Thematic Working Paper for The Annual Conference of the European Centre of Expertise (ECE): The Personal Scope of Labour Law in Times of Atypical Employment and Digitalisation*. See PIERLINGIERI P. (1995), *Mercato, solidarietà e diritti umani in Rass. Dir. Civ.*, p. 92 (representing labour law as an antidote to the "commercialisation" of society providing for correctives aimed at pursuing the goal of a "social market economy". In this scenario, the aim of politics should be "harmoniz[ing] economic efficiency with social justice"). For a constitutionally oriented interpretation, see SCOGNAMIGLIO R. (1978), *Il lavoro nella Costituzione italiana in AA.VV., Il lavoro nella giurisprudenza costituzionale*, Milano, pp. 13-55. Contrary to this interpretation, see PERULLI A. (2007), *Diritto del lavoro e diritto dei contratti in Riv. it. dir. lav.*, 4, p. 427 ff. See also VARDARO G. (1986), *Tecnica, tecnologia e ideologia della tecnica nel diritto del lavoro*, op. cit., p. 298 ff. (describing labour law as a sub-branch of industrial law). For a European perspective, see COUNTOURIS N. (2009), *European Social Law as an Autonomous Legal Discipline in Yearbook of European Law*, 28(1), p. 95.

¹²⁰ CODAGNONE C., ABADIE F. and BIAGI F. (2016), *The future of work in the 'Collaborative Economy': Market Efficiency and Equitable Opportunities or Unfair Precarisation?*, op. cit., p. 19.

¹²¹ BERG J. (2016), *Income Security in the On-Demand Economy: Findings and Policy Lessons from a Survey of Crowdworkers*, op. cit., p. 19 (drawing a parallel with the rhetoric promoting temporary agency industry as employing just middle-class housewives "who were looking to earn 'extra' money while still fulfilling their household duties").

¹²² BÖCKMANN M. (2013), *The Shared Economy: It is time to start caring about sharing; value creating factors in the shared economy*, University of Twente, Faculty of Management and Governance, quoted in HATZOPOULOS V. and ROMA S. (2017), *Caring for Sharing? The Collaborative Economy under EU Law in Common Market Law Review*, 54(1), p. 81.

¹²³ See VOZA R. (2017), *Il lavoro e le piattaforme digitali: the same old story?*, WP C.S.D.L.E. "Massimo D'Antona".IT, 336, p. 13 (inviting labour lawyers to tackle the issue without complacency). For the purposes of the next chapters, labour law will be substantially complemented with studies in the field of sociology of labour markets and work organisation and management. One of the essential features of labour law – in addition to its role in mediating social conflicts – is indeed the openness to the influence of different subjects (not to be confused with the "hybrid mixing up", denounced by

argued that the very origin of employment law does not merely lie on the advancements of the technically sophisticated organisation of the modern undertaking¹²⁴: statutes and bills regulating working conditions have represented a way to counteract several market failures, such as information asymmetries, monopsony in labour supply, collective action problems, low trust, opportunism and sub-optimum investment in human capital, and externalities¹²⁵. By ensuring rights and attributing duties¹²⁶, the employment relationship was seen as “the site of the greatest need for legal intervention”¹²⁷ aimed at reinforcing the bargaining power of the workforce vis-à-vis the employer and establishing a minimum floor of protection and ground rules for “pragmatic” conflict¹²⁸.

It is worth noting that, over a century ago, labour laws were established in many countries because of the inadequacy of the ordinary private law in governing such market transactions¹²⁹. These rules were supposed to provide protection to workers

Barassi). See COLLINS H. (1997), *The productive disintegration of labour law* in *Industrial Law Journal*, 26, p. 295. See also ICHINO P. (2001), *Il dialogo tra economia e diritto del lavoro* in *Riv. it. dir. lav.*, 1, p. 166. ROMAGNOLI U. (2003), *Il diritto del lavoro nell'età della globalizzazione* in *Lav. dir.*, 4, p. 570 (describing the new challenges faced by this subject comparing labour law to a “tightrope walker”).

¹²⁴ “Labour law is a product of industrialization”, as asserted in WEISS M. (2009), *Re-Inventing Labour Law?*, op. cit., p. 45.

¹²⁵ See FUDGE J. (2006), *Fragmenting work and fragmenting organizations: The contract of employment and the scope of labour regulation* in *Osgoode Hall LJ*, 44(4), p. 626. See also EUROFOUND (2017), *Non-standard forms of employment: Recent trends and future prospects*, Dublin, p. 22 (arguing that “[m]onopsony will tend to lead to relatively lower wages and employ fewer people than in a more competitive labour market”).

¹²⁶ See, among others and generally, MANCINI F. (1957), *La responsabilità contrattuale del prestatore di lavoro*, Milano.

¹²⁷ HYDE A. (2006), *What is labor law?* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and frontiers of labour law*, Oxford, UK and Portland, OR, p. 37 (presenting the assumption that “the relationship of work or employment was simultaneously the site of: (1) the greatest social oppression, (2) the greatest inequality of bargaining power, (3) the most revolting excesses of power, and (4) the greatest social conflict”). See also CASTELVETRI L. (1994), *Il diritto del lavoro delle origini*, Milano, p. 222.

¹²⁸ KAHN-FREUND O. (1979), *Arbeit und Recht*, Frankfurt. See also DEL PUNTA R. (2001), *L'economia e le ragioni del diritto del lavoro* in *Giorn. dir. lav. rel. ind.*, p. 3 ff. (arguing that the level of protection is a purely political choice, to be considered as such, without dwelling too much on its “scientific” justification).

¹²⁹ COLLINS H. (2000), *Justifications and Techniques of Legal Regulation of the Employment Relation* in COLLINS H., DAVIES P. L. and RIDEOUT R. (Eds.), *Legal regulation of the employment relation*, London, p. 4. A lot has also been said, and quite rightly so, about the fact that “in the continental European legal systems, labor law arose as a reaction to the ambiguities of principles of contract law”. See RAZZOLINI O. (2009), *The Need to Go Beyond the Contract: Economic and Bureaucratic Dependence in Personal Work Relations* in *Comp. Lab. L. & Pol'y J.*, 31(2), p. 268.

in a situation of inequality of exchange between labour and capital¹³⁰. The same policies also gave power to employers (and managers) to organise, direct and vet their employees' work. In return for these privileges accorded to employers, workers, seen as weaker parts of the contract, were entitled to mandatory individual protections¹³¹. According to DEAKIN¹³², the "contractualisation" of the employment relationship resulted in the establishment of limits on the employer's power of command and in the transparent allocation and redistribution of economic and social risk.

The protection of workers' health and safety and the right to join forces and bargain collectively with the counterparts represent the core of the institutional *corpus* aimed at shielding workers from the volatility of the market and ensuring that they are not treated merely as a commodity, being human dignity at stake¹³³. These achievements can be considered as a political result of the "struggle between different social actors and ideologies, of power relationships"¹³⁴. It could be said that, for this reason, the essential scope of labour law has been restricted to the worker rather than being accompanied by a focus on the employer. Having reviewed

¹³⁰ "Labour is traded in markets, but it is inseparable from the human beings who perform it. On normative grounds, the terms, conditions and treatment of labour carry a higher moral significance than that of commodities, thereby meriting greater social protection and regulation" according to KAUFMAN B. E. (2008), *Paradigms in Industrial Relations: Original, Modern and Versions In-between* in *British Journal of Industrial Relations*, 46, p. 321.

¹³¹ Admittedly, traditional arguments about the need to protect workers' interest are met with strong counterarguments. For a critical analysis, reference should be made to LIEBMAN S. (2010), *Prestazione di attività produttiva e protezione del contraente debole fra sistema giuridico e suggestioni dell'economia* in *Giorn. dir. lav. rel. ind.*, 4, p. 571 (also describing the notion of "technological dependency" in the context of a subcontracting contract). Or to put it another way, statutory and collective provisions govern the individual contract, regardless of the will of contracting parties. See CARUSO B. (2013), *"The Employment Contract is Dead: Hurrah for the Work Contract!" A European Perspective* in STONE K. V. W. and ARTHURS H. (Eds.), *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, New York, p. 97 (discussing the civil law concept of inderogability or mandatory effects, through which the principles of the welfare state and social justice "seep into" different templates of both individual and collective employment relationships).

¹³² DEAKIN S. (2000), *The many futures of the contract of employment*, *ESRC Working Paper*, 191, p. 5. Macneil referred to a "mini-society with a vast array of norms" regulating several exchanges and their immediate processes. See MACNEIL I. R. (1973), *The many futures of contracts* in *S. Cal. L. Rev.*, 47(3), p. 801.

¹³³ See LIEBMAN S. (1993), *Individuale e collettivo nel contratto di lavoro*, Milano (arguing that collective organisations allow employees to stand at the same level as their employers, therefore limiting the employer's hierarchical power).

¹³⁴ HEPPLER B. (2013), *Back to the Future: Employment Law under the Coalition Government* in *Industrial Law Journal*, 42(3), pp. 203-223.

“complementary rather than exclusionary” justifications and together examined their foundations¹³⁵, the goal of labour law may be summarised as follows: “protection of human dignity of the worker who is involved in a contractual relationship and interest in functions, needs and goals more than in structures”¹³⁶.

In the second half of the last century, in order to unleash the productive potential of human labour a “civilisation” became necessary¹³⁷. Hence, the recent development of labour law can be seen as “the enactment of procedures and rules regulating the mutual relations and boundaries between management’s right to lead workers’ right to voice, negotiations, and exertion of independent collective pressure to influence and improve the condition of work”¹³⁸. For instance, the Italian Workers’ Statute¹³⁹ could be seen as the empowerment of a collective countervailing power to which specific functions implementing that regulation were attributed¹⁴⁰. This led to a limitation of the most authoritative profiles of the managerial prerogatives. As a

¹³⁵ See TODOLÍ-SIGNES A. (2017), *The End of the Subordinate Worker? The OnDemand Economy, the Gig Economy, and the Need for Protection for Crowdworkers* in *Int’l J. Comp. Lab. L. & Indus. Rel.*, 33(2), p. 244 ff.

¹³⁶ BARBERA M. (2010), *Trasformazioni della figura del datore di lavoro e flessibilizzazione delle regole del diritto*, op. cit., p. 203. See also COLLINS H. (2000), *Justifications and Techniques of Legal Regulation of the Employment Relation*, op. cit., p. 12 (claiming that “[m]any interests of the workers are commonly regarded as rights, which signifies that these interests should be regarded as inalienable entitlements. These right should thus be respected and protected by the law independently of their allocative efficiency”). At least, it can be said that many strands of EU social policy are oriented towards ambitions of social justice. For a comprehensive overview of the concept of “social justice”, see HENDRICKX F. (2012), *Foundations and functions of contemporary labour law in European Labour Law Journal*, 3(2), p. 115 ff. See also DAVIES P. L. and FREEDLAND M. (1983), *Kahn-Freund’s Labour and the Law*, London, p. 18 (arguing that “[t]he main objective of labour law has always been, and we venture to say will always be, to be a countervailing force to counteract the inequality of bargaining power which is inherent (...) in the employment relationship”). For a philosophical reflection, see COLLINS H. (2011), *Theories of rights as justifications for labour law* in DAVIDOV G. and LANGILLE B. (Eds.), *The idea of Labour Law*, Oxford, UK, pp. 137-155.

¹³⁷ See CORAZZA L. and ROMEI R. (2014), *Il puzzle delle trasformazioni*, op. cit., p. 8 (discussing the peculiar identity of labour law). See also SUPIOT A. (1994), *Critique du droit du travail*, Paris.

¹³⁸ DØLVIK J. E. and JESNES K. (2017), *Nordic labour markets and the sharing economy: Report from a pilot project*, Nordic Council of Ministers.

¹³⁹ It is the name given to Law No. 300 of May 20, 1970, “to make provisions respecting the protection of workers’ freedom and dignity, trade union freedom and freedom of action within the workplace, and provisions respecting placement”. For a comprehensive analysis, see WEDDERBURN L. (1990), *The Italian Workers’ Statute – Some British Reflections* in *Industrial Law Journal*, 19(3), pp. 154-191.

¹⁴⁰ See also KAHN-FREUND O. (1972), *Labour and the law*, London, p. 8 (maintaining that “[t]he main object of labour law has always been, and I venture to say will always be, to be a countervailing force to counteract the inequality of bargaining power which is inherent and must be inherent in the employment relationship”).

result, the employment contract was therefore shaped as the place where forces are in equilibrium between “freedom and equality, risk and solidarity, efficiency and sociality”¹⁴¹, taking into account the essentially dynamic and confrontational character of the set of interests in question when it comes to the production relationship.

However, while the world of work has changed since the first labour regulations were instituted [...], the fundamental reasons for the existence of labour protections – to ensure safe and healthy workplaces, to give workers a voice, and to provide minimum protections with respect to working time and earnings – remain valid”¹⁴². More than ever before. That is why labour lawyers should not abdicate their paramount role in being part of this discussion on platform-mediated labour, a foretaste of what is to come¹⁴³.

2. The industrial revolution(s) and the continuous metamorphosis of the firm. Sorting the old from the new.

Undoubtedly, the firm is one of the principal actors within the economic system¹⁴⁴. For the purposes of our research, this section will analyse the debate on the foundational role and the subsequent developments of such legal device¹⁴⁵. Once again, it has to be acknowledged that an in-depth examination of the process of

¹⁴¹ See also ROMAGNOLI U. (2003), *Il diritto del lavoro nell'età della globalizzazione* in *Lav. dir.*, 4, p. 569 (describing a set of sustainable and temporary compromises between the needs of companies such as efficiency, productivity, competitiveness and the exigency to preserve workers' dignity, health and safety).

¹⁴² BERG J. and DE STEFANO V. (2017, April 18), *It's time to regulate the gig economy*, retrieved from <https://goo.gl/ZWKyP1>.

¹⁴³ See also GAROFALO D. (2017), *Lavoro, impresa e trasformazioni organizzative* in *Frammentazione organizzativa e lavoro: rapporti individuali e collettivi*, Giornate di studio AIDLASS, Cassino, 18 e 19 May 2017, p. 97 (arguing that studying these phenomena is pivotal when it comes to understanding future trajectories of labour law).

¹⁴⁴ For a complete review of the development of the firm as an organisation, see AMATORI F. (1991), *Forme di impresa in prospettiva storica* in ZAMAGNI S. (Ed.), *Imprese e mercati*, Torino, pp. 123-154; LANDES D. S., MOKYR J. and BAUMOL W. J. (Eds.) (2012), *The invention of enterprise: Entrepreneurship from ancient Mesopotamia to modern times*, Princeton, NJ.

¹⁴⁵ “An organised grouping of resources which has the objective of pursuing an economic activity” according to Council Directive 2001/23/EC of 12 March 2001 on the approximation of the laws of the Member States relating to the safeguarding of employees' rights in the event of transfers of undertakings, businesses or parts of undertakings or businesses.

fragmentation, both from a corporate and organisational point of view¹⁴⁶, resulting in the disjuncture between the exercise of direction and control powers and the imputation of liabilities stemming from the employment relationship is not new¹⁴⁷. While grasping the scale of a carve-out phenomenon that has a vast series of consequences for employment law, it is important to specify that the interest is justified also in view of determining which entity is responsible for the entitlements accruing from the relevant employer-employee relationship¹⁴⁸.

The sharp decline in heavy industry, the slow collapse of manufacturing¹⁴⁹, the sluggishness of the production sector, the end of mass production¹⁵⁰, the tertiarisation of the productive apparatus¹⁵¹ have determined a paradigm shift as regarding the prototype of the firm which has abstracted itself from the business of value creation through the production and distribution of goods and services¹⁵². In the last decades,

¹⁴⁶ As pointed out in SANTORO-PASSARELLI G. (2004), *Trasferimento d'azienda e rapporto di lavoro*, Torino, p. 2.

¹⁴⁷ The entrepreneur might resort to different contractual instruments, ranging from simple arrangements (such as agency work) to more complex tools (such as service contract). See, for instance, ZANELLI P. (1985), *Impresa, lavoro e innovazione tecnologica*, Milano.

¹⁴⁸ At the same time, the firm cannot be considered as a mere substrate of the employment relationship, but *the* entity from which legal relations branch out. Accordingly, it could be said that the decomposition of the firm in turn determines also a fragmentation of the labour force. See DE STEFANO V. (2014), *A tale of oversimplification and deregulation: the mainstream approach to labour market segmentation and recent responses to the crisis in European countries*, op. cit., p. 253.

¹⁴⁹ “[M]ost advanced economies have witnessed a secular decline in their share of workers employed in manufacturing – a phenomenon often referred to as deindustrialisation” according to BERGER T. and FREY C. (2016), *Structural Transformation in the OECD: Digitalisation, Deindustrialisation and the Future of Work*, OECD Social, Employment and Migration Working Papers, No. 193, p. 15 (documenting a 30 per cent drop in manufacturing employment since 1980, mostly in low-technology sectors). See also MILGROM P. and ROBERTS J. (1990), *The economics of modern manufacturing: Technology, strategy, and organization* in *The American Economic Review*, p. 511 (describing a new “flexible multiproduct firm that emphasizes quality and speedy response to market conditions while utilizing technologically advanced equipment and new forms of organization”).

¹⁵⁰ It can also be seen as the end of the “mass-collective worker”, i.e. the proletariat, forged in the factories and furnaces. See ACCORNERO A. (1997), *Era il secolo del lavoro*, Bologna, p. 33 ff.

¹⁵¹ For a complete overview, see BAINES T. S., LIGHTFOOT H. W., BENEDETTINI O. and KAY J. M. (2009), *The servitization of manufacturing: A review of literature and reflection on future challenges* in *Journal of Manufacturing Technology Management*, 20(5), pp. 547-567.

¹⁵² Other scholars have demonstrated how the manufacturing sector has not been superseded definitely. Conversely, technological improvements may boost this sector. See, for instance, BERTA G. (2014), *Produzione intelligente. Un viaggio nelle nuove fabbriche*, Torino, p. 5. On the subject of the service-based sectors, see TOSI P. (1991), *Le nuove tendenze del diritto del lavoro nel terziario* in *Giorn. dir. lav. rel. ind.*, 4, pp. 613-632 (arguing that the difference between manufacturing industry and the service sector has become blurred).

a sustained process of disintegration has altered its conventional shape, the mould of the workplace and, more importantly, the concept of entrepreneur that ended up being dissociated from the notion of employer¹⁵³. In addition to this, the functional programme of the firm has been drastically transformed, segmented, redesigned and even reconceptualised¹⁵⁴.

The firm has been portrayed as a “plurality of activities” (i.e. a discrete group of processes) decomposable and then re-composable in accordance with the strategic objectives of the entrepreneur. Since the beginning of the last century, firms are no more designed as “medieval kingdoms, walled off and protected from hostile outside forces”¹⁵⁵. Conversely, their structure is more intricate as well as permeable¹⁵⁶. Scholarship has provided convincing evidence in support the hypothesis that the disassembling trend is neither the mere result of the employer’s unilateral action seeking to restore contractual power to the detriment of the weak part nor an act driven solely by the speculative objectives¹⁵⁷. The above-mentioned combined centrifugal forces have been presented as the natural effect of unbiased

¹⁵³ AA.VV. (2009), *La figura del datore di lavoro, articolazioni e trasformazioni: in ricordo di Massimo D’Antona, dieci anni dopo: atti del XVI Congresso nazionale di diritto del lavoro, Catania, 21-23 maggio 2009*, Milano. See also PRASSL J. (2015), *The concept of the employer*, Oxford, UK (proposing a functional-typological approach by identifying key functions of the employer, namely (i) the inception and termination of the employment relationship, (ii) receiving labour and its fruits, (iii) providing work and pay, (iv) the internal managing of the enterprise and (v) managing the enterprise on the external market).

¹⁵⁴ MURRAY F. (1983), *The decentralisation of production—the decline of the mass-collective worker?*, op. cit., p. 75 (demonstrating “how the use of decentralisation has been intensified and has changed though the introduction of new technology as Italy’s dominant firms have sought to restructure production in their struggle against profitability”).

¹⁵⁵ POWELL W. W. (1990), *Neither market nor hierarchy: network form of organization* in STAW B. M. and CUMMINTS L. L. (Eds.), *Research in Organizational Behavior*, 12, p. 301.

¹⁵⁶ For a complete review see DIMAGGIO P. (2009), *Introduction: Making sense of the contemporary firm and prefiguring its future* in ID. (Ed.), *The twenty-first-century firm: changing economic organization in international perspective*, Princeton, NJ, p. 4. The author offers a “new lexicon” to describe this “putative” transformation by referring to titles available in a local bookstore. The list is vast, presented in an almost comical tone: “*The Boundaryless Organization* (Ashkenas et al. 1998), *The Centerless Organization* (Pasternak and Viscio 1998), *The Clickable Corporation* (Rosenor et al. 1999) [...] *The Collaborative Enterprise* (Campbell and Goold 1999), *The Horizontal Organization* (Ostroff 1999), *The Self-Managing Organization* (Purser and Gabana 1998)”.

¹⁵⁷ Many scholars have focused on the “financialisation” of the firm, i.e. the dominance of financial calculations when it comes to defining how organisations should be designed. See generally FROUD J., HASLAM, C., JOHAL S. and WILLIAMS K. (2000), *Shareholder value and financialization: consultancy promises, management moves* in *Economy and Society*, 29(1), p. 80-110. See also GALGANO F. (1993), *Le istituzioni della società post-industriale* in GALGANO F., CASSESE S., TREMONTI G. and TREU T. (Eds.), *Nazioni senza ricchezza, ricchezze senza nazione*, Bologna, p. 16.

phenomena related to transformation of the post-industrial (corporate and) organisational models and to the advent of cognitive work¹⁵⁸.

Several comments have captured and classified different business practices redefining the frayed boundaries of the firm¹⁵⁹, from outsourcing of single tasks or complex functions to the transfer of a part of an undertaking¹⁶⁰. More recently, a new explanation has been developed according to which enterprises are rarely a self-reliant system. In this respect, two main flows arise – from inside to outside and vice versa. First and foremost, the focus on core competencies (the true point of differentiation¹⁶¹) somehow pushes non-core functions and non-core workers to the margin of the main productive process determining their redundancy. Moreover, the use of technology makes this process easier and more convenient. Secondly, in search for key competencies requiring a high degree of specialisation (that are not present internally), the firm may resort to the market for obtaining what is needed. As a consequence, “there is less of an incentive to cultivate long-term employment relationships”¹⁶².

Taking the historiographical perspective, the evolution of the firm can be portrayed in accordance with a simplified timeline moving from the introduction of early automation to the rise of cloud computing and artificial intelligence. Without dwelling too much on the matter, consideration must be given to the fact that historians have developed a rather rigid model in order to classify and describe the main distinctive aspects of what have been termed industrial revolutions, “in the sense that a sudden, unexpected surge of technological applications transformed the

¹⁵⁸ This is only partly true: transformations in the productive sectors are not independent variables. See Act No. 196/1997 (the so-called “Treu package”) extending the range of atypical forms of work: fixed-term contract, part-time work, temporary agency labour, apprenticeship, training contract and internship; Decree No. 469/1997 eliminating the rigidity of the public monopoly on placement; Act No. 30, 14 February 2003 and Legislative Decree No. 276/2003, implementing the Biagi law. For a detailed overview, see TIRABOSCHI M. (2015), *Labour Law and Industrial Relations in Recessary Times: The Italian Labour Relations in a Global Economy*, Modena.

¹⁵⁹ The expression is used in ROMEI R. (1999), *Cessione di ramo di azienda e appalti* in *Giorn. dir. lav. rel. ind.*, 2/3, pp. 325-383.

¹⁶⁰ For a more detailed analysis, see SANTORO-PASSARELLI G. (2004), *Trasferimento d’azienda e rapporto di lavoro*, op. cit.

¹⁶¹ PORTER M. E. (2008), *Competitive advantage: Creating and sustaining superior performance*, New York.

¹⁶² INTERNATIONAL LABOUR OFFICE (2016), *Non-standard employment around the world: Understanding challenges, shaping prospects*, Geneva, Switzerland, p. 163.

processes of production and distribution”¹⁶³. The first industrial revolution – starting in the last third of the eighteenth century – implied the transition from manual to mechanised production methods by using bulky machines and steam power, boosting coal-powered manufacturing¹⁶⁴. A hundred years later, the second industrial revolution was based on the conversion to mass production based on a stricter division of labour, by using electric power and benefiting from urbanisation, advancements in the telecommunication (for instance the telegraph) and the transport sectors¹⁶⁵. Both revolutions triggered serious upheaval, displacement and dislocation¹⁶⁶.

Moreover, in the light of Taylor’s principles of “scientific management”, the efficiency of businesses was strengthened through (i) the parcelisation of the acts of conception and execution, previously lodged in the same workers, and the nearly equal division of work between workers and managers, (ii) the rigid calibration, monitoring and control over discrete worker’s performances, replacing rule-of-thumb methods¹⁶⁷, (iii) the use of incentives in response to individual conducts¹⁶⁸. These theories are epitomised by the Fordist model, characterised by the standardisation of components and the creation of a workflow that chops up a complex assignment in discrete, repeatable and guileless steps. Accordingly, the production line was organised in accordance with a methodical subdivision of labour, each repetitive performance of jobs was preceded by preparatory acts.

¹⁶³ CASTELLS M. (2011), *The rise of the network society: The information age: Economy, society, and culture* (Vol. 1), Oxford, UK, p. 34 ff. (describing the concept of network as an interpretation framework for increasingly complex interactions and power relationships).

¹⁶⁴ For the British case, see LANDES D. S. (1969), *The unbound Prometheus: technological change and industrial development in Western Europe from 1750 to the present*, Cambridge, MA, p. 41. See also HOBBSAWM E. J. (1972), *La rivoluzione industriale e l'impero. Dal 1750 ai giorni nostri*, Torino; WEISS M. (2009), *Re-Inventing Labour Law?*, op. cit., p. 45 (presenting the factory of manufacturing industry, “a more or less large unit, where employees – mainly blue-collar” worked “as a collective entity”).

¹⁶⁵ Railroads and telegraph are considered the key factor for this “leap forwards”. See AMATORI F. (1991), *Forme di impresa in prospettiva storica*, op. cit., p. 126.

¹⁶⁶ See ACEMOGLU D. and ROBINSON J. A. (2012), *Why nations fail: The origins of power, prosperity, and poverty*, New York.

¹⁶⁷ See also TAYLOR F. W. (1911), *Principles of Scientific Management*, New York and London (claiming that “perhaps the most prominent single element in modern scientific management is the task idea”).

¹⁶⁸ See TAYLOR F. W. (1914), *Scientific management* in *The Sociological Review*, 7(3), p. 266. Although not widely adopted, his theory has influenced the an “ethos of managerial control”, accelerating bureaucratisation, defined as “a new governance system that displaced traditional authority exercised directly through personal relationships by embedding control in the social structure of work relations”.

Moreover, the mass production of uniform goods in factories became a rapid and efficient engine of growth thanks to the use of dedicated mechanical elements, in a very early phase of robotisation¹⁶⁹.

On this concise timeline¹⁷⁰, the expression “third industrial revolution” is used to refer to the automation and computerisation of production thanks to the tools of the information and communication technology (hereinafter ICT), started in the 70’s¹⁷¹. In this era, “mass customisation”, a particular variation of consumerism, began to succeed, as brands and marketing emerged and started exerting more penetrating strength¹⁷².

¹⁶⁹ “Some call it simply ‘Taylorism’ while other management theorists focus on the hierarchical corporation, with its pyramid structure. The hierarchical corporation was a structure with many layers, or rungs, with everyone reporting to someone on the next higher rung”, according to BELLACE J. R. (1996), *Labour Law for the Post-Industrial Era* in *Int’l J. Comp. Lab. L. & Indus. Rel.*, 12(3), p. 189. In this case, a reference has to be made to the Japanese model, also known as the “Toyota system” or “Toyotism”. This archetype was extremely flexible and adaptable, changing over gradually from planned mass production to the practice of zero stockholding (and, consequently, to the opportunity of downsizing). Inventories were eliminated and total quality control was fostered. A combination of enhanced autonomy, rewards for best performances, team working practices, worker participation and reduced hierarchies echelons became a crucial component of the backbone of this model, thus boosting the workers’ productivity. According to Castells, “‘Toyotism’ is a management system designed to reduce uncertainty rather than to encourage adaptability”, CASTELLS M. (2011), *The rise of the network society: The information age: Economy, society, and culture*, op. cit., p. 158. See also MONDEN Y. (2011), *Toyota production system: an integrated approach to just-in-time*, Boca Raton, FL (showing how to each unsold stock there is a corresponding oversupply in labor force). See also OHNO T. (1993), *Lo spirito Toyota*, Torino. For a comparison between post-Fordism, lean production and Toyota, see COFFEY D. and THORNLEY C. (2010), *Legitimizing precarious employment: Aspects of the post-Fordism and lean production debates* in THORNLEY C., JEFFERYS S. and APPAY B. (Eds.), *Globalization and precarious forms of production and employment: Challenges for workers and unions*, Cheltenham, UK, p. 53. For an analysis on subordination and “total quality management”, see GAETA L. (1997), *Qualità totale e teorie della subordinazione* in SPAGNUOLO VIGORITA L. (Ed.), *Qualità totale e diritto del lavoro*, Milano, pp. 103-128. For an overview on the “wise utilization of human resources”, see SCHULER R. S. and JACKSON S. E. (2007), *Human resource management in context* in BLANPAIN R. (Ed.), *Comparative labour law and industrial relations in industrialized market economies*, The Hague, pp. 95-133.

¹⁷⁰ See also PEREZ C. (2009), *Technological revolutions and techno-economic paradigms* in *Cambridge Journal of Economics*, 34(1), p. 185 ff.

¹⁷¹ See CASTELLS M. (1996), *The information age: Economy, society, and culture*, Oxford, UK. This revolution was considered as “just started” by CARINCI F. (1985), *Rivoluzione tecnologica e diritto del lavoro: il rapporto individuale*, op. cit., p. 203.

¹⁷² This customer-centric approach has profound impacts on the production system, as the production structure need to be redesigned. The pitfalls in such an unprecedented restructuring are evident. “[O]ne’s consumer identity has come to take precedence over other social roles, particularly the role of worker or citizen”, according to CRAIN M., POSTER W. and CHERRY M. (Eds.) (2016), *Invisible Labor: Hidden Work in the Contemporary World*, Oakland, CA. The Authors refer to COHEN L. (2003), *A Consumers’ Republic: The politics of mass consumption in Postwar America* in *Journal of Consumer Research*,

Following this slide show on the history of industrial revolutions, it could be said that today the global economic and social system stands at the brink of a fourth industrial revolution, which can be described as the prosecution of the third revolution further leveraging on the exponential pace of digitalisation, thanks to a “full development of the techno-economic paradigm of the information society”¹⁷³. In many writings, the current wave of technological development is configured as the “second machine age”¹⁷⁴, boosted by cyber-physical systems and interconnected artificial intelligence (AI)¹⁷⁵. The continuous production and massive usage of data, in conjunction with cloud storage and computing, learning machines, mobile robotics and 3D printing, represents the lifeblood of the on-going remodelling¹⁷⁶.

In this context, it can be said that during the second industrial revolution the so-called “system firm” was developed as an effective way to orchestrate a more complex production with continuous processes, while the third industrial revolution has signalled the entrance into the realm of tertiarisation¹⁷⁷. In a sense, it accelerated the process of decentralised production allowing setting a “rarefied” network of relationships¹⁷⁸. As the evolution of the external environment was somehow variable,

31(1), pp. 236-239. See also SRNICEK N. (2016), *Platform capitalism*, New York, p. 17 (describing the shift towards the production of “increasingly customised goods that responded to consumer demand”).

¹⁷³ VALENDUC G. and VENDRAMIN P. (2017), *Digitalisation, between disruption and evolution*, op. cit., p. 127.

¹⁷⁴ BRYNJOLFSSON E. and MCAFEE A. (2014), *The second machine age: work, progress, and prosperity in a time of brilliant technologies*, New York (arguing that the difference between the first and the second machine ages is explained by the scope of what can be automated and the pace as well as the scale at which it can be done).

¹⁷⁵ See also European Parliament resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)). For a preliminary comment, see PONCE DEL CASTILLO A. (2017), *A law on robotics and artificial intelligence in the EU?*, *ETUI Foresight Briefs*, No. 2.

¹⁷⁶ According to a study commissioned by the European Parliament, “[d]ata will become the main source of desire, the preeminent medium of exchange and the main source of tension”. See ROBERTSHAW S. (2015), *The Collaborative Economy: Impact and Potential of Collaborative Internet and Additive Manufacturing*, Publications Office of the European Union. See also EUROPEAN COMMISSION, *Open data: An engine for innovation, growth and transparent governance*, COM(2011) 882 final.

¹⁷⁷ Fortunately, the expressions “quaternary” and “quinary” – used to refer to the digitalised segment of the third sector – have been abandoned. See BELL D. (1973) *The Coming of Post-Industrial Society. A Venture in Social Forecasting*, New York. The knowledge-based economy is inherently rooted on the relevance of service sector and the paramount role of information and communication technology. GOLZIO L. (2005), *L'evoluzione dei modelli organizzativi d'impresa* in *Dir. rel. ind.*, 2, p. 312 (describing the operation of service sector and the increasing importance of technological and scientific knowledge).

¹⁷⁸ CORAZZA L. (2004), *“Contractual integration” e rapporti di lavoro. Uno studio sulle tecniche di tutela del lavoratore*, op. cit., p. 7.

the efficiency was thus reached by means of new organisational patterns conceived as a rapid interconnection between different production factors¹⁷⁹.

Being aware of the risk of simplification, this change of paradigm can be described by referring to three concurring phenomena: de-materialisation¹⁸⁰, de-territorialisation¹⁸¹ and de-institutionalisation¹⁸². As a result of this, the vertically structured firm, capable of concluding a complete productive process internally, was slowly reengineered. Firstly, a trend may be observed according to which a variety of legal instruments are increasingly being used to externalise productive functions. Secondly, new information and communication technologies allow, to an increasing extent, for a relocation of work performances outside the traditional business cycle. Thirdly, elusive practices may result in the (transnational) selection of most favourable regime where the entrepreneur can buy the “labour resource” or assets and services, thus leading to a detrimental sort of regulatory competition.

As a closing remark, while it is true that the undertaking has slowly crumbled into connected subunits due to a number of different causes, perhaps the stereotyped

¹⁷⁹ To this extent, the notion of “simultaneous interdependence” has made headway in literature as an explanation for the overlapping between the real world and the immaterial environment, otherwise known as “cyberspace”. Without going into further details, it could be said that the virtual dimension extends both space and time, determining a sort of a substantial a-temporality, a peculiar spot where transience and eternity blend harmoniously. See RODOTÀ S. (1997), *Tecnopolitica. La democrazia e le nuove tecnologie della comunicazione*, Roma and Bari. Contrary to the idea that platform are operating in an immaterial dimension, see FLECKER J. and SCHÖNAUER A. (2016). *The Production of ‘Placelessness’: Digital Service Work in Global Value Chains* in FLECKER J. (Ed.), *Space, Place and Global Digital Work*, London, p. 11.

¹⁸⁰ “Dematerialisation” has been described as the “increased evaporation of material assets” in DE LUCA TAMAJO R. (2004), *Riorganizzazione del sistema produttivo e imputazione dei rapporti di lavoro* in LYON-CAEN A. and PERULLI A. (Eds.), *Trasformazione dell’impresa e rapporti di lavoro: atti del seminario dottorale internazionale, Venezia 17-21 giugno*, Padova, p. 39. As rightly pointed out, although the modern firm refuses the incoercible materiality of productive lines, labour organisation can be hardly de-materialised.

¹⁸¹ See HORTON J. J. (2010), *Online labor markets*, op. cit., p. 515 (discussing the acceleration in the flattening of labour markets due to “virtual migration”). See also FRIEDMAN T. (2005), *The world is flat: A brief history of the globalized world in the 21st century*, London (formulating the so-called “flat world hypothesis”, i.e. the irrelevance of one’s location thanks to ICT tools).

¹⁸² This trend can be described as the prevalence of self-regulation in terms of working conditions, thus increasing the role of private autonomy while statutory regulations as well as “external” control mechanisms undergo a remarkable decline. See also FUDGE J. (2012), *Blurring Legal Boundaries: Regulating for Decent Work* in FUDGE J., MCCRYSTAL S. and SANKARAN K. (Eds.), *Challenging the Legal Boundaries of Work Regulation*, Oxford, UK, p. 1-26. See generally TOURAINE A. (2009), *Libertà, uguaglianza, diversità*, Milano.

image of the “standard firm” has been consistently overstated¹⁸³. Indeed, as explained long before the advent of platforms, the traditional model has been in continuous transformation and movement, rapidly eroding since the last century. Hence, this alleged crisis ought not to be overestimated but warrants special attention.

2.1. Hierarchical outsourcing in a broader context: snapshots from the “fissured workplace”.

The previous section has explained how the modern workplace and the standard firm, once represented as a solid monolith, have “exploded” due to a drastic de-verticalisation process¹⁸⁴. Borrowing the expression from geological studies, professor WEIL crafted an influential formulation, “fissured workplace”¹⁸⁵ in order to explain how economies of flexibility pursue the goal of reacting rapidly to both qualitative and quantitative fluctuations in demand¹⁸⁶.

To deepen this understanding, the labour market economist used impressive “vignettes” of workers in several businesses, demonstrating how firms, and consequently employment relationships, are vulnerable to erosion. The sequence is impressive: a maid employed by a third-party hotel management company, a cable installer classed as an independent contractor while working for a single installation company, a janitor who has purchased a franchise from one of the biggest company in that sector¹⁸⁷, a dock porter who unpacks, loads, and ships goods – temporarily staffed to a logistic company serving a large chain of grocery stores, a young student holding an expensive work visa who packs chocolates exclusively for a well-known company for a modest wage. Informed by these experiences, the list could be easily

¹⁸³ There is no typical firm in a given industry according to ICHINO P. (1999), *Il diritto del lavoro e i confini dell'impresa*, op. cit., pp. 203-275.

¹⁸⁴ For a review of the Italian context, see NEPI F. (2004), *I profili contrattuali dell'outsourcing* in CAMPANELLA P. and CLAVARINO A. (Eds.), *L'impresa dell'outsourcing*, Milano, p. 47 ff. (discussing analogies and differences between common outsourcing processes and other contracts such as mandate, “mandato”, subcontracting, “subfornitura”, and contract, “appalto”). Several tools can be used to bring about “a transformation in how business work in ways that are invisible to most of [...] consumer”: subcontracting, temporary agency, franchising, licensing and third party agreement, but also legions of “self-employed” workers (as fissuring is the cause of misclassification).

¹⁸⁵ Professor Harry Arthurs has recently proposed to use the expression “fracked”.

¹⁸⁶ See also TREU T. (2012), *Trasformazioni delle imprese: reti di imprese e regolazione del lavoro in Mercato Concorrenza Regole*, 1, p. 10.

¹⁸⁷ A study found that janitorial workers suffered a four-to-seven percent wage penalty from 1983 to 2000 as a result of outsourcing practices. See DUBE A. and KAPLAN E. (2010), *Does outsourcing reduce wages in the low-wage service occupations? Evidence from janitors and guards in ILR Review*, 63(2), p. 287.

complemented, expanded and even updated by making specific reference to crowd-employment and work on demand via platform arrangements¹⁸⁸.

Two particular aspects must be highlighted here. On the one hand, the expressive force of these snapshots reveals how common it has become to come across similar situations in a myriad of industries where “[t]he label on a worker’s uniform and the brand on the outside of the establishment where the work occurs may not match the business name on the paycheck or the company that recruits and hires that same worker”, as explained in a NELP’s report¹⁸⁹. On the other, the point made concerns the fact that – in a different era – the end beneficiaries of the underlying services (a hotel, a media giant, a cleaning company, a multinational retailing corporation, a food manufacturers) would likely have directly employed the workers.

No one can deny that this introductory plethora of controversial cases offers an effective representation of the disarticulation of activities deemed peripheral to the core business, formerly carried out inside the “mother” organisation¹⁹⁰. In the

¹⁸⁸ “Gig workers are employed in coffee shops and university lecture halls, farms, factories, and as janitors cleaning offices at night. They work for low wages as personal care attendants, dog walkers, and day labourers for landscapers, and for high wages as managers of IT installations, accountants, editors, lawyers, and business consultants. Gig workers often do the same work as do those on traditional contracts; often the same work that they themselves had performed before they were laid off from a traditional job to be rehired on a gig” as described in FRIEDMAN G. (2014), *Workers without employers: shadow corporations and the rise of the gig economy* in *Review of Keynesian Economics*, 2(2), p. 172.

¹⁸⁹ RUCKELSHAUS C., SMITH R., LEBERSTEIN S. and CHO E. (2014), *Who’s the boss: Restoring accountability for labor standards in outsourced work* in *National Employment Law Project Report*, available at www.nelp.org/content/uploads/2015/02/Whos-the-Boss-Restoring-Accountability-Labor-Standards-Outsourced-Work-Report.pdf (illuminating the scope and features of companies’ decisions to outsource or use related structures in a variety of sectors).

¹⁹⁰ Before venturing on to this topic, it should be borne in mind that scholars have provided a conceptualisation of the process of making companies more flexible, focussing on three axes: functional, numerical and financial flexibilities. In order to build a “flexible firm”, the workforce has to be divided into different groups of workers: the core and the periphery ones. The two are submitted to different kinds of flexibility strategies: “functional flexibility is designed for the core workers, who are more protected from market fluctuations; whereas numerical flexibility becomes more important when shifting to the periphery”. In line with Atkinson’s considerations, the differentiation between an inner core of employees with high levels of task flexibility, an outer core of peripheral employees where the achievement of numerical flexibility is paramount, and beyond the organisation to the use of self-employed, subcontractor and agency temporary staff, none of whom were employees of the organisation. As is evident, lower-skilled workers are likely to be more replaceable. See ATKINSON J. (1984), *Manpower strategies for flexible organisations* in *Personnel management*, 16(8), p. 28. On numerical flexibility see BENTOLILA S. and DOLADO J. J. (1994), *Labour flexibility and wages: Lessons from Spain* in *Economic Policy*, 9(18), p. 53. For the Italian scenario, see GALLINO L. (2007), *Il lavoro non è una merce: contro la flessibilità*, Roma and Bari, p. 5. For a complete overview, see ZAPPALÀ L. (2006), *Tra diritto ed economia: obiettivi e tecniche della regolazione sociale dei contratti di lavoro a termine* in *Riv. giur. lav.*, 1, pp. 171-214.

author's words, once again referred to rocky surfaces, "one fissures start, they deepen" with time¹⁹¹. The image of a chink that would grow and would lead to the crumbling into granules is evocative, as it explains how this trend could spread in other functions and from sector to sector, "by design or effect".

Major companies suffered market pressure to skyrocket their profits, improve the financial performances and produce results for investors. The strategy to help restore competitiveness relied on focusing attention and resources on a set of core competencies representing distinctive capabilities and "source of comparative advantage in the markets in which they competed"¹⁹². Firms often responded by concentrating on their core competencies, shedding peripheral activities (such as catering, portering, security, janitorial maintenance). The result was the disintegration of non-core activities (i.e. ancillary services) from the original granite boulder¹⁹³, a partial or total removal of liabilities and a convenient increase in their margins. While in the past, the segmentation involved marginal and nonessential functions of the productive cycle¹⁹⁴, modern vignettes document the "fissurisation" and consequent assignment to third parties of key functions and full crucial company processes¹⁹⁵, such as accounting, payroll, human resources, client care. The very fact that a company has a core business was then considered a factor behind its rigidity. As claimed before, this process is very difficult to stop once it starts rolling¹⁹⁶.

¹⁹¹ WEIL D. (2016), *Afterword: Learning from a Fissured World-Reflections on International Essays regarding the Fissured Workplace*, op. cit., p. 211.

¹⁹² See CORAZZA L. (2004), "Contractual integration" e rapporti di lavoro. Uno studio sulle tecniche di tutela del lavoratore, op. cit., p. 201 (describing the outsourcing of core competencies, such as strategic and market programming). The idea of core competence was introduced into management literature by PRAHALAD C. K. and HAMEL G. (1990), *The Core Competence of the Corporation* in *Harvard Business Review*, 68(3), pp. 79-91.

¹⁹³ After the Second World War, a new model emerged in Japan. "Keiretsu" consisted in a nucleus of a firm tied to a myriad of other cross-held companies. They often jointly invested in new large infrastructure projects, and occasionally mutually supported each other in times of financial crisis. WEIMER J. and PAPE J. (1999), *A taxonomy of systems of corporate governance* in *Corporate Governance: An International Review*, 7(2), p. 152. See also EDWARDS B., WOLFENZON D. and YEUNG B. (2005), *Corporate governance, economic entrenchment, and growth* in *Journal of Economic Literature*, 43(3), p. 655.

¹⁹⁴ DE LUCA TAMAJO R. (2005), *Ragioni e regole del decentramento produttivo* in *Dir. rel. ind.*, 2, p. 307.

¹⁹⁵ CAMPANELLA P. (2004), *Outsourcing e rapporti di lavoro. La dimensione giuslavoristica dei processi di esternalizzazione dell'impresa* in CAMPANELLA P. and CLAVARINO A. (Eds.), *L'impresa dell'outsourcing*, Milano, p. 99 ff. (describing "modern" outsourcing as something peculiar, new and distinctive).

¹⁹⁶ In many cases it goes even deeper, spreading into activities that had previously been carried out directly and could be regarded as core to the company: housekeeping in hotels, cooking in restaurants, loading and unloading in retail distribution centres, even basic legal research in law firms. See WEBER L. (2017, February 2), *The End of Employees*, retrieved from <http://on.wsj.com/2lndKEK>

Understandably, this particular practice has recently come under fire by labour inspectorates and agencies¹⁹⁷. Equally unsurprising is that literature has convincingly demonstrated how the fissured workplace represents both the relationship between different business enterprises (subcontracting, franchising) and a reshaping of the employer-employee relationship, which is described in the following chapter.

2.2. From hierarchy to market to network, and back. No need to reinvent the wheel.

The aim of this paragraph is to examine what drives and motivates the process of vertical disintegration. Economists, lawyers, organisational theorists, and business historians have long wrestled with this issue. To tell the truth, a slightly different question has to be answered, and the intention is to take a backwards step by extending the scope of the analysis to the reasons why firms exist. Why, in other words, “islands of conscious power” arise in the surrounding “ocean of unconscious co-operation like lumps of butter coagulating in a pail of buttermilk”¹⁹⁸? Neoclassical economics wondered why not all firms transact in the open market¹⁹⁹. To this extent, transaction cost economics – assuming that organisations tend toward efficiency – is fundamental to the study of the business decision-making process determining the “efficient boundaries” of a given organisation²⁰⁰, defined as an optimal balance between activities done within and outside its confines.

(discussing recent trends of outsourcing in companies such as *Virgin America Inc.*, *Pfizer Inc.*, *Wal-Mart Stores Inc.* and even *Google* parent *Alphabet Inc.* There is a highly revealing passage on this point: “[n]o one in the airline industry comes close to *Virgin America Inc.* on a measurement of efficiency called revenue per employee. That’s because baggage delivery, heavy maintenance, reservations, catering and many other jobs aren’t done by employees. *Virgin America* uses contractors”).

¹⁹⁷ In 2015 the US Department of Labour had released an administrative interpretation revealing how many workers (misclassified as independent contractors) would be covered by the Fair Labour Standards Act, in light of the wording of the law and established case law. UNITED STATES DEPARTMENT OF LABOUR, WAGE AND HOUR DIVISION (2015), *The Application of the Fair Labor Standards Act’s “Suffer or Permit” Standard in the Identification of Employees Who Are Misclassified as Independent Contractors*. Administrator’s Interpretation No. 2015-1, issued by Administrator David Weil.

¹⁹⁸ ROBERTSON D. H. (1923), *The Control of Industry*, London, p. 85, quoted in COASE R. H. (1937), *The nature of the firm* in *Economica*, 4(16), p. 386.

¹⁹⁹ In the eyes of neoclassical economists, the factory was a schematised “black box”, “a self-interested utility maximize”, where the entrepreneur provided an input and received an output. See MACNEIL I. R. (1980), *Economic analysis of contractual relations: its shortfalls and the need for a rich classificatory apparatus* in *Nw. UL Rev.*, 75(6), p. 1021.

²⁰⁰ The expression is borrowed from OUCHI W. G. and BARNEY J. B. (1981), *Efficient Boundaries in Working paper*, UCLA Graduate School of Management. To this extent, the entrepreneurial activity consists in defining boundaries (i) leading to an exchange between parties aimed at obtaining

It must be highlighted that – despite the lack of convergence of views²⁰¹ – economy is the result of political decisions, implemented through the use of law, since “legal regulation shapes the market in which contracts are made”²⁰². Thus, legal institutions need to be analysed also by mentioning their socio-economic foundations. Consequently, this section will describe the theoretical foundation of the vertically integrated firm or, even better, the modern corporation, by scrutinising similarities and discrepancies between the traditional structure of a firm and the dominant business model of any platform- and app-based player. In particular, it is vitally important to assess the distinctive elements of labour platforms by referring to previous literature on transactional costs. Thus, attention will be drawn on Coase’s and Williamson’s key insight describing the firm as a governance structure²⁰³. The strategy is to develop the strengths of scholars from different fields and perspectives and to tempt a dialogue among them in the light of the advent of digital intermediaries.

At the same time, the purpose of this test is to provide a speculative path aimed at confirming the process of overcoming or, at least, integrating the dyadic view of markets and hierarchies, bearing in mind that every pure scheme admit variants. In particular, it is argued that the combination of pervasive broadband, algorithmic governance, geo-location mechanisms and ICT systems seems to have further blurred the lines between the two longstanding alternatives²⁰⁴. Furthermore, it has to be noted that an unorthodox response to this rigid divide has been already proposed: networks, a “distinctive form of coordinating economic activity” in an elastic way²⁰⁵.

sufficient information to judge the fairness and good faith with which they are being dealt in the relationship and (ii) allowing to accomplish the relevant assignment at minimum cost.

²⁰¹ The traditional economic perspective has been criticised as it simplistically “describes the firm in technological terms as a ‘production function’ in which inputs (labor, capital) are transformed into outputs (goods, services) according to the laws of technology”. See WILLIAMSON O. E. (1996), *Economics and Organization: A Primer in Cal. Mgmt. Rev.*, 38(2), p. 131. See also MARINELLI M. (2002), *Decentramento produttivo e tutela dei lavoratori*, Torino.

²⁰² STONE K. V. W. (1993), *Policing employment contracts within the nexus-of-contracts firm* in *University of Toronto Law Journal*, 43(3), pp. 353-378 (pinpointing the distributive consequences of legal regulation in employment relations). Moreover, the particular part played in this by conventional sources such as collective agreement is something that needs to be taken into account.

²⁰³ The first question to answer is “should an entrepreneur use markets or produce in-house?”.

²⁰⁴ See also RUBERY J. and WILKINSON F. (1981), *Outwork and segmented labour markets* in WILKINSON F. (Ed.), *The Dynamics of Labour Market Segmentation*, London, pp. 115-132 (analysing capital investment in technology and organisation flexibility).

²⁰⁵ DE LUCA TAMAJO R. (2007), *Diritto del lavoro e decentramento produttivo in una prospettiva comparata: scenari e strumenti*, op. cit., p. 3

By building on the initial Coasean dichotomy and on its alternative supplement²⁰⁶, this section will provide arguments for describing the hybrid nature of labour platforms. Although such capacity could be partially used to demonstrate its exceptional class, in reality, digitally enabled firms embody and take advantage of the most controversial features of each model²⁰⁷. The truth is that non-hierarchical relationships have given way to more sophisticated ones but still characterised by hierarchical authority and economic dominance²⁰⁸.

That said, going back to the original point about the models, it has to be said that a firm should be able to find the most inexpensive commodities and services by contracting them out in an open marketplace. According to Coase, haggling costs are avoided inside the firm because formal authority, the essence of such structure, replaces time-consuming negotiation and price-mechanisms governance in the market. It begins with the presumption that uncertainty deriving from markets can be used to explain vertical integration as a way to bypass markets²⁰⁹. For this reason, business administration experts have acknowledged that the existence of – or better, the need to minimise – transaction costs justifies the emergence of the firm²¹⁰. According to this line of thinking, the study of the firm can be developed as a study of transaction costs, defined as (i) obtaining reliable information, (ii) bargaining the price and contract, and (iii) monitoring and enforcing transactions²¹¹.

In this vein, if transaction costs are prohibitive, then firms choose to “produce” a particular input internally, thus bypassing the markets thanks to integration²¹². If

²⁰⁶ See LIEBMAN S. (2010), *Prestazione di attività produttiva e protezione del contraente debole fra sistema giuridico e suggestioni dell'economia*, op. cit., p. 577 (clarifying the equivalence between the couples “centralisation/decentralisation”, “hierarchy/market”, “firm/market”).

²⁰⁷ For an alternative conceptualisation built around aspects of the control of the firms’ non-human assets, see generally HART O. D. (1995), *Firms, contracts, and financial structure*, Oxford, UK.

²⁰⁸ See HEAD S. (2014), *Mindless: Why smarter machines are making dumber humans*, New York (arguing that employees can be monitored every second once management and intelligent machines will be connected).

²⁰⁹ See JACOBIDES M. G. (2005), *Industry change through vertical disintegration: How and why markets emerged in mortgage banking* in *Academy of Management Journal*, 48(3), p. 467 (arguing that scholars should focus on the question of integration at the industry level rather than on the single choices of specific firms).

²¹⁰ See COASE R. H. (1988), *The firm, the market, and the law*, Chicago, IL.

²¹¹ See WILLIAMSON O. E. (1981), *The economics of organization: The transaction cost approach* in *American Journal of Sociology*, 87(3), p. 553.

²¹² As argued by Perulli, “[a] firm will tend to expand as long as the organizational costs of an internal adding operation will not match the ones in the open market, that is to say the costs to set up another firm”. See PERULLI A. (2017), *The theories of the firm between Economy and law*, op. cit., p. 358.

transaction costs are low, firms rely on markets and buy what they need. Thus, according to this theory, when asset specificity²¹³, uncertainty and frequency are high, and hence transaction costs owing to speculation are significant, firms will be integrated, establishing a “non-market governance system”. COASE brilliantly uses this analytical framework to observe that “[w]ithin a firm, market transactions are eliminated and in place of the complicated market structure with exchange transactions is substituted the entrepreneur-coordinator, who directs production”. From another standpoint, it could be said that a firm is essentially a device for creating long-term contracts when short-term contracts may prove to be too inconvenient or unsatisfactory²¹⁴.

Interestingly, it has to be noted there is an intertwined association between the notion of the firm (intended as a “command hierarchy”²¹⁵) and the employment relationship, on the one hand, and the notion of market and the self-employment relationship, on the other²¹⁶. Moreover, while firms can be defined as entities

²¹³ An alternative explanation could be that “specificity” may reduce the costs of maintaining vertically integrated organisations since “[t]here is less need to manage (through vertical integration) the coordination of assets when they are ‘dedicated’ to specific uses, as they are likely to be under conditions of asset specificity”, see DEMSETZ H. (1988), *The theory of the firm revisited* in *Journal of Law, Economics, & Organization*, 4(1), p. 153.

²¹⁴ See generally CHANDLER A. D. (1993), *The visible hand: The managerial revolution in American business*, Cambridge, MA (describing the role of “the visible hand of management” as an alternative to the invisible hand of market forces and claiming that large, vertically integrated, managerially directed enterprises in the most important industries have been the foundations for America’s success).

²¹⁵ See PERULLI A. (2017), *The theories of the firm between Economy and law*, op. cit., p. 359 (arguing that “[t]he labour contract’s structural flexibility, consisting in the creation of ‘areas of acceptance’, within which the orders shall be executed without resistance, especially guarantees the adaptability of the firm to ever-changing market and technological conditions, in the same way the internal organization responds to those issues more efficiently than the inter-firm bargaining”).

²¹⁶ See COASE R. H. (1937), *The nature of the firm*, op. cit., p. 403 (“[T]he legal concept of ‘employer and employee’ and the economic concept of a firm are not identical, in that the firm may imply control over another person’s property as well over their labour. But the identity of these two concepts is sufficiently close for an examination of the legal concept to be of value in appraising the worth of the economic concept”. According to FUDGE, “[t]here was a fit between the firm for reasons of corporate governance and the firm for reasons of labour law” when there is the need of strong control and direction. See FUDGE J. (2006), *The legal boundaries of the employer, precarious workers, and labour protection* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and Frontiers of Labour Law: Goals and Means in the Regulation of Work*, Oxford, UK and Portland, OR, p. 301. The Italian legal scholarship has read this theory in accordance with the critical thinking of Lodovico Barassi. See PEDRAZZOLI M. (2002), *La parabola della subordinazione: dal contratto allo status. Riflessioni su Barassi e il suo dopo* in *Arg. dir. lav.*, 2, p. 272. See also DEAKIN S. (2006), *The comparative evolution of the employment relationship* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and frontiers of labour law*, Oxford, UK and Portland, OR, pp. 89-108

exercising control over agents, a contract of employment entails the right for the employer to control an agent's performance, in exchange for a tacit or explicit promise of durability and job-security (an understanding of a long-termed contract without arbitrary discharge)²¹⁷. This is why an employee "agree[s] to accede to the authority of the employer"²¹⁸. The employer can vary and organise the content of the contract *quotidie et singulis momentis* thanks to a unique scheme that "synthetises" the orientation and regulatory functions²¹⁹. This largely explains why the (vertically integrated) entrepreneur tends to prefer a contract of employment, seen as a highly flexible tool, rather than a continuous contract of service (which is typical in a "market" situation)²²⁰. The increase in "subordination costs" is compensated by the possibility of exercising entrepreneurial authority and hierarchical power.

(defining the contract of employment one of the principal business instruments); ICHINO P. (2004), *Lezioni di diritto del lavoro: un approccio di labour law and economics*, Milano; TOMASSETTI J. (2016), *From Hierarchies to Markets: FedEx Drivers and the Work Contract as Institutional Marker* in *Lewis & Clark. L. Rev.*, 19(4), pp. 1083-1152. For an alternative conceptualisation, see BOWLES S. and GINTIS H. (1988), *Contested exchange: political economy and modern economic theory* in *The American Economic Review*, 78(2), p. 147 (maintaining that "[a]n exchange is contested when some aspect of the good exchanged possesses an attribute that is valuable to the buyer, is costly to provide, and is at the same time difficult to measure or otherwise not subject to determinate contractual specification. In such cases, the *ex post* terms of exchange are determined by the monitoring, sanctioning, and incentive mechanisms instituted by the buyer to induce proper seller behavior").

²¹⁷ The picture was that of the so-called "internal labour market" aimed at bringing benefits both to employers (cost-saving in recruiting, screening and training) and employees (career opportunities and promotions along a job ladder).

²¹⁸ See WILLIAMSON O. E. (1996), *The Mechanisms of Governance*, Oxford, UK and New York, p. 99.

²¹⁹ *Ex multis*, Cass., 16 January 1996, No. 326. See also PEDRAZZOLI M. (1998), *Lavoro sans phrase e ordinamento dei lavori. Ipotesi sul lavoro autonomo* in *Riv. it. dir. lav.*, 1, pp. 49-104 (defining the notion of "costs of subordinate work"). The argument is further developed in DEAKIN S. and WILKINSON F. (1998), *Labour Law and Economic Theory – A Reappraisal*, op. cit. (arguing that, when worker invest in firm-specific skills, the correspondent level of protection should increased against arbitrary conducts by the management and in order to preserve continuing employment). See also COASE R. H. (1937), *The nature of the firm*, op. cit., p. 391 (referring to the "master and servant" or "employer and employee" relationships as a source for command and control).

²²⁰ Notably, Collins describes the employment contract as a contract that combines both a market and a bureaucratic dimension. As explained by Razzolini, "it represents a simple market contract providing a port of entry into the bureaucratic organization", at the same time it sets a bureaucratic relationship ("akin to that enjoyed by the State"), "embedding the employees in a system of rules and hierarchical ranks planned in order to allow the entrepreneur to achieve his/her goals". In particular, the arrangements of a bureaucratic model is usually associated with the intrinsic nature of "contractual incompleteness", aimed at achieving flexibility and cooperation between parties thanks to gradual adjustments. See COLLINS H. (1986), *Market power, bureaucratic power, and the contract of employment* in *Industrial Law Journal*, 15(1), pp. 1-15. See also COLLINS H. (2001), *Regulating the employment relation for competitiveness* in *Industrial Law Journal*, 30(1), pp. 17-48. *Contra* see ALCHIAN A.

More accurately, what is significant here is the definition of “organisational costs”, that are costs borne by a business in executing an activity on its own, such as the outlay of resources, arrangement of procedures and methods of coordination and authority, as well as “costs related to external limitations imposed on hierarchy within the organization”²²¹. In other words, workers, taken as a joint “countervailing power”, may increase this kind of cost, by means of collective bargaining, to name but one example. Moreover, statutory regulations governing the individual employment relationships may end up limiting the employer’s hierarchical power and, ultimately, compressing the flexibility of the business activity. As a consequence, in the attempt to reduce transactional costs by internalising the “labour factor”, the employer may incur in (high) organisational costs. This would also explain the reason why firms tend to outsource even crucial activities, renouncing to the high degree of flexibility that they could enjoy in the hierarchical system.

In theory at least, it would be possible to arrange an effective productive system by means of private or commercial contract between parties. But arguably the reality is more complex, as markets are not perfectly fluid. Coordination costs are in fact higher for markets than for hierarchies. The fact is that every contract entails a peculiar negotiation, which result in making a transaction costly and lengthy. After all, transactions involve uncertainty about their product, leading to several risks such as opportunistic renegotiation by the counterpart²²². It is remarkable that, according to some authors challenging Coase’s model, “[m]oral hazard analysis, shirking, and opportunism – the problems of incentive compatibility – yield explanations of the

A. and DEMSETZ H. (1972), *Production, Information Costs, and Economic Organization in American Economic Review*, 62, pp. 777-795 (denying that the “authoritarian” power shapes the conception of the firm).

²²¹ See DE STEFANO V. (2009), *Smuggling-in flexibility: temporary work contracts and the “implicit threat” mechanism*, *ILO Working Document*, 4, p. 10 (clarifying how collective organisation may determine a reduction of the directional power of employers).

²²² According to Collins, vertical integration represents an “insurance against the risk” of shortage in services and product as well as opportunistic behaviours. This conduct has been defined as the attempt made by economic actors “to extract more benefit from an exchange than they would otherwise receive if each had the same information”. See LAMOREAUX N. R., RAFF D. M. and TEMIN P. (2003), *Beyond markets and hierarchies: Toward a new synthesis of American business history in The American Historical Review*, 108(2), pp. 404-433. See also GILSON R. J., SABEL C. F. and SCOTT R. E. (2009), *Contracting for innovation: vertical disintegration and interfirm collaboration in Columbia Law Review*, 109(3), pp. 431-502 (describing forms of contracting beyond the reach of contract theory models).

internal organization of the firm that are difficult to derive from only transaction cost considerations”²²³.

On the other hand, purchasing resources on the market can lead to several general savings in labour costs, often seen as an obstacle to competitiveness. Therefore, an efficient system for the acquisition of labour power can be described as follows: (i) the reliance on lower wages outside the firm due to the scarce collective power of non-unionised workers, benefitting from geographical differences and labour market segmentation; (ii) the fact that cheaper labour could decrease the level of internal rate for workers desperately trying to face external competition – instead of having to pay the high rates of the internal labour market²²⁴; (iii) a reduction in the cost connected with compliance with statutory duties²²⁵, (iv) more importantly, by reducing the duration of contracts and making them contingent, the client may be able to use his position to “impose stricter controls over performance”²²⁶.

To sum up, a firm is integrated whenever transaction (or market) costs outweigh the internal costs connected with relatively quick administrative decisions²²⁷. In

²²³ For a “brief general critique of transaction cost theory”, see DEMSETZ H. (1988), *The theory of the firm revisited*, op. cit., p. 151. It has to be noted that paying an “above-market wage will increase the costs of unemployment, and will therefore induce loyalty and prevent shirking”, see ROGERS B. (forthcoming), *Fissuring, Data-Driven Governance, and Platform Economy Labor Standards* in DAVIDSON N., FINCK M., INFRANCA J. (Eds.), *Cambridge Handbook of Law and Regulation of the Sharing Economy*, Boston, MA (describing the Shapiro/Stiglitz efficiency wage model).

²²⁴ Defined as “the system that created inside major businesses that set policies for wages, employment practices, and other features of the workplace” in DOERINGER P. B. and PIORE M. J. (1985), *Internal labor markets and manpower analysis*, New York (explained the difference between a “primary or internal market” consisting of jobs that are well paid and stable and a “secondary or external market”, composed of jobs lower paid and with few opportunities for training and advancement). See DAUSCHMIDT K. G. (2001), *Employment in the new age of trade and technology: Implications for labor and employment law*, op. cit., p. 6 (maintaining that “the major advantage of an internal labor market with lifetime employment is that it solves most of the shortcomings of a spot market for labor”). De Stefano clarifies how “in countries such as Italy, in which collective bargaining takes place primarily at industry level, and the courts do not contest employers’ choice of the collective bargaining agreement which is to be applied to their workforce, firms could also choose to outsource some business activities to suppliers applying a less ‘expensive’ national collective agreement”. DE STEFANO V. (2009), *Smuggling-in flexibility: temporary work contracts and the “implicit threat” mechanism*, op. cit., p. 7.

²²⁵ LAZERSON M. H. (1988), *Organizational Growth of Small Firms: An Outcome of Markets and Hierarchies?* in *American Sociological Review*, 53(3), p. 330.

²²⁶ At the same time, keeping production in a hierarchical system may lead to the development of consolidated production methods and skills efficiency. See also WILLIAMSON O. E., WACHTER M. L. and HARRIS J. E. (1975), *Understanding the employment relation: The analysis of idiosyncratic exchange* in *The Bell Journal of Economics*, 6(1), p. 250.

²²⁷ GRANDORI A. (1999), *Organizzazione e modello economico*, Bologna. See also WILLIAMSON O. E. (1981), *The economics of organization: the transaction cost approach* in *Am. J. Sociol.* 87, p. 548.

Coase's words, "a firm will tend to expand until the costs of organising an extra transaction within the firm become equal to the costs of carrying out the same transaction by means of an exchange on the open market or the cost of organising in another firm"²²⁸. Therefore, a standard firm when transaction costs exceed the fixed cost of establishing and maintaining a bureaucratic internal structure²²⁹. It is noted that if transaction costs were equal to zero (for example, when a buyer is able to compare all solutions and choose the best one²³⁰), discussing about the efficient boundaries of the firm or about the proficient allocation of property rights would not even be a question²³¹. Proponents of this thesis maintain that, in certain circumstances, the hierarchal firm is more efficient than the market which is incapable of coordinating production factor effectively, assuring the best distribution of resources. In this vein, Coasean theorists revealed that firm production could be more convenient than market production, as it can coordinate the internal labor more effectively. Moreover, a firm can manage a wide range of resources – even immaterial ones such as "corporate culture" and "collective knowledge" – that markets can hardly access.

This line of thinking has been refined by the "neo-institutional" approach taken by WILLIAMSON who developed a formal theory of TCE in the late 1970s and 1980s²³². Notably, economic actors decide whether to purchase assets or services on the market or to produce them internally based on relative costs²³³. Competitive forces lead some activities to be done internally, others through assorted agreements and still others through market transactions. It must however be made clear that this thesis (scholarship even called it a theorem) should be read in the light of

²²⁸ COASE R. H. (1937), *The nature of the firm*, op. cit., p. 395.

²²⁹ CORAZZA L. (2004), "Contractual integration" e rapporti di lavoro. Uno studio sulle tecniche di tutela del lavoratore, op. cit., p. 71 ff. (also discussing the role of "international regulatory competition").

²³⁰ Notably, Coase clearly held the zero transactions cost assumption to be unrealistic.

²³¹ See DEMSETZ H. (1988), *The theory of the firm revisited*, op. cit., p. 150 (anticipating that "[a] series of costless transitory market negotiations would bring the same employers and employees together, so that, de facto, the firm that is characterized in terms of employment contracts would be achieved through repeated market negotiations"). See also SMORTO G. (2014), *Dall'impresa gerarchica alla comunità distribuita: Il diritto e le nuove forme di produzione collaborativa* in *Orizzonti del Diritto Commerciale*, 3, pp. 1-40.

²³² See also WILLIAMSON O. E. (1979), *Transaction-cost economics: the governance of contractual relations* in *The Journal of Law and Economics*, 22(2), p. 233 (assessing which activities should remain within the confines of an organisation, and which should be farmed out).

²³³ DIMAGGIO P. (2009), *Introduction: Making sense of the contemporary firm and prefiguring its future*, op. cit., p. 17.

technologies and organisational patterns existing at the moment when it was formulated. A hierarchical structure built on departments, lines of authority, reporting mechanisms, formal decision making processes is well suited for mass production and distribution. In the pre-digital era, the theory of an “economy in which firms [are] featured as islands of planned co-ordination in a sea of market relations” has been challenged²³⁴. Similarly, the rationale behind this assumption has been confuted; the technological level reached by new infrastructure has lowered transactional costs and reduced frictions²³⁵, making it more convenient for firms to resort to the complex market relations for purchasing labour energies as well as semi-finished and finished products²³⁶.

Surprisingly, an influential article written by MALONE long before the advent of platform-mediated labour anticipated that “by reducing the costs of coordination, information technology will lead to an overall shift toward proportionately more use of markets – rather than hierarchies – to coordinate economic activity... we should not expect the electronically interconnected world of tomorrow to be simply a faster and more efficient version of the world we know today. Instead, we should expect fundamental changes in how firms and markets organize the flow of goods and services in our economy”²³⁷. Indeed, transaction costs can be reduced by using advanced technologies in the collaborative economy: (i) information can be obtained through the rating-based reviews and the provider’s “digital career”²³⁸, (ii) fares are stipulated “algorithmically” on a case by case by the app taking into account distance, demands and other conditions, (iii) the failure to observe guidelines, recommendations, instructions may constitute a breach of the participation agreement.

Admittedly, the two traditional models have yielded to a new way of organising business enterprise, situated in between these two poles which “fail to grasp the

²³⁴ RICHARDSON G. B. (1972), *The organisation of industry* in *The Economic Journal*, 82(327), p. 895.

²³⁵ For a complementary point of view, see DRAHOKOUPIL J. and PIASNA A. (2017), *Work in the platform economy: Beyond lower transaction costs* in *Intereconomics: Review of European Economic Policy*, 52(6), p. 335 (arguing that “the notion of reduced transaction costs alone is not sufficient to understand the impact of market-making by platforms”).

²³⁶ See, generally, WILLIAMSON O. E. (1985), *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, London.

²³⁷ MALONE T. W., YATES J. and BENJAMIN R. I. (1987), *Electronic markets and electronic hierarchies*, *Communications of the ACM*, 30(6), p. 496.

²³⁸ On the determinants of the “job history”, see SPENCE M. (1974), *Market Signaling: Informational Transfer in Hiring and Related Processes*, Cambridge, MA, p. 7.

increasing reliance upon horizontal rather than vertical exchanges that are accompanied by a weakening of boundaries within and between organizations as risks and resources are pooled through collaborative arrangements"²³⁹. According to POWELL, "the familiar market-hierarchy continuum does not do justice to the notion of network forms of organization"²⁴⁰. Such distinctive forms of organising and coordinating economic activities allow commentators "to make progress in understanding the extraordinary diversity of economic arrangements found in the industrial world today"²⁴¹. Moreover, it should be said that networks – presented as intermediate governance structures based on "reciprocal, preferential, mutually supportive actions"²⁴² – commonly involve aspects of dependency and particularism²⁴³. Without making too broad a generalisation, "individuals are not only users but also 'inputs,' since their participation creates value for other users"²⁴⁴.

As explained, the pace of technological change, short product life cycle and market specialisation can exacerbate disadvantages of large-scale vertical integration. Therefore contracting work out becomes an appropriate response (together with more collaborative ventures with suppliers and distributors). Thus, the rise of network can be illustrated also by referring to three common failures that plague

²³⁹ GRIMSHAW D., MARCHINGTON M., RUBERY J. and WILLMOTT H. (2005), *Introduction: Fragmenting Work Across Organizational Boundaries* in MARCHINGTON M., GRIMSHAW D., RUBERY J. and WILLMOTT H. (Eds.), *Fragmenting work: Blurring organizational boundaries and disordering hierarchies*, Oxford, UK, pp. 13-16. Building on LORENZONI G. and ORNATI O. A. (1988), *Constellations of firms and new ventures* in *Journal of Business Venturing*, 3(1), p. 41-57 (arguing that craft-based forms in Northern Italy do not follow the standard model of small firms developing internally through an incremental and linear process). For the Italian context, see also CAFAGGI F. (Ed.) (2004), *Reti di imprese tra regolazioni e norme sociali. Nuove sfide per diritto ed economia*, Bologna.

²⁴⁰ The author also criticises the "exclusive focus on the transaction" which overshadows the role of relationships. See POWELL W. W. (1990), *Neither market nor hierarchy: network form of organization*, op. cit., p. 296 and 323. See also PODOLNY J. M. and PAGE K. L. (1998), *Network forms of organization* in *Annual Review of Sociology*, 24(1), p. 57 (highlighting the prevalence and functionality of organizational forms that could not be classified as markets or hierarchies); UZZI B. (1996), *The sources and consequences of embeddedness for the economic performance of organizations: The network effect in American sociological review*, 61(4), pp. 674-698 (suggesting that embeddedness is a logic of exchange that shapes motives and expectations and promotes coordinated adaptation).

²⁴¹ POWELL W. W. (1990), *Neither market nor hierarchy: network form of organization*, op. cit., p. 301.

²⁴² POWELL W. W. (1990), *Neither market nor hierarchy: network form of organization*, op. cit., p. 271.

²⁴³ See also RICHARDSON G. B. (1972), *The organisation of industry*, op. cit., p. 883 (refusing sharp distinctions between markets and firms and describing "the dense network of co-operation and affiliation by which firms are inter-related").

²⁴⁴ MARTENS B. (2016), *An Economic Policy Perspective on Online Platforms*, *Institute for Prospective Technological Studies Digital Economy Working Paper*, No. 05, p. 17.

vertically integrated firms such as (i) failure to counter quickly to competitive changes in globalised markets; (ii) reluctance to innovations that modify the relationship between different phases of the production process; (iii) regular resistance to the introduction of new products. As it will be demonstrated in the following paragraph, the conventional theoretical distinctions of organisational governance do not allow capturing hierarchical forms of outsourcing. The sharp delineation of organisational models could trivialise mixed governance structures. As admitted by those who have formulated this theory, the latter describes integration (not disintegration) as a condition of asset specificity, not of technological development²⁴⁵. Specifically, “it is more plausible to regard ‘market’, ‘hierarchy’, ‘network’ as concepts that have proven valuable in differentiating elements or dimension of organizing practices within and between organizations, rather than as alternative designs of economic organizations²⁴⁶. New adaptations are needed. Therefore, the exploration cannot stop here.

2.3. Contractual integration: a “platform-oriented” reading.

The increasing relevance of immaterial assets and knowledge transfer represents a key driver of a permeable modern corporation²⁴⁷. Heavy machinery and equipment have been sacrificed in favour of lean processes and investments in flexible lines²⁴⁸, in order to limit, as much as possible, any unsold stock and inefficiency. At the same time, changes in consumer habits, the rapid shortening of production cycles and the emergence of complex and simultaneous trade flows have contributed to redraw the boundaries of the firm²⁴⁹, as explained in the previous paragraph. At first, firms

²⁴⁵ See WILLIAMSON O. E. (1985), *The economic institutions of capitalism: firms, markets, relational contracting*, New York, p. 86, quoted in RATTI L. (2008), *Agency work and the idea of dual employership: A comparative perspective*, op. cit., p. 840 (warning against the risk of overestimating “the value of economic theories about an enterprise’s boundaries and the outcomes of a single theory in particular”).

²⁴⁶ GRIMSHAW D., MARCHINGTON M., RUBERY J. and WILLMOTT H. (2005), *Introduction: Fragmenting Work Across Organizational Boundaries*, op. cit., pp. 13-16.

²⁴⁷ For an overview of this trajectory, see PIORE M. and SABEL C. (1984), *The second industrial divide*, New York, pp. 49-72 (discussing the pre-New Deal firm as a means of managing aggregate demand and stabilising labor relationships).

²⁴⁸ See generally DE LUCA TAMAJO R. (2003), *Metamorfosi dell’impresa e nuova disciplina dell’interposizione* in *Riv. it. dir. lav.*, 1, pp. 176-188.

²⁴⁹ See VICARI S. (2002), *L’outsourcing come strategia per la competitività* in DE LUCA TAMAJO R. (Ed.), *I processi di esternalizzazione. Opportunità e vincoli giuridici*, Napoli, p. 77 (using the expression “partnership between businesses”).

contracted out auxiliary activities. More recently, even the most fundamental functions of the business (the very underlying service, for instance) are eligible to be outsourced²⁵⁰. As a result of this reconversion, the firm has been completely freed from the unbearable weight of centralised and hierarchical management of work. The most obvious consequence of the specialisation in core competencies is a new (and more tenuous, in theory at least) form of control over the various phases of the work operation: nothing surprising for those readers who might be familiar with the concrete operation of a modern business and the “alternative patterns of economic integration between numbers of firms”²⁵¹.

Even though this topic remains primarily a matter of company law and corporate governance, there is much to be gained by examining such arrangements in view of the effects on employment relationships²⁵². This paragraph will try to summarise the academic debate on “relational contracts” (i.e. informal agreement not adjudicated by courts) and “contractual integration” by linking previous explorations, mainly those carried out by CORAZZA, to the recent rise of platforms. The question to be addressed is whether and to what extent this theoretical elaboration, presented as an alternative response to the rigid and imperfect “make vs. buy” dichotomy, appears sufficient to fully explain the redefinition of the relationships between contractual parties. In other words, is this type of contracts an ancestor of the ambiguous relation between a digitally enabled firm and the legions of “independent providers”?

Read through the prism of transaction costs economics, this kind of structure of the inter-relationship among different players has long been an area of particular interest for economists and lawyers as well²⁵³. Relational patterns have been defined

²⁵⁰ Outsourcing firms ultimately came to encompass full-scale assembly and supplier management.

²⁵¹ COLLINS H. (1990), *Ascription of legal responsibility to groups in complex patterns of economic integration* in *Modern Law Review*, 53(6), p. 733 ff. (discussing common forms of ownership without assimilation between groups of companies giving the example of construction, fashion and manufacturing industries). Other authors have focused on media, trucking and insurance sectors. See MUEHLBERGER U. (2005), *Hierarchies, relational contracts and new forms of outsourcing*, ICER Working Paper No. 22, p. 4 ff. See also BOSCH G. and PHILIPS P. (Eds.) (2003), *Building chaos: an international comparison of deregulation in the construction industry*, London, p. 10 (arguing that subcontracting is usually used “to evade regulations protecting wage workers rather than [...] to extend specialization”).

²⁵² See generally FERRUGGIA A. (2011), *Le esternalizzazioni “relazionali” nel decentramento di attività dell’impresa*, Doctoral dissertation, University of Bologna.

²⁵³ There is clear “shift away from coordination by managerial hierarchies in vertically integrated firms toward coordination through long-term relationships, based on ‘informal restraints on self-interested behavior,’ among networks”. See LAMOREAUX N. R., RAFF D. M. and TEMIN P. (2003), *Beyond*

in opposition to both contingent or *à la carte* contracts and vertical integration²⁵⁴. These situations involve a non-unique link in a context of formal independence but stable cooperation, diverging from the traditional models²⁵⁵. The extension over time is considered the cause of these contracts. In the light of the practical impossibility for the contractual parties to consider the immense set of circumstances that might occur in this considerable period of time, such relational agreement postpones the precise determination of a significant part of detailed terms and conditions to a later moment, in order to adjust it over the course of time. Such self-enforcing nature of the underlying compromise provides incentives allowing to face unpredictability and opportunistic conducts²⁵⁶.

To see an example of how relational contracts works, suffice here to observe that the contract of employment can be classified among this group, characterised by durability, incompleteness and unilateral powers²⁵⁷. Such a private governance structure is defined as the employer's prerogative of "us[ing] the contract to provide

markets and hierarchies: Toward a new synthesis of American business history in *The American Historical Review*, 108(2), p. 430.

²⁵⁴ The so-called spot contracts "differ from contractual relations respecting many key characteristics", for instance "(1) commencement, duration, and termination; (2) measurement and specificity; (3) planning"; (4) sharing vs dividing benefits and burdens; (5) interdependence, future cooperation and solidarity; (6) personal relations among, and numbers of, participants; and (7) power". For the purpose of this analysis, the main focus should have to be only two factors, namely (i) how personal relationships emerge and develop and (ii) how intensely and what kind of a power is exercised. See MACNEIL I. R. (1980), *Economic analysis of contractual relations: its shortfalls and the need for a rich classificatory apparatus*, op. cit., p. 1025.

²⁵⁵ GOETZ C. J. and SCOTT R. E. (1981), *Principles of relational contracts* in *Virginia Law Review*, 67(6), p. 1091.

²⁵⁶ "A handshake [is] not always a handshake" according to BOWLES S. and GINTIS H. (1993), *The revenge of homo economicus: contested exchange and the revival of political economy* in *Journal of Economic Perspectives*, 7(1), pp. 83-102. See also DEAKIN S. and WILKINSON F. (1998), *Labour Law and Economic Theory – A Reappraisal, Working Paper, ESCR Centre for Business Research*, No. 2. According to Holmström and Milgrom, the firm itself can be seen as an incentive system. See HOLMSTRÖM B. and MILGROM P. (1994), *The firm as an incentive system* in *The American Economic Review*, 84(4), pp. 972-991.

²⁵⁷ This is a perfect example, as the parties postpone the detailed definition of the content of the performance. See GOETZ C. J. and SCOTT R. E. (1981), *Principles of relational contracts*, op. cit., p. 1090. See also BROWN M., FALK A. and FEHR E. (2004), *Relational contracts and the nature of market interactions* in *Econometrica*, 72(3), p. 747 ff. (demonstrating how "both firms and workers are better off if they are allowed to engage in long-terms relations"). See also DEAKIN S. and WILKINSON F. (2005), *The law of the labour market: Industrialization, employment and legal evolution*, Oxford, UK, p. 15 (viewing employment as a "relational" contract that would last over time and in which all parties are mutually committed). For the Italian context, see FALERI C. (2007), *Asimmetrie informative e tutela del prestatore di lavoro*, Milano. See also HART O. D. and MOORE J. (2005), *On the design of hierarchies: coordination versus specialization* in *Journal of political Economy*, 113(4), pp. 675-702.

rules on controversial matters and reserve to itself explicit discretionary power to fill in any gaps²⁵⁸, in order to reduce terms of the arrangement to specific obligations²⁵⁹. It is inappropriate to maintain that the arrangement described above seems to defy the Coasean taxonomies, on the contrary, it has to be admitted that relational contracts – when settled vertically – reinforce the seminal theory of the firm by virtue of a less radical reading. New forces have made the make-or-buy decision “subject to continuous revision because prices were readily available”²⁶⁰.

Contractual integration, defined as “establishing long-term relations with suppliers” or “firms linking up into regional networks to strengthen their mutually dependent competitive position”, has been described as a common scheme for modern decentralised structures²⁶¹. Scholarship has also distinguished between “primary” outsourcing (often characterised by a horizontally layered contractual integration entailing balanced contractual power²⁶²) and “secondary” outsourcing or relational contracts. Therefore, two kinds of power, a unilateral one and a bilateral one, may be recognised in assessing these contracts²⁶³. In brief, while a discrete transaction determines a single flow of intense power, in a relational contract power

²⁵⁸ COLLINS H. (2007), *Legal responses to the standard form contract of employment* in *Industrial Law Journal*, 36(1), p. 6. See also MENGONI L. (2000), *Il contratto individuale di lavoro* in *Giorn. dir. lav. rel. ind.*, 2, p. 181.

²⁵⁹ WILLIAMSON O. E. (1996), *The Mechanisms of Governance*, op. cit., p. 96 (arguing that incomplete contracts “require special adaptive mechanism to effect realignment and restore efficiency when beset by unanticipated disturbances”).

²⁶⁰ DAVIS G. F. (2015), *What might replace the modern corporation: Uberization and the web page enterprise* in *Seattle U. L. Rev.*, 39(2), pp. 501-516.

²⁶¹ GRIMSHAW D., MARCHINGTON M., RUBERY J. and WILLMOTT H. (2005), *Introduction: Fragmenting Work Across Organizational Boundaries*, op. cit., p. 2.

²⁶² See BONOMI A. (1997), *Il capitalismo molecolare: la società al lavoro nel Nord Italia*, Torino and BUTERA F. (2005), *Il castello e la rete. Impresa, organizzazioni e professioni nell'Europa degli anni '90*, Milano, p. 43. More recently, in the light of the peculiar Italian experience of “distretti” (districts), the interactions among firms have been considered as a way of promoting the development of firm-specific skills and enhancing know-how. See, among others, MORETTI E. (2012), *The New Geography of Jobs*, Boston, MA (describing the rise of “innovation hubs”). For a detailed analysis, please refer generally to FERRARA M. and MAVILIA R. (2012), *Dai distretti industriali ai poli di innovazione. L'Italia nel Mediterraneo*, Milano. For an evocative description of the textile industry in the Prato region of Italy (Tuscany), see also MALONE T. W. and LAUBACHER R. J. (1999), *The Dawn of the E-Lance Economy* in NÜTTGENS M. and SCHEER A. W. (Eds.), *Electronic Business Engineering*, Heidelberg, pp. 18-19 (demonstrating how an economy can be built on the network model).

²⁶³ The author defines power as “the ability to impose one’s will on others irrespective of their wishes” borrowing Weber’s notion. See WEBER M. (1946), *Class, status, party* in GERTH H. H. and WRIGHT MILLS C. (Eds.), *From Max Weber: Essays in Sociology*, New York.

is exercised bilaterally, free from “unilateral power beyond that resulting from each party’s property rights over the subject matter of the exchange”²⁶⁴.

Nevertheless, at a closer inspection, firm-, relation- or even contract-specific investments (so-called “idiosyncratic investments”) might “entrap” a contracted worker to the principal due to a situation of uneven reciprocity (i.e. “hold up”)²⁶⁵ or develop a genuine exchange of mutual expectations, based on extra contractual items. Accordingly, a high degree of economic dependence and strong countervailing bargaining power may affect organisational choices of the entrepreneur, since idiosyncratic investments are difficult to reallocate²⁶⁶, thus representing an incentive to extend the relevant business relationship as long as possible²⁶⁷. Therefore, it is not the “level of skill but the firm-specificity of the skill that is likely to determine which jobs remain with employers and which become *Uberized* tasks”²⁶⁸. The result is stunning: in a situation marked by strong interdependence, the principal firm underpins its *de facto* hierarchical authority, while reporting significant savings in transactional costs, due to the strong process of durable and loyal collaboration²⁶⁹.

Asymmetric investments (for instance patterns aimed at establishing or maintaining a long-term operating relationship) often determine a strongly dominant

²⁶⁴ MACNEIL I. R. (1980), *Economic analysis of contractual relations: its shortfalls and the need for a rich classificatory apparatus*, op. cit., p. 1038.

²⁶⁵ CORAZZA L. (2004), “*Contractual integration*” e rapporti di lavoro. *Uno studio sulle tecniche di tutela del lavoratore*, op. cit., p. 103. This is all the more true with regard to economically dependent self-employed work which will be dealt with in the following section.

²⁶⁶ For an analysis on idiosyncratic investments, see DENOZZA F. (2017), *The Contractual Theory of the Firm and Some Good Reasons for Regulating the Employment Relationship* in PERULLI A. and TREU T. (Eds.), *Enterprise and Social Rights*, Alphen aan den Rijn, The Netherlands, p. 33.

²⁶⁷ For the collaborative economy scenario, see NEWLANDS G., LUTZ C. and FIESELER C. (2017), *Power in the Sharing Economy, Report for the EU Horizon 2020 project Ps2Share: Participation, Privacy, and Power in the Sharing Economy* (analysing a “problematic” relation of significant power advantage due to the top-down determination of participation access in close conjunction with the “locked in” situation determined by sponsored auto-loans for the purpose of sharing, as in the case of both *Uber* and, more recently in Europe, *BlaBlaCar*). See also WELLS K., CULLEN D. and ATTOH K. (2017, August 8), *The work lives of Uber drivers. Worse than you think*, retrieved from <https://www.lawcha.org/2017/08/08/work-lives-uber-drivers-worse-think/> (explaining how “[d]rivers invest upfront nearly all of the costs of running a car service: the vehicle itself, maintenance, gas, insurance, and taxes”).

²⁶⁸ DAVIS G. F. (2015), *What might replace the modern corporation: Uberization and the web page enterprise*, op. cit., p. 514.

²⁶⁹ It has to be noted that this situation is slightly reminiscent of the discussion on the notions of the contractor dependent on a single client (like those in countries such as Germany and Spain, which will be analysed at a later stage).

position over the “integrated” or “interdependent” firm²⁷⁰. Hence, the stronger party may implement “adaptive mechanism” or unilaterally set and change terms and conditions, as they have been left unspecified by the contract’s incompleteness, rather than providing a framework for cooperation. As a result, the autonomy is merely virtual, or formal, as in concrete the influence power restricts the freedom of initiative and organisation²⁷¹. Incidentally, the solid interconnection and convergence between firms may result in the integration of the workforce of the “dependent” business in the principal organisation “through the practice of repetitive contracting combined with reliance upon the other party as a sole supplier or sole customer”²⁷²: a further case of dissociation between formal employer and concrete managerial

²⁷⁰ See KLEIN B., CRAWFORD R. G. and ALCHIAN A. A. (1978), *Vertical integration, appropriable rents, and the competitive contracting process* in *Journal of Law and Economics*, 21(2), p. 297 (cautioning against the risk of abuse of dominant position when, in case of asymmetric investments, the weaker party lacks commercial alternatives). In Italy, Act No. 192 of 1998 introduced a form of protection for companies trading with hegemonic companies, using B2B contracts. Article 9 of the Act forbids companies from taking advantage of the state of economic dependence of a client company or supplier (“abuse of economic dependency”). By “economic dependence” the law intends “a situation in which a company in a commercial relationship with another company can exert influence to the detriment of the other, thus creating an imbalance”. Although such provision are intended to regulate the “sub-supply” commercial relationships, the Italian Supreme Court clarified that “article 9 has a wider scope than the other provisions of that Law, as it constitutes a ‘general clause’, applicable to any contractual relationship in which an abuse of economic dependence may occur”. See CAVALLINI G. (2017), *The (Unbearable?) Lightness of Self-employed Work Intermediation*, Paper presented at the Fifteenth International Conference in commemoration of Professor Marco Biagi, Modena, Marco Biagi Foundation, 20-21 March 2017, p. 14 (proposing to “extend the application of the prohibition of the abuse of economic dependency to self-employment relationships, in order to protect, at the very least, autonomous workers from suffering unilaterally and arbitrary decisions made by their counterpart”). See also Cass. S.U., 25 November 2011, No. 24906, FI, 2012, 3, I, 805. See also DASKALOVA V (2017), *Regulating the New Self-Employed in the Uber Economy: What Role for EU Competition Law?*, TILEC Discussion Paper No. 28. Available at SSRN: <https://ssrn.com/abstract=3009120>.

²⁷¹ For instance, Section 3 of Law 129/2004 regulating franchising provides that, where franchising is on an open-ended basis, the franchisor must set a duration of the contract sufficient for the franchisee to return on the specific investment and, in any case, not less than three years. In this way, the law aims, ultimately, to protect the franchisee from the detrimental consequences of an idiosyncratic investment. See DE STEFANO V. (2009), *Smuggling-in flexibility: temporary work contracts and the “implicit threat” mechanism*, op. cit., p. 14 (highlighting how the abovementioned provisions on outsourcing are not easy to enforce, due to the difficulty of effectively monitoring the clauses of outsourcing contracts).

²⁷² COLLINS H. (1990), *Ascription of legal responsibility to groups in complex patterns of economic integration* op. cit., p. 734 ff. (also describing the improvement of an employee’s position thanks to the associated employer doctrine, which is an aspect that will not be addressed specifically in this dissertation).

control. Once again, this analysis reveals how outsourcing, liquid responsibilities as well as some form of hierarchy could go hand in hand²⁷³.

What is more, the parent company is able to impose and enforce standards of production and to “incorporate” the results of the performances carried out by employees formally hired by another controlled or bound undertaking. In order to aptly allocate idiosyncratic resources, this model is based on the award of several contracts to a contractor with which the lead company has long-term contracts based on extra-contractual elements in order to reduce complexity and uncertainty (for instance, the threat of excessive renegotiation)²⁷⁴. As a result, these relationships “imitate” the centralised firm²⁷⁵, or at least some of the characteristics concerned (influence power²⁷⁶, above all), thus achieving the goal of setting a hierarchy by having recourse to the market instead of internal authority. To conclude this point, it has to be said that relational outsourcing based on vertical relationships represents one of the major unknown factors having a potentially negative impact on working conditions. As a more specific example, unfavourable wage policies can be enforced by the dominant firm over the contracted workers, also because the assistance by collective forces such trade unions is somewhat nullified²⁷⁷. In this sense, the situation in the “contractual integration” model may be assimilated to the relationship between a platform and an individual provider, whether professional or non-professional.

In short, literature has documented how informal mechanisms are able to strengthen formal contracts in long-term relationships, overcoming common

²⁷³ Enterprise networks are most typical examples of this model named “corporate integration”. On the topic of “structured irresponsibility”, see GALLINO L. (2009), *L'impresa irresponsabile*, Torino. Collins used the definition “organised irresponsibility”, see COLLINS H. (2015, November 10), *A Review of The Concept of The Employer by Dr Jeremias Prassl*, retrieved from <https://goo.gl/dwQQWY>. See also PERRAUDIN C., THEVENOT N. and VALENTIN J. (2013), *Avoiding the employment relationship: Outsourcing and labour substitution among French manufacturing firms, 1984–2003* in *International Labour Review*, 152(3-4), pp. 525-547.

²⁷⁴ MACNEIL I. R. (1985), *Relational contract: What we do and do not know* in *Wis. L. Rev.*, (3), pp. 483-526. See also WHITFORD W. C. (2004), *Relational Contracts and the New Formalism* in *Wis. L. Rev.*, 2004(2), pp. 631-644.

²⁷⁵ See LO FARO A. (2003), *Processi di outsourcing e rapporti di lavoro*, Milano, p. 66

²⁷⁶ LYNKEY O. (2017), *Regulating 'Platform Power'*, *LSE Legal Studies Working Paper*, No. 1/2017. Available at SSRN: <https://ssrn.com/abstract=2921021>.

²⁷⁷ Interestingly enough, the model has been read as an impulse of delayed Fordism. See MORIN M. L. (2005), *Labour law and new forms of corporate organization* in *International Labour Review*, 144(1), pp. 5-30. See also HART O. D. (1988), *Incomplete Contracts and the Theory of the Firm* in *Journal of Law, Economics, & Organization*, 4(1), pp. 119-139.

difficulties²⁷⁸. Moreover, these contracts are regulated by extra-contractual drivers such as social bonds²⁷⁹, unwritten codes of conducts and other informal dynamics that end up affecting the behaviour of providers when interacting with other legal entities²⁸⁰. If vertical integration could prove to be costly and the “market option” entails great uncertainty, a winning combination blending the most effective features from the two alternatives has been developed, namely “vertical integration for a network of contractual relations” between different economic actors. Put another way, such business relationships are used to introduce hierarchical features into the market.

3. *Why the collaborative economy is everything but collaborative. Taking “platformisation” (more) seriously.*

As discussed in the third part of this work, apparently unprecedented intermediaries have arisen matching demand and supply of labour in a very effective way. Despite the differences, labour platforms in the on-demand economy share one common similarity: they mobilise and dispatch a flexible, volatile and scalable workforce, allowing for a reduction in transactional costs (for clients and firms) and information asymmetries (again, asymmetrically, only for clients and firms) thanks to the smart use of new digital channels²⁸¹.

²⁷⁸ For a comprehensive overview, see MUEHLBERGER U. (2005), *Hierarchies, relational contracts and new forms of outsourcing*, op. cit., p. 7. See also BAKER G., GIBBONS R. and MURPHY K. J. (2002), *Relational Contracts and the Theory of the Firm* in *The Quarterly Journal of Economics*, 117(1), pp. 39-84.

²⁷⁹ Many authors have stated that it is incorrect to refer to “trust” as this kind of economic link is based on rationality and calculation. Indeed, as argued, “firms are able to make use of outsourcing without renouncing to hierarchy in the management of the relevant business relationships by means of extra-legal mechanisms”. For a description of this phenomenon, admittedly in a different context, see DE STEFANO V. (2009), *Smuggling-in flexibility: temporary work contracts and the “implicit threat” mechanism*, op. cit., p. 1.

²⁸⁰ This could be considered an attribute that relational contracts have in common with platform-based labour. See the examples from the Austrian insurance industry investigated in MUEHLBERGER U. (2005), *Hierarchies, relational contracts and new forms of outsourcing*, op. cit., p. 12 (describing the wide range of support used to solve the principal-agent issue and the financial support in purchasing office and IT as well as various managerial control instruments aimed at creating “the upstream’s dependency upon the downstream party”). The governance of contractual relations builds a sort of “framework” which allocates potential risks. See also HALAC M. (2012), *Relational contracts and the value of relationships* in *The American Economic Review*, 102(2), p. 750.

²⁸¹ For a seminal definition, see AKERLOF G. A. (1970), *The market for “lemons”: Quality uncertainty and the market mechanism* in *The Quarterly Journal of Economics*, 84(3), pp. 488-500. See also EDELMAN B. G. and GERADIN D. (2016), *Efficiencies and Regulatory Shortcuts: How Should We Regulate Companies Like Airbnb and Uber* in *Stanford Technology Law Review*, 19(2), pp. 293-328.

Being characterised by an “at arm’s length” pattern built on an “as-needed” basis, they break jobs down into small pieces and assign them to the lowest bidder or the highly ranked, a worker who is invariably classified as self-employed, with very limited access to labour protection. Consequently, these workers are excluded from many rights and benefits afforded to employees, including minimum wage – where applicable, paid sick leave, vacation, parental leave, overtime pay, protection from unfair dismissal, compensation in case of work-related illness or injury, employer contributions to health insurance and retirement, and the freedom to organise and collectively bargaining with employers or platform operators²⁸². Unpredictable incomes and very little security could be more the norm than the exception. For the purpose of this investigation, two different trends can be traced, in a way paradoxically. On the one hand, the production chain has never been more decentralised both structurally and geographically, on the other, a kind of intense market concentration in the low-wage economy (consolidation, economies of scale, rent-seeking) can be recognised that, in most of the cases, might result in hampering fair competition²⁸³. Yet, modularity and flexibility are in outright contrast with consolidation and enclosure²⁸⁴.

By collecting and employing a great amount of data, enforcing exclusivity clauses or winning additional market shares thanks to diversification, many companies are taking over and skyrocketing profits, asking for forgiveness rather than permission. While it is debatable whether they are operating “wildly” in traditionally regulated

²⁸² SILBERMAN M. S. and HARMON E. (2017), *Rating Working Conditions in Digital Labor Platforms in Proceedings of 15th European Conference on Computer-Supported Cooperative Work – Exploratory Papers, Reports of the European Society for Socially Embedded Technologies*, p. 2.

²⁸³ Needless to say, there are structural features that make many gig-firms prone to concentration, with rent extraction and abusive market power as a result. For a complete and provoking analysis, see KHAN L. (2017), *Amazon’s Antitrust Paradox* in *Yale Law Journal*, 126(3), pp. 564-907 (describing Amazon’s anticompetitive conflicts of interest as well as the potentially detrimental role played by its supremacy in certain sectors. In the research, calls are being made for “prophylactic limits on vertical integration by platforms that have reached a certain level of dominance”). Studies dating back to the last decade of the 19th century describe this system as a model of “concentration without centralisation”. See LODIGIANI R. and MARTINELLI M. (2002), *Dopo la ‘mass production’*. *Nuovi paradigmi e questioni aperte* in ID. (Ed.), *Dentro e oltre i post-fordismi. Impresa e lavoro in mutamento tra analisi teorica e ricerca empirica*, Milano, p. 45. It should be pointed out that the same bidirectional exchange (decentralisation vs. concentration) has been described in ZANELLI P. (1985), *Impresa, lavoro e innovazione tecnologica*, Milano, p. 136 ff.

²⁸⁴ See SCHWARZ J. A. (2017), *Platform Logic: An Interdisciplinary Approach to the Platform-Based Economy in Policy & Internet*, 9(4), pp. 374–394 (examining the forms of domination found in a “governing systems that control, interact, and accumulate”).

markets²⁸⁵, it seems evident that what unites these intermediaries is the tendency to compress fixed costs and maximising fleeting financial goals at the expense of stability and security of their workforce. They cheapen labour while immensely enhancing its efficiency: is not this the very source of their competitive advantage? The idea of building an enterprise based on its productive functions and capabilities is therefore no longer an issue. Neither the investment on enhancing human capital, increasing networking opportunities and fostering internal skills is on the agenda, as companies are reluctant to offer training or other lifelong learning programme²⁸⁶. In a very opportunistic approach, platforms select which rules comply with and, very often, contravene labour law principles or skip out on regulations, having claimed that out-dated constraints should not hinder innovation.

In this respect, it is vital to differentiate between innovations brought by conscious managerial decisions and restructuring processes that are merely aimed at circumventing labour and social security provisions. Before getting into that, it has to be specified that the interest in whatever can be labelled under the umbrella of collaborative economy is anything but excessive. Hence, a modest prophecy is that the global labour market will run the risk of experiencing a tremendous “platformisation” process whose main problems and related critical issues will be analysed in the following paragraph²⁸⁷. Legal researchers as well as management

²⁸⁵ PASQUALE F. (2016), *Two Narratives of Platform Capitalism*, op. cit., p. 311 (arguing that “large platforms have gained massive market share because of luck, first-mover advantage, network effects, lobbying, strategic lawlessness”).

²⁸⁶ NICOLOSI M. (2012), *Il lavoro esternalizzato*, op. cit., p. 21 (arguing that the replacement of the employment contract with outsourced labour prevents the development of investments in human capital, innovation and support for social actors). See also TIRABOSCHI M. (2005), *Esternalizzazione del lavoro e valorizzazione del capitale umano: due modelli inconciliabili?* in *Dir. rel. ind.*, 2, pp. 379-408; VICARI S. (2002), *L'outsourcing come strategia per la competitività*, op. cit., p. 72 (describing outsourcing as a way to gain competitive advantage over competitors).

²⁸⁷ CORPORAL G. F. and LEHDONVIRTA V. (2017), *Platform Sourcing: How Fortune 500 Firms are Adopting Online Freelancing Platforms*, Oxford Internet Institute (arguing that large organisations “are increasingly hiring and sourcing work from freelancers through platforms”). See also FRY E. (2017, August 29), *The Gig Economy Isn't Just For Startups Anymore*, retrieved from <http://for.tn/2iDaCYp> (demonstrating that “gig workers” are now a feature of large companies too). Potentially, many other economic sectors could undergo such a conversion. If the *Uber* model is successful in the field of urban mobility, why should not it be replicated, for instance, in the road transport segment? Moreover, expanding in other sectors seems to be a survival imperative for these actors. See also EICHHORST W., HINTE H., RINNE U. and TOBSCH V. (2016), *How Big is the Gig? Assessing the Preliminary Evidence on the Effects of Digitalization on the Labor Market*, IZA Policy Paper, No. 117, p. 7 (arguing that [*Uber's*] “basic principle could also be easily transferred to many other industries, including those that require mainly technical and knowledge workers”).

scholars are forecasting that these trends will lead to organisations that are “fluidly assembled and re-assembled from globally networked labor markets”²⁸⁸, thus defining the business’s next evolutionary step²⁸⁹. Cloud- or app-based service firms have the potential to become dominant providers of back- and middle-office functions, dramatically shrinking the size and redesigning the notion of the firm²⁹⁰.

Perhaps not unsurprisingly, “[p]henomena that appear to be radical novelties, in historical light, reveal themselves to be simple continuities”²⁹¹. In this respect, it has to be noted that the “living” labour law is experimenting a fully immersive step back in the 19th century, if not in the pre-industrial epoch²⁹². A parallel can be drawn with the early era of automation: workers have started bidding and begging again for a job in brutal competition with each other. Such reconfiguration of the employment relationship is reminiscent of the time when workers would gather in specific places “praying” to be selected for a day’s work. Leading scholars have also associated this

²⁸⁸ See CORAZZA L. (2004), “Contractual integration” e rapporti di lavoro. *Uno studio sulle tecniche di tutela del lavoratore*, op. cit., p. 201 (describing the outsourcing of human resources management and predicting that even pure managerial activities would have been outsourced). More recently, special platforms have been developed to automatically “conduct a swarm of workers, most of whom are freelancers, and other ‘robots’ to complete projects”. See KESSLER S. (2017, July 31), *Robots are replacing managers, too*, retrieved from <https://qz.com/1039981>. This sort of model is based on “flash organisations”, i.e. “software which automatically hires freelancers into roles, teams, and hierarchies that allow them to work together on a goal”. See KESSLER S. (2017, July 13), *Forget the on-demand worker: Stanford researchers built an entire on-demand organization*, retrieved from <https://qz.com/1027606>. See also RETELNY D. et al. (2014), *Expert crowdsourcing with flash teams* in *Proceedings of the 27th annual ACM symposium on User interface software and technology*, p. 75.

²⁸⁹ Some firms have started relying on software to sort applicants and targets eligible employees; other ones are developing internal platforms for organising work. See PECK D. (2013, December), *They’re Watching You at Work*, retrieved from <http://theatlntc.com/2IPTYUV>.

²⁹⁰ It is expected that, in a not too distant future, “teams will be self-managed, leading to a vast reduction in the number of traditional managers”. A recent report drawn up by a global management consultancy, Bain & Company, attempts to predict a future where “employees will have no permanent bosses” and almost “all remaining roles will be mission-critical”, because of automation and outsourcing. See ALLEN J., ROOT J. and SCHWEDE A. (2017), *The Firm of the Future, Bain Brief*, p. 8.

²⁹¹ SRNICEK N. (2016), *Platform capitalism*, op. cit., p. 9.

²⁹² GRISWOLD A. (2016, October 1), *The Uber economy looks a lot like the pre-industrial economy*, retrieved from <https://qz.com/806117> (arguing that “the practices described [...] by drivers working with Uber would appear to fit the Victorians’ definition of ‘sweated labour’”). See generally FIELD F. and FORSEY A. (2016), *Sweated Labour, Uber and the ‘gig economy’*, retrieved from <https://goo.gl/1MBZmZ>; O’CONNOR S. (2017, April 18), *Gig economy workers want to ditch industrial-era shift patterns*, retrieved from <http://on.ft.com/2pfQZrT>. See also PAUL T. (2017, July 18), *The gig economy is nothing new – it was standard practice in the 18th century*, retrieved from <https://goo.gl/kxY1F1> (analysing the diaries of three men in 18th-century Britain who “worked multiple jobs to piece together a living”).

model to the one characterising the preliminary phase of industrialisation, when a merchant used to connect a series of craftsmen's businesses²⁹³. In this quasi-feudal system, the merchant, who distributed tasks and the necessary initial materials, gained the right to own the finished product, and took responsibility for selling it to third-party consumers. In this context, producers used to be paid on consignment from revenues generated once the final output (shoes, clothing, or firearms) was sold by the intermediary²⁹⁴.

As explained by FINKIN, in a preliminary phase of the proto-industrial era "manufacture, the making of things, [...] was home-based"²⁹⁵. The mid-twentieth century America envisaged a no-change scenario, as "there was nothing transitional in the deployment of home-based contract work"²⁹⁶. It took until the industrialisation era for this system to become a legal concern, laws regulating "industrial

²⁹³ The traditional model was based on "(1) the role of investment and capital intensive technology; (2) the lack of need to supervise the work; (3) the avoidance of collective action; (4) the flexibility of the product market; and (5) the control of labor cost and the avoidance of legal regulation". Similarities and differences with platform-economy companies can be traced. See FINKIN M. W. (2016), *Beclouded Work, Beclouded Workers in Historical Perspective in Comp. Lab. L. & Pol'y J.*, 37(3), p. 603 (describing the "survival" of certain pre- and proto-industrial organisational patterns that determine a fragmentation of the workforce, also preventing the emergence of solidarity). See also CELATA G. (1980), *L'operaio disperso* in AA.VV. (1980), *L'impresa in frantumi*, Roma, p. 83 ff. (describing the Italian putting-out system and the increasing division of labour among "mini-firms" and small artisans' workshops which were considered more flexible and productive than large manufacturing plants. This trend also implied a significant growth in the number of people employed in these undertakings. It will suffice to recall that craft labour was at one point the driver propelling industrialisation in Europe). See also DE LUCA TAMAJO R. (2004), *Riorganizzazione del sistema produttivo e imputazione dei rapporti di lavoro* in LYON-CAEN A. and PERULLI A. (Eds.), *Trasformazione dell'impresa e rapporti di lavoro: atti del seminario dottorale internazionale, Venezia 17-21 giugno*, Padova, p. 39. See also CARABELLI U. (2004), *Organizzazione del lavoro e professionalità: una riflessione su contratto di lavoro e post-taylorismo*, op. cit., pp. 1-99 (drawing a parallel with the Italian Law No. 877/1973 regulating home work). See also BRONZINI G. (1997), *Postfordismo e garanzie: il lavoro autonomo* in BOLOGNA S. and FUMAGALLI A. (Eds.), *Il lavoro autonomo di seconda generazione. Scenari del post-fordismo*, Milano, p. 325 (defining homeworking a "mitigated form of subordination").

²⁹⁴ See STANFORD J. (2017), *The resurgence of gig work: Historical and theoretical perspectives*, op. cit., p. 4 (describing "a return to previous work organisation strategies common in earlier periods of capitalism"). For a detailed analysis, see ROMAGNOLI U. (1985), *Alle origini del diritto del lavoro: l'età preindustriale* in *Riv. it. dir. lav.*, 4, p. 515 ff. (describing the "cheap but laborious workforce" in the pre-industrial Europe). For a complete overview, see also GRANDI M. (1977), *Diritto del lavoro e società industriale* in *Riv. it. dir. lav.*, 1, pp. 3-23.

²⁹⁵ See FINKIN M. W. (2016), *Beclouded Work, Beclouded Workers in Historical Perspective*, op. cit., p. 605 (observing that the platform economy more closely resembles the mercantile system).

²⁹⁶ FINKIN M. W. (2016), *Beclouded Work, Beclouded Workers in Historical Perspective*, op. cit., p. 608.

homeworking” were enacted in the late nineteenth century²⁹⁷. It might be concluded that the apparent novelties of the situation obscure the persistence of longer-term trends. Other commentators have claimed that platform labour approximates the model and features of day labourers “who would show up at a site in the morning in the hope of finding a job for the day”²⁹⁸, in sectors such as agriculture or dock logistics²⁹⁹.

A sort of reversion to the same precarious and day-by-day labour supply configuration can be traced, but with a twist. By dint of the Internet, “human” intermediaries typically acting as agents are no longer required³⁰⁰. They seem invisible – in a way they are. What stands between a company offering opportunities or requesting services and job seekers is a digital platform. To this extent, the role of the networks is of paramount relevance, as the penetration of digital infrastructure has increased dramatically, by turning the web from a simple bulletin board into a pervasive intermediary organising work. As explained in the previous paragraph, notwithstanding the fact that the firm has shed its skin, the tight control over the performance as well as the direct intrusion in the individual’s sphere of autonomy presage a return to the never faded hierarchical system³⁰¹.

What is clear, however, is that platforms offer an indefinite pool of workers making it cheap and easy to outsource; for this reason one can catalogue this heterogeneous experiences under the larger category of tools which have been

²⁹⁷ See VOZA R. (2017), *Il lavoro e le piattaforme digitali: the same old story?*, op. cit., p. 5 (drawing a parallel between the original model of homeworking and platform labour in terms of organisation).

²⁹⁸ SRNICEK N. (2016), *Platform capitalism*, op. cit., p. 78.

²⁹⁹ See, for instance, SYLOS-LABINI P. (1964), *Precarious employment in Sicily* in *Int'l. Lab. Rev.*, 89(3), pp. 268-285 (illustrating the situation of agricultural worker) and KAHN-FREUND O. (1967), *A note on status and contract in British labour law* in *Mod. L. Rev.*, 30(6), p. 642 (describing casual work relations of dockworkers), both quoted in COUNTOURIS N. (2012), *The legal determinants of precariousness in personal work relations: A European perspective* in *Comp. Lab. L. & Pol'y J.*, 34(1), p. 21.

³⁰⁰ See PFISTER U. (2008), *Craft guilds, theory of the firm, and early modern proto-industry* in EPSTEIN S. R. and PRAK M. (Eds.), *Guilds, innovation and the European economy, 1400–1800*, New York, p. 25 ff. (discussing the role of guilds as institutions for delegated monitoring and the vertical integration of production). In the agricultural and industrial sectors, waged work was commonly organised through nominally independent subcontractors, through much of the 19th century. See BRASS T. (2004), *“Medieval working practices”? British agriculture and the return of the gangmaster* in *Journal of Peasant Studies*, 31(2) p. 313.

³⁰¹ As a consequence, the opportunities to influence or negotiate the term of the relationship are scant, thus replicating the abovementioned out-dated scheme. In the following sections, the process of cutting back on cost centres and internal functions will be described widely. For a radical view, see POSNER E. A. and WEYL E. G. (2018), *Radical Markets: Uprooting Capitalism and Democracy for a Just Society*, Princeton, NJ.

tearing the boundaries of the firm down, promoting the engagement of external resources in lieu of stable employment relationships. Secondly, platforms are inherently built as “connecting hubs” (or “marketplace”, according to their terms of service) where responsibilities are diluted³⁰². The prediction about the transition “from mass production to networks of smaller business geared to rapid response to change in consumer taste” has become true³⁰³. It follows that collaborative platform are, in a sense, involved twice in this paradigm shift, both when they bring together a contingent of workers who perform instantaneous tasks to the benefit of other companies (B2B) and when they build from scratch businesses in the fields of transport, delivery or consultancy, acting as service providers on their own account (B2C)³⁰⁴. In a word, the “an app for that” pattern represents the extreme level of granularity of the firm: a “general contractor” defined as a coordinator of outcomes deriving from different subcontracting firms or independent contractors³⁰⁵. Contrary to the firms’ bundling of production assets, platforms tend to disaggregate services,

³⁰² See GIUGNI G. (1994), *Una lezione sul diritto del lavoro* in *Giorn. dir. lav. rel. ind.*, 2, p. 210.

³⁰³ COLLINS H. (1990), *Independent contractors and the challenge of vertical disintegration to employment protection laws* in *Oxford J. Legal Stud.*, 10, p. 356. Note that many authors have explained how the decline of mass fabrication does not imply the disappearance of manufacture or the progressive loss of social significance of work. See, among others, ACCORNERO A. (1994), *Il mondo della produzione*, Bologna, p. 323 (arguing that “the rules of the manufacturing sector are still valid and they can penetrate further the economic system”).

³⁰⁴ “Uber has basically eradicated search costs” according to ROGERS B. (2015), *The social costs of Uber*, op. cit., p. 88. In a different paper, the author explains how the result might be “a market for rides in which drivers spend far less time waiting at cab stands or cruising around looking for passengers”, see ID. (2016), *Employment Rights in the Platform Economy: Getting Back to Basics*, op. cit., p. 490. See also SÖDERQVIST F. (2017), *A Nordic approach to regulating intermediary online labour platforms* in *Transfer: European Review of Labour and Research*, 23(3), p. 349 (describing platforms as either a tool to internalise labour, where workers operate under bogus self-employment contracts, or externalise labour, where providers are properly categorised as self-employed). Platforms might “compensate” for the developments of “part-time, short duration, and low-wage jobs” in the off-line labour market, see BERINS COLLIER R., DUBAL V. B. and CARTER C. (2017), *Labor Platforms and Gig Work: The Failure to Regulate*, IRLE Working Paper, No. 106, p. 4. For a different view, see BERMAN S. and MARSHALL A. (2014), *The next digital transformation: from an individual-centered to an everyone-to-everyone economy* in *Strategy & Leadership*, 42(5), pp. 9-17. For a complementary point of view, see TULLINI P. (2016), *Digitalizzazione dell'economia e frammentazione dell'occupazione. Il lavoro instabile discontinuo informale: tendenze in atto* in *Riv. giur. lav.*, 4, p. 752 (describing four different distribution channels: from consumer to consumer, from consumer to business, from business to consumer, from business to business).

³⁰⁵ PICHIERRI A. (1982), *L'organizzazione del lavoro in edilizia* in *Inchiesta*, ottobre-dicembre, p. 57 (presenting the “general contractor” firm in the building industry). See generally DEL CONTE M. (2006), *Rimodulazione degli assetti produttivi tra libertà di organizzazione dell'impresa e tutele dei lavoratori* in *Dir. rel. ind.*, 2, p. 311.

which in turn are carried out by small and dispersed providers and then reassembled.

The ability to create an enterprise out of already-existing relations empowered a disintegrated form of organisation³⁰⁶. Accordingly, researchers have generally agreed that the granitic notion of the undertaking has been torn apart and pulled in many directions, up to what has come to be known as the “*entreprise sans travailleurs*” (literally “a firm without workers”), a temporary “network of individuals” specialised in coordinating funding, production and commercialisation³⁰⁷. Viewed in this way, it is possible to conclude that the “collaborative economy” formula used by the European institutions is a misleading notion, especially if related to a marketplace trading labour-intensive transactions³⁰⁸.

3.1. The rise of the “Cerberus firm”, a plural and effective combination of pre-existing models.

Fragile innovations have a noteworthy impact on the nature of firms³⁰⁹; it could be said that jobs disappear and projects ascend while simultaneous process substitute sequential steps. Not only they do lead to a reduction in the proportion of hierarchical coordination³¹⁰, but “new information technologies are allowing for closer integration of adjacent steps in the value-added chain”³¹¹. Technology, in fact,

³⁰⁶ DAVIS G. F. (2015), *What might replace the modern corporation: Uberization and the web page enterprise*, op. cit., p. 501.

³⁰⁷ Among the main goals of this reconfiguration, one may list the need for risk-spreading and speed in decision-making processes. See VALDES DAL-RE F. (2002), *Decentralisation productive et desorganisation du droit du travail*, op. cit.. See also TRONTI L. (Ed.) (1997), *Ristrutturazione industriale e struttura verticale dell'impresa*, Milano (presenting a set of case-studies of personnel management policies in the restructured industry sector). See also MALONE T. W. and LAUBACHER R. J. (1999), *The Dawn of the E-Lance Economy*, op. cit., p. 15 (describing “the devolution of large, permanent corporations into flexible, temporary networks of individuals”) and, for more recent and critical perspective, STAGLIANÒ R. (2016), *Al posto tuo: così web e robot ci stanno rubando il lavoro*, Torino, p. 207-208 (criticising the optimistic vision of the “e-lance economy”). See also STAGLIANÒ R. (2018), *Lavoretti: così la Sharing Economy ci rende tutti più poveri*, Torino.

³⁰⁸ DRAHOKOUPIL J. and FABO B. (2016), *The platform economy and the disruption of the employment relationship*, ETUI Policy Brief, No. 5., p. 1.

³⁰⁹ POWELL W. W. (2001), *The capitalist firm in the 21st century: emerging patterns* in DIMAGGIO P. J. (Ed.), *The 21st Century Firm: Changing Economic Organization in International Perspective*, Princeton, NJ, p. 35.

³¹⁰ See BRYNJOLFSSON E., MALONE T. W., GURBAXANI V. and KAMBIL A. (1994), *Does information technology lead to smaller firms?* in *Management Science*, 40(12), pp. 1628-1644.

³¹¹ MALONE T. W., YATES J. and BENJAMIN R. I. (1987), *Electronic markets and electronic hierarchies*, op. cit., p. 484 (describing how, “for a market to emerge at all, there must be both *producers* and *buyers* of

can decrease the unit costs of coordination, by extending technical control and making it more penetrating. As already mentioned, firms may coordinate economic activities thanks to hierarchy, control and authority, which allow to solve bounded rationality problems, reduce the hazards of opportunism and minimise the costs of collecting and transferring information³¹².

Whilst most of these explanations focus on material items, it could be argued that the outcome of the analysis could vary if one concentrates the attention on labour resource. It is easy understandable why firms do not need to be vertically integrated, as it is far more convenient to purchase instant job performances directly on the market by abnegating their responsibility as employers. As noted above, companies need to be flexible, professional, specialised, and innovative to face unexpected changes³¹³. In order to stay competitive, enterprises might look for ways to get rid of the constraints of labour and social security law. Nowadays, transaction costs connected with hiring processes and training modules, just to list a few of them, can be close to zero for a whole host of reasons. First and foremost, matching infrastructures make it simple to recruit the most suited candidate; secondly, the “taskifications”³¹⁴ of labour triggers in turn the fungibility of workers, as there is very little added value in performing routine or detached activities; thirdly, micro-

some good or service”). In this sense, a broker substantially reduces the need for buyers and suppliers to interact with a large number of alternative partners individually. “The electronic brokerage effect simply means that electronic markets, by electronically connecting many different buyers and suppliers through a central database, can fulfil this same function. The standards and protocols of the electronic market allow a buyer to screen out obviously inappropriate suppliers, and to compare the offerings of many different potential suppliers quickly, conveniently, and inexpensively. Thus the electronic brokerage effect can (1) increase the number of alternatives that can be considered, (2) increase the quality of the alternative eventually selected, and (3) decrease the cost of the entire product selection process” (p. 488). For a comprehensive and farsighted review of the challenges presented ICT at work, see LEE J. (2016), *Drivers and Consequences in Transforming Work Practices* in LEE J. (Ed.), *The Impact of ICT on Work*, Singapore, pp. 71-92.

³¹² See also EDWARDS R. C. (1979), *Contested Terrain: The Transformation of the Workplace in America*, New York. In addition to this, “ICT technologies greatly reduce coordination costs. This is true, in particular, for small and medium-sized enterprises”. BEBLAVÝ M., MASELLI I. and MARTELLUCCI E. (2012), *Workplace Innovation and Technological Change*, CEPS Special Report, Brussels, p. 41.

³¹³ This is much more difficult for enterprises above a certain size threshold, according to QUADRI G. (2004), *Processi di esternalizzazione: tutela del lavoratore e interesse dell'impresa*, Napoli, p. 26.

³¹⁴ GRAY M. L. (2016, January 8), *Your job is about to get 'taskified'*, retrieved from <http://lat.ms/1RtDjRA> (describing “immediate issue is the Uber-izing of human labor, fragmenting of jobs into outsourced tasks and dismantling of wages into micropayments”).

activities can be allocated efficiently and reassembled at a later stage, with no further energy expenditure³¹⁵.

In other words, “the chief advantage of formal disintegration of the firm is to create the possibility for sustained informal cooperation between independent producers”³¹⁶. Organisations are then decomposed into their key component parts so to understand what is truly differentiating (i.e. strengths and weaknesses) and make decisions about how to craft, buy or partner for capability. In the light of the above, platforms can be seen as an aggregation of specialised entities with complementary interests – expanding, contracting and reconfiguring themselves in a way that best adapts to or even anticipates market dynamics.

Accepting the terms of this empirical matrix, a combination of elements combining both the “hierarchy” strategy (main firm with a traditional configuration and a classic organogram promoting “intra-firm contracts”) and the “market” strategy (inter-firm contracts) can be traced³¹⁷. Speaking in Transaction Cost Economics (TCE) terms, platforms “replace the ‘spontaneous’ ‘autonomous adjustments’ of supply and demand from price signals with ‘consciously coordinated adaptations’ of centralised production”³¹⁸. As a result, the vertically integrated organisation model is increasingly challenged by a fragmented structure that is centrally piloted, entailing “less secure internal labor markets, more fluid job definitions, and more ambiguous”³¹⁹. It optimises flows, by adapting the zero-inventory model to the workforce.

Again, it is important to substantiate the hybrid nature of the platform business model. While market coordinates resources through the price mechanism and the firm is led by the “entrepreneur-co-ordinator”, platforms can be depicted as “centralised markets”. If it is true that “traditional command-and-control

³¹⁵ How techno-legal features allow collaborative platforms to cut transaction costs will be further investigated in the second section of this dissertation.

³¹⁶ GILSON R. J., SABEL C. F. and SCOTT R. E. (2009), *Contracting for innovation: vertical disintegration and interfirm collaboration*, op. cit., p. 434.

³¹⁷ MAZZOTTA O. (1990), *Introduzione* in AA.VV. (1990), *Nuove tecnologie e rapporti fra imprese*, Milano, pp. 1-10. See also RULLANI E. (1988), *La teoria dell'impresa nei processi di mondializzazione* in *Democrazia e Diritto*, 1, p. 69 (contrasting the idea of transactions as punctual phenomena).

³¹⁸ For a very comprehensive and brilliant investigation, see TOMASSETTI J. (2016), *Does Uber redefine the firm? The postindustrial corporation and advanced information technology* in *Hofstra Lab. & Emp. L. J.*, 34(1), pp. 23-24.

³¹⁹ DIMAGGIO P. (2009), *Introduction: Making sense of the contemporary firm and prefiguring its future*, op. cit., p. 5. See also SALENTO A. (2003), *Postfordismo e ideologie giuridiche: nuove forme d'impresa e crisi del diritto del lavoro*, Milano (describing the network structure).

management is becoming less common [since] decisions are increasingly being pushed lower down in organisations"³²⁰, at the same time, firm can still rely on a centralised form of coordination. Indeed, efficiencies are achieved in streamlining ride services, in Coasean terms, "as a result of firm integration, of replacing the market exchange activities (or inter-firm transaction costs) [...] with agency cost (intra-firm costs)"³²¹. Therefore, it could be aptly pointed out that platform companies have reduced costs between the platforms and its users, not between workers/providers and users. Like markets, they summon, dispatch and connect formally independent actors; like firms, they rely on labour to extract value and exercise their control power, like networks, they match and synchronise demand and supply of services, by lowering transaction costs and creating value for both workers and clients (and accumulated by the platform). In summary, like *Cerberus*, the mythological three-headed monstrous dog³²², platforms are multi-headed economic players that are supposed to metastasise from transaction enablers to participation gatekeepers³²³.

Furthermore – and no less important – it should be obvious from the foregoing that the contractual pattern of stepping out of the traditional employment relationship has become a consolidated phenomenon: it is no longer a problem of merely some atypical cases. As will be explained at a later stage, the advantages for the contractual patterns of self-employment are evident. The employer does not have to beat common employer's responsibilities under labour law or under social

³²⁰ See also MALONE T. W. and LAUBACHER R. J. (1999), *The Dawn of the E-Lance Economy*, op. cit., p. 16.

³²¹ TOMASSETTI J. (2016), *Does Uber redefine the firm? The postindustrial corporation and advanced information technology*, op. cit., p. 22. See also POSNER E. A. (2000), *Agency models in law and economics*, John M. Olin Program in Law and Economics Working Paper No. 92, p. 4 (discussing "complications" arising from an agency relationship).

³²² It is worth noting that, to stay on a mythical creatures theme, "unicorn" is a term used to refer to private companies valued at \$1 billion or more.

³²³ MALONE T. W., YATES J. and BENJAMIN R. I. (1987), *Electronic markets and electronic hierarchies*, op. cit., p. 496 (claiming that "all firms should consider whether more of the activities they currently perform internally could be performed less expensively or more flexibly by outside suppliers whose section and work could be coordinated by computer-based systems"). As will become clear in Part 3 below, *Uber* reveals information incrementally and does not disclose the customer's destination until after the request acceptance. Moreover, by default the app prevents drivers for competing with one another for passengers or over prices thus resulting in the design of a uniform ride experience.

security law³²⁴. Downsides are less recognisable. Employers may face difficulties in dealing with a segmented, low-committed and inharmonious workforce, supervising isolated workers operating outside the firm premises³²⁵ and, ultimately, meeting the needs of more demanding customers in terms of quality and reliability. When these disadvantages outweigh potential benefits, employers may wish to centralise production in concentrated workplaces, and this is the trade-off that lies at the origin of the vertically-integrated factory.

As pointed out earlier, although the Coasean taxonomy proves to be an effective instrument for cataloguing the different types of (standard) firm, there are infinite intermediate options moving along the spectrum from centralised hierarchy to dispersed networks. Informed by this theoretical framework, instead of an on-off toggle³²⁶, it is important to think of a composite scale with movable switches. This allows for arguing that platforms are (i) firms when it comes to command-and-control prerogatives, as the authority mechanism can be enforced by vertical relational contracts, (ii) market when it comes to treating workers as independent providers avoiding production costs, (iii) immaterial infrastructure relying on “networks effects” when it comes to allocating products and services by leveraging on the exponential potential of users³²⁷.

Specifically, it is argued that production is made cheaper by a “centralised model”

³²⁴ See RATTI L. (2008), *Agency work and the idea of dual employership: A comparative perspective*, op. cit., p. 839 (arguing that “this abatement of responsibility must be seen as the main reason for the growing importance of the demand of contingent work”).

³²⁵ In contrast to this idea, see FLECKER J. and SCHÖNAUER A. (2016), *The Production of ‘Placelessness’: Digital Service Work in Global Value Chains*, op. cit., p. 13. According to the authors “the process of liberation former territorial configurations are transformed, but not removed” since “ICT-enabled work itself is not independent from place”. They also clarify that, with the exception of English language platforms, “many crowdsourcing intermediaries are assumed to have so far operated mainly within national boundaries” (p. 24). Many platforms for clerical services are operating globally as they can profit from the almost universal knowledge of the English language; others instead are mediating casual work locally, sometimes contributing to reduce undeclared employment.

³²⁶ GRIMSHAW D., MARCHINGTON M., RUBERY J. and WILLMOTT H. (2005), *Introduction: Fragmenting Work Across Organizational Boundaries*, op. cit., p. 17 (arguing that “it is more plausible to regard ‘market’, ‘hierarchy’, and ‘network’ as concepts that have proven valuable in differentiating elements or dimensions of organising practices within and between organisations, rather than as alternative designs of economic organisation”).

³²⁷ See also SRNICEK N. (2016), *Platform capitalism*, op. cit., p. 44 (clarifying that “[r]ather than having to build a marketplace from the ground up, a platform provides the basic infrastructure to mediate between different groups”). For a critical point of view, see COHEN J. E. (2017), *Law for the Platform Economy in U.C. Davis Law Review*, 51(1), pp. 133-204 (maintaining that platforms exploit the affordances of network organisation even though they are not just networks).

increasing the coordinator's prerogatives to direct and control while reducing ownership of assets to a minimum and lowering the costs associated with agency (directing, monitoring and disciplining workers)³²⁸. As explained by TOMASETTI, the result is a "win-win situation" where platforms control resources without owing them, rapidly adapting to downturns in the market. Here is the firm as a web page, or – even better – "a set of calls on resources that are then assembled into a performance"³²⁹. How else can this manner of arranging contractual relationships be explained? It must be said that the end user, even without being a vertically integrated firm, benefits from a specific situation characterised by "incentives (typically linked to market transactions) and control (typically linked to a bureaucratic model)"³³⁰.

In such a context, it is worth noting that flexibility and outsourcing, which are antithetical – in theory at least, can be reconciled in terms of hierarchical market relationships or vertical contractual integration: "[f]irm-to-firm contractual relations replacing employer/employees contractual relations, indeed, (...) tend to be rather structured as a sort of hybrid between market and hierarchy. Such hybrid is a "plural form of organisation" combining the three forms of hierarchy, market and network (see Table 1). This "Cerberus" firm merges hierarchically-structured organisations and networks on a long-term basis, "while highly temporary market relations continue to predominate on the periphery", thus facilitating "a correspondingly (more) rapid change in the institutional arrangement"³³¹. It has to be noted how labour platforms represent a formidable example of "'hierarchical' forms of

³²⁸ ROSS S. A. (1973), *The economic theory of agency: The principal's problem* in *The American Economic Review*, 63(2), pp. 134-139.

³²⁹ DAVIS G. F. (2015), *What might replace the modern corporation: Uberization and the web page enterprise*, op. cit., p. 514.

³³⁰ MUEHLBERGER U. (2005), *Hierarchies, relational contracts and new forms of outsourcing*, ICER Working Paper No. 22, p. 4.

³³¹ For a detailed analysis on the automotive and chemicals industries, and on airports, see SYDOW J. and HELFEN M. (2016), *Production as a service Plural network organisation as a challenge for industrial relations*, Friedrich-Ebert-Stiftung Study. See also MUNGER M. C. (2018), *Tomorrow 3.0: Transaction Costs and the Sharing Economy*, Cambridge, UK, p. 6 (ascribing three main characteristics to the *Uber* business model, namely "triangulation", i.e. "information about identity and location, and agreeing on terms, including price; "transfer", that is "a way of transferring payment and good that is immediate and as invisible as possible"; "trust", which is to say "a way of outsourcing assurance and honesty and performance of the contract").

outsourcing”, because, “[b]y mixing governance structures, [they] are able to benefit from the advantages of outsourcing without losing control over labour and assets”³³².

Table 1: Stylised comparison of forms of economic organisation³³³

<i>Key features</i>	<i>Forms</i>			
	<i>Market</i>	<i>Hierarchy</i>	<i>Network</i>	<i>Cerberus firm</i>
<i>– normative basis</i>	Contract – property rights	Employment relationship	Complementary strengths	Contract – property rights
<i>– means of communication</i>	Prices	Routines	Relational	Relational
<i>– methods of conflict resolution</i>	Haggling – resort to courts for enforcement	Administrative fiat - supervision	Norm of reciprocity – reputational concerns	Supervision, norm of reciprocity – reputational tie
<i>– degree of flexibility</i>	High	Low	Medium	Virtually high
<i>– amount of commitment among the parties</i>	Low	Medium to high	Medium to high	Medium to low
<i>– tone or climate</i>	Precision and/or suspicion	Formal, bureaucratic	Open-ended, mutual benefits	Open-ended, Precision and bureaucratic
<i>– actor preferences or choices</i>	Independent	Dependent	Interdependent	Interdependent

³³² In addition to this, platforms seek total control even as they abdicate responsibility, by consolidating authority structures very resembling to those existing in an employment relationship such as “setting goals, monitoring and evaluating work, providing feedback, and imposing consequences on workers on the basis of their performance”. MUEHLBERGER U. (2005), *Hierarchies, relational contracts and new forms of outsourcing*, op. cit., pp. 4 and 7. See also GIBBONS R. (2001), *Firms (and other relationships)* in DIMAGGIO P. (Ed.), *The twenty-first-century firm: changing economic organization in international perspective*, Princeton, NJ, p. 186 ff. (arguing how the once bi-univocal connexion between productive entity and employment contracts is broken). It has been rightly pointed out that these “contradictory” arrangements “decompose bureaucracy without being, in any meaningful sense, ‘post bureaucratic’”. See GRIMSHAW D., MARCHINGTON M., RUBERY J. and WILLMOTT H. (2005), *Introduction: Fragmenting Work Across Organizational Boundaries*, op. cit., p. 3.

³³³ Table 1. Elements in the first three columns are adapted from POWELL W. W. (1990), *Neither market nor hierarchy: network form of organization*, op. cit., p. 300. Column labelled “Cerberus firm” is author’s contribution. For a similar comparison focused on the difference between “good faith employment model” and “flexible employment model”, which mirrors the alternative market vs. hierarchy, see COLLINS H. (2001), *Regulating the employment relation for competitiveness* in *Industrial Law Journal*, 30(1), pp. 17-48 (assessing the differences in contract specificity, monitoring, information flows, training, security of work, and incentives).

This section concludes with a thought-provoking question: how can “hierarchies without firms” be as effective as traditional highly integrated firms³³⁴? The proliferation of vertical decomposition has cast doubt on how entrepreneurs can succeed in running an efficient business whilst eschewing the powers granted to an employer³³⁵ – a crucial question in the efficient design of a company. The simple answer is that rating systems or automatic review mechanisms are effectively employed to direct, monitor, and consequently discipline the execution of work³³⁶. Digitalisation “together with the dissemination of the ‘service-dominant logic’” encourages the design of corporate structures constituting networks rather than spatial or organisational units³³⁷.

3.2. The platform business model. Does Uberisation redefine the notion of the firm?

No form of economic or social structure is ever entirely new³³⁸. Drawing conclusions from the above, it could be said that the answer to the preliminary question giving the title to this paragraph is negative. Undoubtedly, the increasing relevance of tertiarisation may have heralded a new era of post-industrialism³³⁹. But

³³⁴ When the contractual integration between the ‘main’ outsourcing firm and the other supplier firms might become so intense that the notion of the ‘quasi-firm’ has been proposed”. See LO FARO A. (2017), *Core and Contingent Work: a Theoretical Framework* in ALES E., DEINERT O. and KENNER J. (Eds.), *Core and contingent work in the European Union: a comparative analysis*, Oxford, UK, pp. 17-18.

³³⁵ It is hard to imagine a system of “production without coordination, managed at a distance by an algorithm”. See MÉDA D. (2016), *The future of work: The meaning and value of work in Europe*, ILO Research Paper, No. 18, p. 19 (arguing that “it does not seem that large-scale production of aircraft or buildings could take place in that ultra-personalized way, and it is also uncertain that such an industrial revolution would save materials and energy”). See also PERULLI A. (2006), *La riforma del mercato del lavoro: bilancio e prospettive* in MARIUCCI L. (Ed.), *Dopo la flessibilità, cosa?*, Bologna, p. 203 (arguing that “long-term growth cannot be achieved through mere corporate policies aimed at outsourcing and disassembling the firm in infinite productive cycle”).

³³⁶ See SCHWARZ J. A. (2017), *Platform Logic: An Interdisciplinary Approach to the Platform-Based Economy*, op. cit., p. 8 (differentiating between “prescriptive” and “restrictive” modes of control). See also BRADACH J. L. and ECCLES R.G. (1989), *Price, authority, and trust: From ideal types to plural forms* in *Annual Review of Sociology*, 15(1), pp. 97-118.

³³⁷ SYDOW J. and HELFEN M. (2016), *Production as a service Plural network organisation as a challenge for industrial relations*, *Friedrich-Ebert-Stiftung Study*, p. 7.

³³⁸ As noted by COHEN J. E. (2017), *Law for the Platform Economy*, op. cit., p. 136.

³³⁹ BELL D. (1973) *The Coming of Post-Industrial Society. A Venture in Social Forecasting*, New York, p. 8 (maintaining that “post-industrial society is shaped by an intellectual technology”). At the same time, commentators have depicted a mixed situation. See GALLINO L. (1998), *Se tre milioni vi sembrano pochi: sui modi per combattere la disoccupazione*, Torino, p. 41 (denouncing a sort of industrialisation of the service sector and refuting the hypothesis according to which the rise of the service sector could

“Uberisation” does not redefine the notion of the firm. Rather this phenomenon marks the shift from a bureaucratic control to a more sophisticated, technocratic and invasive one³⁴⁰. Platforms rely on the sharp separation of design, management and execution. Another element that is sure to be of considerable importance is that, while representing the overcoming of the strict productive protocols, platforms embody and exploit the best potential of the Tayloristic principles, leaving the crucial aspects of the traditional division of labour intact³⁴¹.

The truth is that technology and algorithms allow abandoning the pure Fordist method and embracing a stronger version of the same logic of “the watchfulness of management”³⁴². The lack of direct interaction is promptly replaced by a greater reliance on electronic communications³⁴³, workers are watched more closely, strictly and intimately than they ever used to be. Instead of entrepreneurial autonomy, self-determination is a fantasy. Thanks to the “glue of the creation, monitoring, and enforcement of standards on product and service delivery, made available through

reduce the high unemployment rate). A similar assumption is challenged in HENDRICKSON C. (2018, January 8), *The Gig Economy's Great Delusion*, retrieved from <https://goo.gl/oNv8sv>. See also MCAFEE A. and BRYNJOLFSSON E. (2017), *Machine, platform, crowd: Harnessing our digital future*, New York, p. 301 ff. (claiming that “firms are still going strong, and [...] in many ways their economic influence is growing, not shrinking”).

³⁴⁰ YUNG J. (2005), *Big Brother is watching: how employee monitoring in 2004 brought Orwell's 1984 to life and what the law should do about it* in *Seton Hall L. Rev.*, 36, pp. 163-222 (explaining how GPS can follow and monitor the employee beyond the workplace). Note that, according to Bowles and Gintis, “[t]he early evolution of the factory system or the later growth of the bureaucratic structure of the modern corporation, to take two examples, probably had as much to do with their ability to regulate the pace and quality of work as with their efficiency in translating work inputs into production outputs”. BOWLES S. and GINTIS H. (1993), *The revenge of homo economicus: contested exchange and the revival of political economy*, op. cit., p. 87 (explaining how “the growth of the bureaucratic structure of the modern corporation depended on the ability to regulate the pace and quality of work as with their efficiency in translating work inputs into production outputs”). See also MARGLIN S. (1974), *What Do Bosses Do?* in *Review of Radical Political Economics*, 6(2), pp. 60-112.

³⁴¹ LOMBA C. (2005), *Beyond the debate over 'post-' vs 'neo-' Taylorism: the contrasting evolution of industrial work practices* in *International Sociology*, 20(1), p. 71.

³⁴² See TAYLOR F. W. (1911), *Principles of Scientific Management*, New York and London, p. 85. Conceived as a way to reduce inefficiencies, Taylorism can be defined as a systematic attempt to measure work performances thanks to constant monitoring, best practices and task-related incentives. Accordingly, outputs were measured as a function of working time. See KANIGEL R. (1997), *Taylor-made: How the world's first efficiency expert refashioned modern life in his own image* in *The Sciences*, 37(3), p. 18.

³⁴³ SPRAGUE R. (2007), *From Taylorism to the Omnipicon: Expanding employee surveillance beyond the workplace* in *J. Marshall J. Computer & Info. L.*, 25, pp. 27-28.

new information and communication technologies”³⁴⁴, platforms impose detailed and stringent standards on workers hired on the spot for particular tasks. This is of particular concern, along with the fact that, “in markets where major platform actors have come to dominate, they hedge new entrants from acquiring market share in various ways”³⁴⁵.

To further deepen its understanding, platforms’ business model will be scrutinised thoroughly in this paragraph³⁴⁶. As already flagged above, looking at labour platforms as a unified whole could be inappropriate and misleading. Despite the common features, much dissimilarity can be traced: there is no such thing as a functional uniformity. Nevertheless, an attempt will be made to highlight shared hallmarks of this autonomous yet heterogeneous archetype of “non-standard firms”. As far as the business model is concerned, the digital matching firms can be characterised by focusing on a list of principal factors. First and foremost, the massive use of advanced information technology, typically the combination of widespread broadband, user-friendly digital application and increasingly effective features, such as geo-localisation by GPS and management by algorithms, to facilitate transactions and keep the production lean³⁴⁷; then the reliance on customer-based feedback systems for quality check as well as the reliance on workers using their own equipment (be they personal computers, bicycles or cars, whether leased or owned) to provide a service³⁴⁸. The interrelationships between actors could be described as triangular, being the platform (which controls intellectual property rights and governance) a connecting system between buyers (“requesters”, according to the internal terminology) and workers (“sellers” or “providers”).

In theory at least, the activities carried out by platforms may be classified as intermediation between the afore-mentioned contracting parties. In addition to the

³⁴⁴ WEIL D. (2014), *The Fissured Workplace: why work became so bad for so many and what can be done to improve it*, op. cit., p. 9.

³⁴⁵ SCHWARZ J. A. (2017), *Platform Logic: An Interdisciplinary Approach to the Platform-Based Economy*, op. cit., p. 11.

³⁴⁶ Different business models might be lumped under the rubric of the “platform”. As argued by TOMASSETTI J. (2016), *Does Uber redefine the firm? The postindustrial corporation and advanced information technology*, op. cit., p. 7. For a complete literature review on this issue, see SCHNEIDER H. (2017), *Uber: Innovation in Society*, New York, pp. 29-54.

³⁴⁷ For details, see WOMACK J. P., JONES D. T. and ROOS D. (1990), *The machine that changed the world*, New York.

³⁴⁸ See also TELLES R. Jr. (2016), *Digital Matching Firms: A New Definition in the “Sharing Economy”*, *Space, Economics and Statistics Administration Issue Brief*, 1, retrieved from <https://goo.gl/ZP9KgD>.

main service, ancillary activities are supplied such as facilitation of payments, assistance in the course of the execution of the performance, a rather mild internal dispute resolution mechanism or arbitration panels³⁴⁹. It is tantamount to acknowledge that the fundamental feature at the basis of the platform business model is the involvement of individual providers offering services personally and mostly for the same platform (but not for the same client), despite being classified as autonomous workers. An arrangement as such has the merit of lowering transaction costs (as defined in the previous paragraph), barriers to entry and information asymmetries³⁵⁰. Moreover, thanks to the reduction in agency costs, an “assetless company” might arrange production inputs without incurring in the costs of formal property rights, excluding those related to software, patents, and other intangible assets. That is why tech companies are often able to scale very rapidly, thanks to a shift from asset control to resource orchestration.

In line with the “increasing erosion of corporate boundaries as well as the resulting closer linkage of internal and external business processes”³⁵¹, such a way of arranging a digital business results in a blatant deny of the existence of a stable employment relationship. Unquestionably, it is more convenient for clients and employer to engage workers on a task-by-task basis rather than hiring them as employees. At a closer look, this peculiar model allows platforms to deploy management prerogatives over a contingent workforce mobilised on a just in time and just in case basis, by both formal and mainly informal contracts, thus responding to demand peaks and shifting the impact of fluctuations on the worker’s shoulders. This is the source of the considerable cost advantage of digital platforms³⁵². At first glance, platforms constitute a promising example of a two- or multi- sided market where participants are rapidly connected via desktop and/or mobile Internet³⁵³. This

³⁴⁹ Mainly “social networking; mobile and devices platform; and e- or online payment systems” according to SCHNEIDER H. (2017), *Creative Destruction and the Sharing Economy: Uber as Disruptive Innovation*, Cheltenham, UK.

³⁵⁰ On the notion and implications, see ICHINO P. (1998), *The labour market: A lawyer’s view of economic arguments in Int’l Lab. Rev.*, 137, p. 299.

³⁵¹ DURWARD D., BLOHM I. and LEIMEISTER J. M. (2016), *Crowd work in Business & Information Systems Engineering*, 58(4), p. 283.

³⁵² Many reports confirm that much of the advantage of new platform- and app-based players derives from their failure to comply with labour or social security regulations. In order to be effective, this system requires the presence of a fungible and constantly available workforce.

³⁵³ For a detailed analysis, see ROCHET J. C. and TIROLE J. (2006), *Two-sided markets: a progress report in Rand. J. Econ.*, 37(3), p. 645 ff. (defining a two-sided market as “one in which the volume of transactions between end-users depends on the structure and not only on the overall level of the fees

organisation has reversed the traditional pipe-based business model³⁵⁴. One side is made of clients who benefits from access to low-cost services, while supplying the platform with data, the other side is made of clients who which may also benefit from positive network externalities³⁵⁵. On a closer inspection, this model has existed for decades. What is new is the penetration of (immaterial) infrastructure which determines frictionless transactions, not to mention the “quantitative leap and exponential growth” in data and metrics that, collected, refined and analysed, can “train” the internal algorithm, thus resulting in an even more prompt and successful matching and governance function³⁵⁶.

The basic structure is the same in completely different sectors, replicating the original model of a hiring hall or a virtual bulletin board such as *Craigslist* or *eBay*, which are essentially advanced database³⁵⁷. Platforms generate value by simplifying and supporting the interplay between providers and users/consumers. Each successful interaction guarantees a 10 up to 20% transaction fee to the benefit of the platform. At the same time, platforms have the possibility not to incur in high fixed costs as well as to shed variable costs of production, which results in large economies of scale. These business relationships “also transform fixed costs into variable

charged by the platform”). From a competition policy standpoint, see EVANS D. S. (2003), *The Antitrust Economics of Multi-Sided Platform Markets* in *Yale Journal on Regulation*, 20(2), pp. 325-381. For a theory of network externalities, see KATZ M. L. and SHAPIRO C. (1985), *Network externalities, competition, and compatibility* in *American Economic Review*, 75(3), p. 424.

³⁵⁴ On the contrary, classical “pipeline businesses” operate by controlling a linear series of activities from the inputs to the outputs (the value-chain model) and the process of production. Therefore, the main activity consists in transforming inputs at one end of the chain into the finished product. See VAN ALSTYNE M. W., PARKER G. G. and CHOUDARY S. P. (2016), *Pipelines, Platforms, and the New Rules of Strategy* in *Harvard Business Review*, 94(4), pp. 54-62. See also BORZAGA M. (2012), *Lavorare per progetti: uno studio su contratti di lavoro e nuove forme organizzative d'impresa*, Padova, p. 6 ff. (describing the “reengineering” of the Fordist mode of production).

³⁵⁵ VALENDUC G. and VENDRAMIN P. (2016), *Work in the digital economy: sorting the old from the new*, *WP ETUI*, No. 3, p. 12 (arguing how this model may favour a “winner takes all” approach).

³⁵⁶ VALENDUC G. and VENDRAMIN P. (2017), *Digitalisation, between disruption and evolution*, op. cit., p. 121.

³⁵⁷ Early studies analysing the role of the Internet in enabling labour performances date back to 2001, see AUTOR D. H. (2001), *Wiring the labor market* in *The Journal of Economic Perspectives*, 15(1), p. 25 (demonstrating how the employer-employee matches would have been carried out on virtual venues rather than on-site, making one’s location irrelevant on the global scale). See also TODOLÍ-SIGNES A. (2017), *The ‘gig economy’: employee, self-employed or the need for a special employment regulation?* in *Transfer: European Review of Labour and Research*, 23(2), p. 205 (describing platforms as “a new type of company which claims to be a database”). For a complete literature review on multi-sided platforms, see COLANGELO G. and MAGGIOLINO M. (2017), *Sistemi di pagamento e mercati a due versanti: gli insegnamenti dei casi MasterCard e American Express* in *Mercato Concorrenza Regole*, 19(2), pp. 215-248.

ones”³⁵⁸. Accordingly, the only activities that are “internalised” are middle management, sales and marketing functions. This is how economies of scope can be combined with economies of scale and specialisation³⁵⁹, leading to a high-performing model of hierarchical outsourcing³⁶⁰. At the same time, the firm expects employees to offer commitment without loyalty, thus resulting in “a change in the implicit contract between the employee and the firm”³⁶¹. The combination between the contingent nature of the relationship and the reliance on procuring, as opposed to developing internally the skills that the firm needs, causes a significant misalignment of interests between employers and employee with regard to the development of key competences (in labour economics terms, “firm-specific human capital”) and new skills³⁶². This may also have a negative and statistically significant effect on productivity³⁶³.

³⁵⁸ MUEHLBERGER U. (2005), *Hierarchies, relational contracts and new forms of outsourcing*, op. cit., p. 3.

³⁵⁹ GOLZIO L. (2005), *L'evoluzione dei modelli organizzativi d'impresa*, op. cit., p. 313. See also PIRELLA G. and SABEL C. (1984), *The second industrial divide*, op. cit., p. 17 (defining “flexibility” as “a strategy of permanent innovation: accommodation to ceaseless change, rather than an effort to control it, [...] based on flexible—multi-use—equipment; skilled workers; and the creation, through politics, of an industrial community that restricts the forms of competition to those favouring innovation. For these reasons, the spread of flexible specialization amounts to a revival of craft forms of production”).

³⁶⁰ As regards platform-specific investments, drivers must own a vehicle to be eligible to drive. For instance, *Uber* usually assists its drivers in the relationship with an affiliated leasing company and sometimes intervenes directly if the driver becomes delinquent in his payments. More recently, the company has also designed a pilot insurance plan launched in partnership with *Aon PLC* to help cover on-the-job accidents. See GEE K. (2017, August 8), *In a Job Market This Good, Who Needs to Work in the Gig Economy?*, retrieved from <http://on.wsj.com/2uBSChM>.

³⁶¹ See STONE K. V. W. (2005), *Flexibilization, globalization and privatization: The three challenges to labor rights in our time* in *Osgoode Hall L. J.*, 44(1), pp. 80 and 93 (arguing that “[w]ork has thus become contingent, not only in the sense that it is formally defined as short-term or episodic, but also in the sense that the attachment between the firm and the worker has been loosened”).

³⁶² In addition to this, marginal workers will remain so unless they develop “specialised not specific” skills that can be used outside the firm, assuming that firms do not require the same level of loyalty and commitment from all workers. See generally DECKOP J. R., MANGEL, R. and CIRKA C. C. (1999), *Getting more than you pay for: Organizational citizenship behavior and pay-for-performance plans* in *Academy of Management Journal*, 42(4), pp. 420-428. For a conceptualisation of “innovative flexibility”, see KILLICK T. (1995), *The Flexible Economy*, London, p. 15.

³⁶³ LINDBECK A. and SNOWER D. J. (1988), *The insider-outsider theory of employment and unemployment*, Cambridge, MA. See also BOERI T. and GARIBALDI P. (2007), *Two tier reforms of employment protection: A honeymoon effect?* in *The Economic Journal*, 117(521), pp. F357-F385 (describing “a fall in average productivity in the aftermath of the reform [introducing a two tier labour market system], as a consequence of decreasing marginal returns. As the firm expands in good periods, its employment pool increases along a downward sloping labour demand, with additional workers who are less productive at the margin”).

As a consequence, a small but growing body of research on the implications of non-standard firms has suggested that it is far more important to be able to orchestrate processes, solicit participants, and interact fruitfully with the surrounding ecosystem. Contrary to what usually happens in value chain models, platforms make profits thanks to the expansion of the ecosystem in a circular and iterative progression. Hence, a shift from mass production to large-scale networks has been successfully achieved, thanks to the involvement of individual providers. As is well known, network effects increase proportionally with the growing number of participants on the same side of the market (direct effects) or the opposite side (indirect effects)³⁶⁴; that is why online platforms may support one side of the network³⁶⁵. There appear to be different pricing strategies for supply and demand and asymmetric or surge pricing³⁶⁶, not to mention the promotional stratagems offering discounts and bonuses for the launch of services³⁶⁷: increasing the ecosystem value is far more important than focusing on the lifetime value of individual

³⁶⁴ In the long run, the tendency to grow in size, combined with the necessity of replicating the only successful template, will lead to a “great platform war”. See SRNICEK N. (2016), *Platform capitalism*, op. cit., p. 93 ff.

³⁶⁵ Most platforms are aimed at quickly capturing network externalities and thereby becoming monopolies. “It holds true for most platforms that the more people participate, the more useful they become for all users. These so-called network effects foster the rise of monopolies, or at least oligopolies, because from the perspective of the users, it is advantageous to opt for just one search engine, one social network, one online retailer and one online auction house. The result is a strong agglomeration of power in the hands of a small number of corporations”. See SCHMIDT F. A. (2017), *Digital Labour Markets in the Platform Economy, Mapping the Political Challenges of Crowd Work and Gig Work*, Berlin, pp. 10-11. Moreover, platform may limit the number of workers with access to the market, increasing the number of assignments for each worker whose skills and reliability have been tested. See BERTOLINI S. (2003), *The microregulation of atypical jobs in Italy: The case of collaborators* in ZEYTIÑOGLU I. U. (Ed.), *Flexible Work Arrangements: Conceptualizations and International Experiences*, The Hague, The Netherlands, pp. 45-63.

³⁶⁶ It seems that platform will be soon able to discriminate on the basis of the individual’s willingness to pay. See EZRACHI A. and STUCKE M. E. (2015), *Online Platforms and the EU Digital Single Market, University of Tennessee Legal Studies Research Paper*, No. 283, p. 9 (arguing that “learning algorithms may use Big Data to categorise consumers in discrete groups, and charge each group different prices estimated by the likely reservation price”). For a civil law perspective on the impact that the “big data revolution” may have on traditional legal categories, see ZENO-ZENCOVICH V. and GIANNONE CODIGLIONE G. (2016), *Ten legal perspectives on the “Big Data revolution” in Concorrenza e Mercato*, 23, pp. 29-57.

³⁶⁷ This model turns customers into “ambassador” who are offered credits if they are able to successfully convince friends to join the platform on both sides. See SRNICEK N. (2016), *Platform capitalism*, op. cit., p. 46 (arguing that “[p]latforms often use cross-subsidisation: one arm of the firm reduces the price of a service or good (even providing it for free), but another arm raises prices in order to make up for these losses”).

customers. Conversely, the end service (or, in the European Commission's words, the underlying service – which is the very service purchased by the platform) is externalised to individual service providers. As a consequence, also marginal costs of online platforms are low. In short, according to business literature³⁶⁸, platforms perform three specific functions: (i) match workers with employers/clients, (ii) provide a common set of tools and widgets that enable the delivery of work in exchange for money, (iii) set governance rules based on which good actors are rewarded and poor behaviour is discouraged³⁶⁹.

The purpose of this section has been to contribute to the study of platform-mediated working arrangements by situating them within the context of changing forms of the modern firm. This is all the more necessary considering the fact that the blurring of boundaries of the employing entity is generally accompanied by an increase in uncertainty and ambiguity in employment relations³⁷⁰. Following the examination provided for by the previous paragraphs, platform firms might be understood as a new model of the firm. Such a non-standard firm styles itself as a network of market-based contracts, yet utilises both technological means and pure market power to organise, control and discipline workers. Hence it is neither a classic Coasean firm, defined by the exercise of command within its own capital boundaries, nor a “nexus of contracts” firm in which direct power is diffuse or non-existent.

What is still missing, however, is a reflection on the role of the economic and regulatory framework in providing basic tools for fostering the “platformisation” of the labour market observed over recent years. This topic will be scrutinised in the following section.

³⁶⁸ For a recent conceptualisation, see PARKER G., VAN ALSTYNE M. and CHOUDARY S. (2016), *Platform Revolution*, New York.

³⁶⁹ See CHOUDARY S. (2018), *Do platforms like Uber empower or exploit workers?*, retrieved from <http://platformed.info/do-platforms-like-uber-empower-or-exploit-workers/>.

³⁷⁰ LANG C., SCHÖMANN I. and CLAUWAERT S. (2013), *Atypical forms of employment contracts in times of crisis*, ETUI Working Paper, No. 03.

BEYOND THE MYTH: NON-STANDARD FORMS OF WORK AND THE LEGAL DETERMINANTS OF THE EMPLOYMENT RELATIONSHIP

TABLE OF CONTENTS: 1. The changing nature of innovation and its two main trajectories: the presumed end of work and the rise of non-standard forms of employment. – 1.1. The bot who cried «wolf». A critique of the mainstream resignation of a soon-to-be workless society. – 2. Back to the future. Re-casualisation, precariousness, vulnerability, insecurity: is non-standard the new normal? – 2.1. Self-employment as an escape from labour law's grasp. An attempt to dispel the conceptual fog surrounding the "borders" between categories. – 2.1.1. Quasi-subordinate and economically dependent self-employment. – 2.1.2. Bogus self-employment: the old mistake of seeing a "camouflage" as a crystallised category. – 3. From wishful thinking to reality. The reports of the crisis of the standard employment relationship have been greatly exaggerated. – 3.1. Against obsolescence: the enduring (and capacious) persistence of the standard employment relationship. A flexible approach to "subordination".

1. The changing nature of innovation and its two main trajectories: the presumed end of work and the rise of non-standard forms of employment.

This research is not – and certainly does not aim to be – a way of demonising gig-work, especially because platforms and digital matching firms are neither deleterious as such nor the only drivers creating demand for precarious jobs³⁷¹. Conversely, its primary purpose is to develop an unbiased understanding of the nature of contractual relationships between workers and web-based companies, by claiming that the latter should be treated like all other businesses with similar characteristics in comparative terms³⁷². With that in mind, the previous section has attempted to tie the threads of issues apparently distant from each other, yet so closely related: its central focus has been the trend towards digitally-facilitated outsourcing. By focusing on the linkage between the disarticulation of the employing entity and the "pulverisation" of work-related responsibilities, the route of several theories of the firm have been retraced.

³⁷¹ RODGERS L. (2016), *Labour Law, Vulnerability and the Regulation of Precarious Work*, Cheltenham, UK, p. 4 ff. (analysing the economic and social processes undermining the standard employment relationship and its institutions). See also in ROGERS B. (forthcoming), *Fissuring, Data-Driven Governance, and Platform Economy Labor Standards*, op. cit., p. 1 (arguing that "Silicon Valley did not invent worker misclassification, low wages, or mediocre working conditions" and detailing several "traditional" sources of precariousness in a set of sectors).

³⁷² See ALOISI A., DE STEFANO V. and SILBERMAN M. S. (2017, May 29), *A Manifesto to Reform the Gig Economy*, retrieved from <https://goo.gl/fX67S9> (advocating the implementation of existing rules safeguarding workers' rights in the context of digitally-mediated employment relationships).

By taking into account a set of distinctive patterns, hybrid forms adopted in the platform economy can be situated formally halfway between those in market system (i.e. relationships driving “the hardest possible bargain in the immediate exchange”) and those in network system (characterised by “indebtedness and reliance over the long haul”)³⁷³. On a closer inspection, these arrangements may also be strongly shaped within the bureaucratic structure of authority, in line with the hierarchical model³⁷⁴. At the end of this scrutiny, it has become clear that, while orthodox economic models of the firm, based on micro-analytic transactional equilibria³⁷⁵, are well placed to identify a general framework, they fail to adequately describe the quite confusing and entangled reality of platform firms. Accordingly, a fourth “breed” has been proposed to conceptualise the *Uber*-like firms’ ideal-typical business model: a system combining complementary features belonging to well-defined prototypes but in a different configuration.

It goes without saying that the analysis on business restructuring and workplace fissurisation explains only part of the total phenomenon of working in a system different from that of the large, hierarchically structured company³⁷⁶. Consequently, there is a need to further deepen the investigation on what has been described as the “normative basis” of these different forms of economic organisations. In the light of the above, this chapter is organised as follows. Looking at the concrete modes of organisation, consideration will be given to alternative working patterns (self-employment, whether authentic or bogus, temporary hiring, contract work, and on-call labour, to name but a few). To put it briefly, this section will integrate preceding insights regarding the evolution of platform business models, by focusing on a more theoretical issue pertaining to the main types of employment and their discernible legal features. In particular, the fundamental legal determinants of the standard employment relationship will be reviewed, in an attempt to offer an appropriate classification methodology for those situations qualifying to be collected under the scope of labour law. Admittedly, the ultimate aim is to prove the resilient nature of the standard employment relationship.

³⁷³ See POWELL W. W. (1990), *Neither market nor hierarchy: network form of organization*, op. cit., p. 302.

³⁷⁴ For a more detailed analysis of these arrangements, see Part 3.

³⁷⁵ See DIBADJ R. (2004), *Reconceiving the Firm* in *Cardozo L. Rev.*, 26(4), pp. 1459-1534 (maintaining that “there are likely several reasons for this myopia in conventional economic thinking”).

³⁷⁶ BERINS COLLIER R., DUBAL V. B. and CARTER C. (2017), *Labor Platforms and Gig Work: The Failure to Regulate*, *IRLE Working Paper*, No. 106, p. 3.

As a preliminary point, turning now to the mainstream of the debate, it is true that two are the principal implications of the advent of the “algorithmic intelligence” and the convergence of various technological advancements. On the one hand, an increasing automation of jobs is witnessed, leading to a potential human labour substitution. If, indeed, sophisticated machines continue to strengthen their capabilities beyond thinkable levels (including the ability to “learn”, by recognising patterns and formulating predictions), a question to ask would be whether they will soon reduce employment and, consequently, supplant legions of humans³⁷⁷. On the other, it is argued that the changes in the job structure (i.e. a shift towards non-employment arrangements due to the proliferation of sector-specific labour platforms) and the uncertainty they cast upon industrial relations are likely to have a significant precarisation and re-commodification effect on the already depressed labour market³⁷⁸, by impairing power relations drastically and disrupting the social fabric³⁷⁹.

It is often argued that the two arguments are inextricably linked, and both end up offering justifications to the deterioration in the quality of jobs, “understood from a multidimensional perspective comprising not only earning but other conditions of work and employment”³⁸⁰, and in its general perception³⁸¹. In addition, the most

³⁷⁷ In order to be able to answer the enquiry, one must combine theoretical methodologies with evidence provided by predictions and projections from labour economists. As it will be demonstrated, this alarm is overestimated. See AUTOR D. H. (2016, August 15), *The Shifts – Great and Small – in Workplace Automation*, retrieved from <https://mitsmr.com/2blCUi7>. See also PETROPOULOS G. (2017, April 27), *Do we understand the impact of artificial intelligence on employment?*, retrieved from <https://goo.gl/Mui4Hd> (presenting a summary of the different positions on the topic).

³⁷⁸ APPAY B. (2010), *‘Precarization’ and Flexibility in the Labour Process: A Question of Legitimacy and a Major Challenge for Democracy* in THORNLEY C., JEFFERYS S. and APPAY B. (Eds.), *Globalization and Precarious Forms of Production and Employment*, Cheltenham, UK, p. 34 (discussing the etymology of the word and describing precarity as an outcome of flexibilisation).

³⁷⁹ About a third of Europeans are now in some form of atypical employment. According to the European Commission, “[t]oday, almost 40% of people employed are either in an atypical employment situation – meaning that they are not working under a full-time, open-ended contract – or self-employed”.

³⁸⁰ ANTÓN J.-I., FERNÁNDEZ-MACÍAS E. and MUÑOZ DE BUSTILLO R. (2012), *Identifying bad jobs across Europe* in CARRÉ F., FINDLAY P., TILLY C. and WARHURST C. (Eds.), *Are bad jobs inevitable?: Trends, determinants and responses to job quality in the twenty-first century*, Basingstoke, pp. 25-44. See also EICHHORST W., WOZNY F. and MÄHÖNEN E. (2015), *What is a Good Job?*, IZA DP, No. 9461.

³⁸¹ Concomitantly, and further to what was said before on the need to “normalise” the academic discourse regarding platform labour, it is vital to admit that this kind of concerns about the uncertain future of employment is not unique to the platform economy. See TREU T. (1992), *Labour flexibility in Europe* in *Int’l. Lab. Rev.*, 131(4-5), p. 502 (explaining how inherently precarious forms of work such as temporary contracts for young workers have received public subsidies and “in some cases ha[ve] been

likely benefit of this argument is to help unscrupulous managers defend workforce reductions and pay cuts³⁸². Despite the lack of real peer-reviewed evidence that technological progress is reducing overall employment, the prevalent narrative on this matter can be broadly summarised as follows: if automation is going to render humans superfluous, the only way to keep them at work is to cut labour-related costs as a primary competitive strategy, thus making humans convenient in comparison with intelligent robots and cognitive machines.

In line with the above considerations, the exploration will essentially follow two parallel paths. The first one deals with the increasing role of mechanisation, automation and process improvement in the industrial and service sectors that presents new legal and social issues, concerning both labour-displacing risk and the complementarity between human work and work performed by “non-human agents”³⁸³. In this regard, it is stressed that the simplified vision according to which the age of work has come to an end needs to be challenged critically as, on other occasions, predictions as such have proved to be wrong. This means that human labour will survive, but it may be *worse* than before (especially in qualitative terms). In this vein, the myth of a soon-to-be “workless society” will be challenged, responding that the human manpower still maintains a comparative advantage over artificial intelligence and robots in many areas, thus it is often irreplaceable – while the depreciation of tasks and the degradation of work would deserve to be examined more in depth³⁸⁴. If “technology eliminates jobs, not work”³⁸⁵, then it is important to

made more attractive to employers by reductions in minimum standards of employment, particularly wage levels”).

³⁸² PASQUALE F. (2017), “A Silicon Valley Catechism”. *Review of Machine, Platform, Crowd: Harnessing Our Digital Future*, by Andrew McAfee and Erik Brynjolfsson in *Issues in Science and Technology*, 34(1).

³⁸³ BRYNJOLFSSON E. and MCAFEE A. (2015, August 12), *Will Humans Go the Way of Horses?*, retrieved from <http://fam.ag/1OfGFFX>. See also DEPILLIS L. (2015, February 3), *New tech companies say freelancing is the future of work. But there's a downside for workers*, retrieved from <http://wapo.st/1zfachK>. See also MÉDA D. (2016), *The future of work: The meaning and value of work in Europe*, ILO Research Paper, No. 18, p. 13 (arguing that “simply replacing humans by robots is not the only solution”, on the contrary, “cooperation and ‘cobotization’ that permit a considerable alleviation of harsh working conditions and organization could lead to complementary collaboration between humans and robots”).

³⁸⁴ A similar argument is developed in SPENCER D. A. (2018), *Fear and hope in an age of mass automation: debating the future of work* in *New Technology, Work and Employment*, 33(1), p. 7 (imagining a future where “workers will keep being hired but in jobs that have scarcely any intrinsic value”).

³⁸⁵ US DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE (1966), *Report of the National Commission on Technology, Automation, and Economic Progress*, Washington, p. 9, quoted in AUTOR D. H. (2015), *Why are there still so many jobs? The history and future of workplace automation* in *The Journal of Economic Perspectives*, 29(3), p. 4.

focus on the contents and conditions of the latter, with the aim of avoiding the potential dawn of “a low-paid workforce with crappy jobs”³⁸⁶. In fact, the new world of work might bring increasingly lower earnings, reduced social security coverage and diminished overall well-being.

Intimately linked to the first one, the second trajectory deals with the unstoppable diffusion of non-standard forms of work and, more specifically, the trend towards a process of de-typification of the employment relationship in the attempt of surmounting the alleged rigidities of some contractual schemes³⁸⁷. On a closer inspection, the technology-driven organisation is changing how work is structured: a wide variety of “non-employment work arrangements” have replaced full-time contracts, which was the predominant way of earning a living in the “Industrial Century”³⁸⁸. Yet, while the contract of employment has been made less stringent so that it is possible to respond to external circumstances and internal needs more effectively³⁸⁹, it seems to be largely avoided by some businesses, continuously looking for further ways to economise³⁹⁰.

³⁸⁶ BROOKS C. and MOODY K. (2016, July 26), *Interview: Busting the Myths of a Workerless Future*, retrieved from <https://goo.gl/Fk8dvf>. It is, in fact, well known that only job quality can contribute to economic competitiveness, social cohesion and personal well-being. See, for instance, CARRÉ F., FINDLAY P., TILLY C. and WARHURST C. (2012), *Job quality: Scenarios, analysis and interventions* in ID., *Are bad jobs inevitable?: Trends, determinants and responses to job quality in the twenty-first century*, Basingstoke, pp. 1-22 (explaining how the promise of a “new economy” generating good jobs while eradicating bad jobs through technological substitution has not been kept).

³⁸⁷ GUNDERSON M. (2013), *Changes in the Labor Market and the Nature of Employment in Western Countries* in STONE K. V. W. and ARTHURS H. (Eds.), *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, New York, p. 36 (arguing that “the weight of regulations [...] are especially costly and may lack strategic fit in the new world of work”).

³⁸⁸ The expression is borrowed from CHANDLER A. D. (2005), *Shaping the Industrial Century: The Remarkable Story of the Evolution of the Modern Chemical and Pharmaceutical Industries*, Cambridge, MA.

³⁸⁹ LO FARO A. (2017), *Core and Contingent Work: a Theoretical Framework* in ALES E., DEINERT O. and KENNER J. (Eds.), *Core and contingent work in the European Union: a comparative analysis*, Oxford, UK, p. 8 (pointing out that the SER has gone through “the major processes of downgrading workers’ rights, both in terms of reducing dismissals’ protection, and in terms of limiting collective bargaining prerogatives and/or extending concession bargaining at plant level”).

³⁹⁰ It must be said that the requests introduce greater flexibility have been accommodated somehow by the regulator in many countries, with encouragement from the European Commission. In the past, there was an established consensus in the empirical literature around the idea that employment protection legislation (EPL) has important effects on contractual choices. In cross-country analyses, some evidence of a positive relationship between the scope and degree of employment protection and the incidence of alternative arrangements has been found. See HEYES J. and LEWIS P. (2014), *Employment protection under fire: Labour market deregulation and employment in the European Union* in *Economic and Industrial Democracy*, 35(4), pp. 587–607. See also ROMÁN C., CONGREGADO E. and MILLÁN J. M. (2011), *Dependent self-employment as a way to evade employment protection legislation* in *Small*

What is particularly worrying is the confluence of these two forces whose consequences might be mutually reinforcing, thus undermining the traditional foundation of employment law. Therefore, it must be argued that platform-mediated arrangements are particularly keen sites for investigating how classical notions can adapt to these dynamics³⁹¹. That is why this section will address the theoretical distinction between employment and self-employment, by taking a cautious look at the traditional debate on legal determinants of the notion of the employee and rehearsing its legal developments. The principal purpose is to demonstrate the resilient nature of the employment relationship, recently “flexibilised” in light of the assumption that mandatory protections are a (too heavy) burden on business. It will be showed how its replacement by other non-standard arrangements is not an inescapable natural fact, as pointed out by BAVARO³⁹². Put differently, labour law and its tools shall continue to fulfil their role as “innovation facilitators”³⁹³, enabling social institutions to adjust and survive to even chaotic revolutions. The challenge,

Business Economics, 37(3), pp. 363-392 (supplying new empirical evidence proving that workers in non-agricultural sectors are outsourced in order to evade the more onerous elements of the EPL). For a broader picture, see CINGANO F., LEONARDI M., MESSINA J. and PICA G. (2010), *The effects of employment protection legislation and financial market imperfections on investment: evidence from a firm-level panel of EU countries* in *Economic Policy*, 25(61), pp. 117-163. Many studies have successfully debunked these assumptions. For a farsighted review, see DEAKIN S. and WILKINSON F. (1999), *Il diritto del lavoro e la teoria economica: una rivisitazione* in *Giorn. dir. lav. rel. ind.*, p. 587 ff. Most recently, it has been showed how that EPL insulates workers in the middle of the income distribution from the “routinisation” associated with technological change. See MARTELLI A. (2017), *Essays on the Political Economy of Employment Polarization: Global Forces and Domestic Institutions*, LSE Working Papers (finding evidence that EPL contains the wage effects associated with job polarisation). For a discussion on the feasibility of the translation of institutional data into numerical indicators, see LIEBMAN S. (2010), *Evaluate Labour Law* in CASALE G. and PERULLI A. (Eds.), *Compliance with labour legislation: its efficacy and efficiency*, ILO Working Document, No. 6, p. 17.

³⁹¹ CEFKIN M., ANYA O. and MOORE R. (2014), *A perfect storm? Reimagining work in the era of the end of the job*, op. cit., p. 4. See also ZATZ N. (2016), *Does Work Law have a future if the Labor Market does not?* in *Chicago-Kent Law Review*, 91, pp. 1081-1114. Other authors argue that “the scenario of the technological revolution promoting post-wage arrangements appears particularly well suited therefore to dismantling the systems of labour and employment protection still prevalent in Europe”, see MÉDA D. (2016), *The future of work: The meaning and value of work in Europe*, op. cit., p. 12.

³⁹² BAVARO V. (2017), *Questioni in Diritto su Lavoro Digitale, Tempo e Libertà*, paper presented at “Impresa, lavoro e non lavoro nell’economia digitale”, Brescia, 12-13 October 2017.

³⁹³ DÄUBLER W. (2004), *Erleichterung von Innovationen – eine Aufgabe des Arbeitsrechts?* in *Betriebs-Berater*, p. 2521 ff., quoted in NOGLER L. (2015), *La subordinazione nel d.lgs. n. 81 del 2015: alla ricerca dell’autorità del punto di vista giuridico*, WP C.S.D.L.E. “Massimo D’Antona”.IT, 267, p. 23. See GOBBLE M. M. (2015), *Regulating innovation in the new economy* in *Research-Technology Management*, 58(2), p. 62 (disputing the argument that innovation should be “permissionless”).

indeed, is for the regulatory system to respond to transformations effectively thus achieving its protective aims and delivering legal certainty for trade.

There is a close relationship between vertical disintegration, personal outsourcing, employment externalisation, labour protection and precarious work³⁹⁴: this is what the present section intends to examine thoroughly. In a nutshell, the questions to be addressed are: what methods and means are being used to reach organisational efficiency and accommodate changes in technology? Are they appropriate? Needless to say, results of this analysis regarding platform labour, just one of the most visible (or extreme) example of a much broader trend, may be extended to other contingent labour markets³⁹⁵. At the same time, attempts, results and misadventures occurred in comparable legal areas should be drawn up and used as a reference parameter for future decision-making in this field.

1.1. The bot who cried «wolf». A critique of the mainstream resignation of a soon-to-be workless society.

The end of work is coming and, apparently, workers are in a bad spot³⁹⁶. As a source of apprehension and even discontent, this sort of conventional wisdom around the threat that information technology and its “winner-take-most” nature pose to employment has ample historical precedent³⁹⁷. But holding that the age of

³⁹⁴ FUDGE J. (2006), *The legal boundaries of the employer, precarious workers, and labour protection*, op. cit., p. 297.

³⁹⁵ See, generally, MOORE P. V. (2017), *The Quantified Self in Precarity: Work, Technology and What Counts*, Abingdon, UK. See also DONOVAN S. A., BRADLEY D. H. and SHIMABUKURO J. O. (2016), *What Does the Gig Economy Mean for Workers?*, Congressional Research Service, Washington, DC.

³⁹⁶ “The Bot Who Cried Wolf” is the title of a popular comic issue of “Futurama”, written by Ian Boothby and released on March 28, 2012 in the U.S. The expression is a reference to the Aesop’s fable “The Boy Who Cried Wolf”. Derived from that fable, the idiom “to cry wolf” means “to give a false alarm”. A bot is a software application running automated tasks (scripts) over the Internet.

³⁹⁷ See AUTOR D. H., DORN D., KATZ L. F., PATTERSON C. and VAN REENEN J. (2017), *The Fall of the Labor Share and the Rise of Superstar Firms*, NBER Working Paper, No. 23396 (analysing sectors where a small number of firms gain a very large share of the market). It has been demonstrated that the rise of “superstar firms” and decline in the labour share also appear to be related to changes in the boundaries of businesses as a result of managerial practices such as web-enabled outsourcing. This trend concerns an ample range of activities previously fulfilled in-house. Consequently, this fissuring of the workplace can directly reduce the labour share by saving on the wage premia (firm effects) typically paid by large high-wage employers to ordinary workers and by reducing the bargaining power of both in-house and outsourced workers in occupations subject to outsourcing threats and increased labor market competition. See also GOLDSCHMIDT D. and SCHMIEDER J. F. (2017), *The rise of domestic outsourcing and the evolution of the German wage structure in The Quarterly Journal of Economics*, 132(3), pp. 1165-1217.

work has come to an end or, alternatively, will shortly come to an end requires evidence that do not seem to have been provided to substantiate the claim. In the meantime, there is much confusion about how to frame the issue from a legal standpoint. Consequently, the purpose of this paragraph is to reflect critically on the line of studies issuing warnings about mass technological unemployment³⁹⁸. Therefore, by drawing up broad-brush summaries of the most prominent science, philosophy, business as well as economics literature, this short digression will be developed in line with the main argument that the panic regarding the worrisome magnitude of technological displacement is being used as an excuse to force workers increasingly to accept just any bad job (poorly paid and undervalued), as a measure of survival³⁹⁹.

In this respect, it is easy to show how the “workless-society” narrative seems to have prevailed, thanks to lots of evocative headlines and “falsely” alarmist proclamations⁴⁰⁰. What is worse, fuelled by the rhetoric of relentless technological

³⁹⁸ Developments in artificial intelligence, robotics, the Internet of Things (IoT) and data analytics may dispute the nature of the link between technology and employment. See BRYNJOLFSSON E. and MCAFEE A. (2011), *Race against the machine*, Lexington, MA, p. 36. There is widespread and spreading anxiety because of the “substitution effect”, whereby jobs once done by people are taken over by machines. In this case, the situation is further complicated by the fact that more versatile robots might “substitute for labour on a scale never seen before”. See *Automation angst* (2015, August 15), retrieved from <http://econ.st/1TQxcbM>.

³⁹⁹ This is how sociologists have termed them. See GIASANTI L. (2008), *Lavoro subordinato non standard: tra regolazione giuridica e tutela sociale*, Roma, p. 35. There has been a general sense that “working under non-standard employment contracts is better than not working at all”. See generally MANGAN J. (2000), *Workers Without Traditional Employment*, Cheltenham, UK. In analysing job quality, the OECD focused on three main factors: earnings quality, labour market security, and quality of the working environment. In turn, the latter is assessed taking into account the nature and intensity of work, the organisation of work and the working atmosphere. See OECD (2014), *OECD Employment Outlook 2014*, Paris. Eurofound lists four main dimensions of job quality, namely intrinsic job quality, employment quality, workplace risks, working time and work–life balance. See EUROFOUND (2013), *Employment polarisation and job quality in the crisis: European Jobs Monitor 2013*, Dublin. For a detailed overview on the Job Quality Index, a multidimensional measure of the quality of jobs broken down by six dimensions, namely “(1) wages; (2) forms of employment and job security; (3) working time and work-life balance; (4) working conditions; (5) skills and career development; and (6) collective interest representation”, see PIASNA A. (2017), ‘Bad jobs’ recovery? *European Job Quality Index 2005-2015*, ETUI Working Paper, No. 06.

⁴⁰⁰ ATKINSON R. D. and WU J. (2017), *False Alarmism: Technological Disruption and the US Labor Market, 1850-2015*, Information Technology and Innovation Foundation. See also MCGAUGHEY E. (2018), *Will Robots Automate Your Job Away? Full Employment, Basic Income, and Economic Democracy*, Centre for Business Research, University of Cambridge, Working Paper No. 496. Available at SSRN: <https://ssrn.com/abstract=3044448> (arguing that “[l]ike saying there is an ‘end of history’, or ‘skateboards might fly’, this ‘technological forecasting’ has all the shiny appeal, but also the intellectual integrity, of a crystal ball”).

obsolescence, a “post-workerist culture” has gained wide recognition⁴⁰¹, proclaiming that breakthroughs in robotics and artificial intelligence will make it possible to supplant various jobs in the name of efficiency. At least on this issue most scholars seem to have reached some sort of agreement: empirical evidence suggests that the global economy is on the verge of a radical leap forward in the scale, speed and force of digitalisation⁴⁰². Unlike in the past, when individuals had more time to adjust their skills and careers⁴⁰³, this time the impact of automation seems to be broader-based, and the pace with which it spreads more rapid: capabilities of machines continue to expand exponentially affecting every industry simultaneously. These characteristics of the shift, along with the current persisting global economic turmoil, might entail unprecedented effects that are difficult to predict today⁴⁰⁴. Yet, the occupational composition of the workforce has changed very slowly over time, thus supporting the hypothesis that if the marginal hourly cost of an industrial machine is higher than the hourly cost of a human worker, then it makes no sense economically to automate.

To put the matter bluntly, are the robots really just around the corner? And is human labour in retreat⁴⁰⁵? Automation and digitalisation, the culprits, have been rapidly identified and equally fast sentenced; yet there should be a word of caution. There have been periodic warnings in the last two centuries that automation and new technology would wipe out large numbers of middle-class jobs and put workers at a permanent disadvantage, at least since Luddites smashed mechanised looms in

⁴⁰¹ THOMPSON D. (2015, July/August), *A world without work*, retrieved from <http://theatlntc/2qsVCM3>. For a complete picture, see LAGRANDEUR K. and HUGHES J. J. (Eds.) (2017), *Surviving the Machine Age: Intelligent Technology and the Transformation of Human Work*, London.

⁴⁰² OECD (2017), *Going Digital: Making the Transformation Work for Growth and Well-Being, Report for the Meeting of the OECD Council at Ministerial Level Paris, 7-8 June 2017*, Paris (pointing out that “the pace of the digital transformation has quickened in recent years”: for instance, Internet access has grown from 4% to 40% of the world’s population in the last 20 years).

⁴⁰³ COMIN D. and HOBIIJA B. (2010), *An exploration of technology diffusion in The American Economic Review*, 100(5), pp. 2031-2059.

⁴⁰⁴ In previous waves of automation, workers had the time of moving from displaced routine jobs in one industry to routine jobs in another. See also FORD M. (2015), *Rise of the Robots. Technology and the Threat of a Jobless Future*, New York (claiming that not every industry was affected two centuries ago, but every industry uses powerful IT means today).

⁴⁰⁵ WIECKI J. (2017, September), *Robopocalypse not. Everyone think that automation will take away our jobs. The evidence disagrees*, retrieved from <https://www.wired.com/2017/08/robots-will-not-take-your-job/>. See also ARONOWITZ S. and DIFAZIO W. (1994), *The jobless future: Sci-Tech and the Dogma of Work*, Minneapolis, MN.

the 19th century, after marching on a textile mill in Huddersfield, England⁴⁰⁶. There appear to be large-scale revival of such concerns⁴⁰⁷. As is the case today, optimists have highlighted past examples of how technology has improved the human condition throughout factories and warehouses as a positive externality, while pessimists have fretted about the devastating impact of new inventions on the very value of human labour. In fact, social implications resulting from the hypothesis of “a world without work” are obvious and sensitive: the sanctity and prominence of work, often referred to as what a person “does”, along with the sense of purpose and identity it embodies⁴⁰⁸, might be lost. Especially in the midst of an uncertain period like this one, it is of utmost importance to look backwards to see forward, provided that some argue that history will repeat itself.

Often misinterpreting his message, many reports on the subject reference the economist KEYNES, who introduced the concept of “unemployment due to our discovery of means of economising the use of labour outrunning the pace at which we can find new uses for labour”⁴⁰⁹. Back in 1930, the economist forecasted a future where, in countries like Great Britain or the United States, technology and machines could lead to a 15-hour working week. People would finally be liberated from the need to work and have a lot of leisure thanks to labour-saving machines. But history conveys that this never came true. Several years later, RIFKIN published a best-selling book claiming that automation and technological progress in agriculture would have inevitably determined the destruction of work thus causing soaring

⁴⁰⁶ For a detailed and unconventional analysis about the Luddite movement, see also DEAKIN S. (2015, November 3), *Luddism in the Age of Uber*, retrieved from <https://www.socialeurope.eu/luddism-in-the-age-of-uber> (explaining how, as a reaction to employers breaching the rules for the protection of the trades, “Luddism had a more positive and longer-lasting legacy”. Indeed, “the employment relationship which emerged from the collapse of the guilds became the foundation for a new social compact” based on collective bargaining and trade unions). For an historical review of this concern, see WOIROL G. R. (1996), *The Technological Unemployment and Structural Unemployment Debates*, Westport, CT.

⁴⁰⁷ See BOSTROM N. (2014), *Superintelligence: Paths, Dangers, Strategies*, Oxford, UK; STONE P. et al. (2016), *Artificial Intelligence and Life in 2030. One Hundred Year Study on Artificial Intelligence: Report of the 2015-2016 Study Panel*.

⁴⁰⁸ ENGBLOM S. (2003), *Self-employment and the Personal Scope of Labour Law Comparative Lessons from France, Italy, Sweden, the United Kingdom and the United States*, Doctoral Dissertation, European University Institute, Florence. See also DOHERTY M. (2009), *When the working day is through: the end of work as identity?* in *Work, employment and society*, 23(1), pp. 84-101.

⁴⁰⁹ KEYNES J. M. (1930), *Economic possibilities for our grandchildren* in *Essays in Persuasion*, pp. 358-373. See also RICARDO D. (1921), *On the Principles of Political Economy and Taxation*, London.

unemployment⁴¹⁰. Moreover, the labour economist predicted a polarisation between a selected group of high-skilled workers and a mounting number of permanently displaced workers⁴¹¹, with limited professional, income and territorial opportunities in an increasingly globalised and digitised world⁴¹².

The reopening of the debate has been freshly stimulated by the publication of the highly acclaimed working paper “*The future of employment: How susceptible are jobs to computerization?*” quantifying prospective human redundancy. As FREY and OSBORNE put it, 47% of total US employment is vulnerable to automation “relatively soon, perhaps over the next decade or two”⁴¹³. More than seven hundred occupations have been studied, by assessing the likelihood that a given occupation will become affected and eventually replaced by advanced machinery, with jobs in logistics, production and administrative support particularly exposed. The “subjective” model assuming the complete automation of those jobs entailing enough repetitive or numerical tasks went viral. The empirical exercise has been repeated with many adjustments and country or sector-specific adaptations⁴¹⁴. Echoing Frey and

⁴¹⁰ RIFKIN J. (1994), *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era*, New York.

⁴¹¹ This has resulted in a “bifurcated labour market”. The middle class has been the most affected by the impact of “polarisation” of the workforce in numerous industrialised countries for the last several decades. See GOOS M., MANNING A. and SALOMONS A. (2014), *Explaining job polarization: Routine-biased technological change and offshoring in American Economic Review*, 104(8), pp. 2509-2526.

⁴¹² Conceptual exercises aside, more recently, a new research based on real-world data got a lot of attention for its claim that “automatically controlled, reprogrammable, and multipurpose machines” have been responsible for the loss of up to 670,000 manufacturing jobs in the US labour market between 1990 and 2007. ACEMOGLU D. and RESTREPO P. (2017), *Robots and Jobs: Evidence from US labor markets*, op. cit. Moreover, it has been proven that the concentration of industrial robots in American local job markets was directly related to a decline in jobs and in pay. See, for the Italian context, ALLEVA G. (2017), *L’impatto sul mercato del lavoro della quarta rivoluzione industriale*, Communication of the President of The National Institute for Statistics (Istat), retrieved from <https://goo.gl/pbSmtD>.

⁴¹³ The analysis point out that a bunch of sectors, such as education and health, are at small risk of being automated. See FREY C. B. and OSBORNE M. A. (2017), *The future of employment: how susceptible are jobs to computerisation?* in *Technological Forecasting and Social Change*, 114, pp. 254-280 (despite its over 1700 citations on Google Scholar by January 2018, the study has been released in 2013 and only recently accepted into a peer reviewed journal). See also ID. (2015), *Technology at work: the future of innovation and employment*, Citi GPS Report.

⁴¹⁴ Since 2013, many other authors have dealt with this theme arriving at similar results. See, among others, BENZELL S. G., KOTLIKOFF L. J., LAGARDA G. and SACHS J. D. (2015), *Robots are us: Some economics of human replacement*, NBER Working Paper, No. 20941 (concluding that, unless appropriate fiscal policy redistributing from winners to losers are delivered, “smart machines can mean long-term misery for all”). See also PAJARINEN M. and ROUVINEN P. (2014), *Computerization threatens one third of Finnish employment* in *ETLA Brief*, 22(13) (estimating that the share of jobs susceptible to automation is around 35% in Finland); BRZESKI C. and BURK I. (2015), *Die Roboter kommen, Folgen der Automatisierung*

Osborne's findings, the same figure rises to 54%, based on a European application⁴¹⁵, and 57% when the same method has been used to calculate automation risk in OECD countries⁴¹⁶. Such assessments are therefore afflicted by the obvious limits of linear extrapolation.

Needless to say, pessimistic predictions have not corresponded to actual developments. Perhaps unwillingly, the authors overestimated how quickly and profoundly machines will take over. In fact, they predict that artificial intelligences will be increasingly capable of executing even non-routine cognitive activities such as financial compliance, medical diagnostics or legal writing. Over all these years, the methodology used by Frey and Osborne has been strongly criticised for being too simplistic, in fact – according to many commentators – occupations considered as high-risk often still contain a substantial share of tasks that are almost impossible (or even too costly) to automate. Therefore, taking into account the variety of workers' tasks within even the same occupation⁴¹⁷, instead of the average task content of all jobs in each occupation, several authors have re-evaluated the estimate claiming that, on average across the 21 OECD countries, only approximately 9% of jobs will face

für den deutschen Arbeitsmarkt, INGDiBa Economic Research (estimating the risk of job automation to be as high as 59% in Germany). In Italy, as highlighted by the most recent study, 14.9% (3.2 million) of total number of employed might lose their job in the next fifteen years. See THE EUROPEAN HOUSE AMBROSETTI (2017), *Tecnologia e Lavoro: Governare il Cambiamento*, Milano (the estimate is calculated by combining data from Frey et Osborne and the National Institute for Statistics (Istat)). The consultancy firm Deloitte has estimated that as many as 11 million jobs could be automated within the next decade, while the World Economic Forum predicts more than seven million jobs in the world's largest economies will be threatened in the next few years. See DELOITTE (2015), *From Brawn to Brains: The impact of technology on jobs*. More recently, a study looking at the employment impacts of Uber in the US found that "total employment expanded in cities where the Uber platform was adopted", see BERGER T., CHEN C. and FREY C. B. (2017), *Drivers of disruption? Estimating the Uber effect*, Working Paper, Oxford Martin School, University of Oxford.

⁴¹⁵ BOWLES J. (2014, July 24), *Chart of the Week: 54% of EU jobs at risk of computerisation*, retrieved from <https://goo.gl/hqwkr4>.

⁴¹⁶ See also THE WORLD BANK (2016), *World Development Report 2016: Digital Dividends*, Washington, DC, p. 107 (also arguing that, "as technology improves and wages rise, some of the jobs typically offshored, such as call center jobs, could be automated").

⁴¹⁷ For instance, "the Oxford study reported that clerks in bookkeeping, accounting and auditing face an automation risk of 98%" but a following survey data on what people in those professions actually do founds that "76% of them had jobs that required group work or face-to-face interaction". See ANTHES E. (2017), *The shape of work to come: Three ways that the digital revolution is reshaping workforces around the world in Nature*, 550, pp. 316-319.

automatibility risk⁴¹⁸, while 44% of employed people will soon experience a radical change in their tasks.

The truth is that making predictions is not an exact science. Moreover, in order to contrast the generalisation of entire sectors or segments, recent scholarship focused on single task rather than on whole occupation (it is the so-called “occupation-based approach”⁴¹⁹), when assessing the risk of automation. These alternative studies are rooted on the approach taken by AUTOR and his co-authors, showing that occupations are far more multifaceted than has been assumed. Occupations consist of “performing a bundle of tasks”⁴²⁰, not all of which may be at risk of substitutability of humans by machines. An ample portion of work is still hard to mechanise, as it involves tasks requiring “a mixture of skills” including abstraction, imaginative capacity, critical thinking, charismatic acumen, analytical judgment, common sense but also physical dexterity and craftsmanship⁴²¹. Humans can perform many valuable activities that will remain beyond the reach of technology or specialise in non-automatable niches within their profession, thus taking out a sort of insurance

⁴¹⁸ A task-based approach dramatically reduces the (over)estimated impact of automation. See ARNTZ M., GREGORY T. and ZIERAHN U. (2016), *The risk of automation for jobs in OECD countries: A comparative analysis*, op. cit. Other authors have focused on work activities rather than whole occupations, see MANYIKA J., CHUI M., MIREMADI M., BUGHIN J., GEORGE K., WILLMOTT P. and DEWHURST M. (2017), *A future that works: Automation, employment, and productivity*, McKinsey Global Institute, New York (showing that less than 5 per cent of occupations can be fully automated based on existing technologies, while 49 per cent of the activities have the potential to be automated). See also PAJARINEN M. and ROUVINEN P. (2014), *Computerization threatens one third of Finnish employment*, op. cit. (arguing that “the estimated impacts do not necessarily imply future mass unemployment, since the approach employed does not take into account changes in the task content within occupations or the evolution in the mix of occupations”).

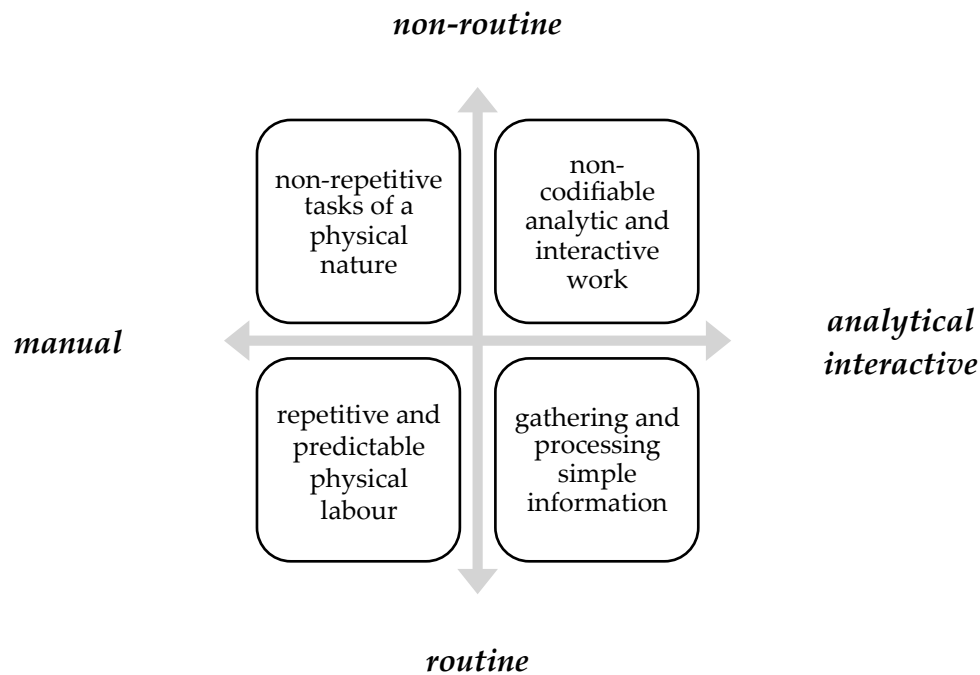
⁴¹⁹ AUTOR D. H. (2013), *The “task approach” to labor markets: an overview*, NBER Working Paper, No. 18711 (drawing a distinction between skills and tasks and explaining how “[a]t the intersection of these two forces – technological feasibility and economic cost – lies the principle of comparative advantage”, defined as the allocation of the duty to perform a task to the factor with the lowest economic cost).

⁴²⁰ See ARNTZ M., GREGORY T. and ZIERAHN U. (2016), *The risk of automation for jobs in OECD countries: A comparative analysis*, op. cit. According to the authors, the U.S.A. are in the midst of a “routine-biased technological change”, see AUTOR D. H., LEVY F. and MURNANE R. J. (2003), *The skill content of recent technological change: An empirical exploration in The Quarterly Journal of Economics*, 118(4), pp. 1279-1333. See also WORLD TRADE ORGANIZATION (2017), *World Trade Report: Trade, technology and jobs*, Geneva, Switzerland.

⁴²¹ They draw upon “tacit” knowledge that cannot be codified or performed by robots, a concept first introduced in the 1950s by philosopher Michael Polanyi. POLANYI M. (2009), *The tacit dimension*, Chicago, IL. See also KNIGHT W. (2016), *AI’s unspoken problem in MIT Technology Review*, 19(5), pp. 28-37.

against displacement⁴²². Neglecting these possibilities leads to an overestimation of the overall risk of automation in the economy⁴²³.

Figure 1: A stylised representation of the task-based approach to illustrate the effects of ICT-driven technological innovation on the demand for jobs⁴²⁴



⁴²² Thus, in a sense, humans have the resources to adjust to computerisation or even augment their cognitive, collaborative and physical capabilities, while substituting certain labour activities. See SPITZ-OENER A. (2006), *Technical Change, Job Tasks, and Rising Educational Demands: Looking outside the Wage Structure* in *Journal of Labor Economics*, 24(2), pp. 235-270.

⁴²³ ARNTZ M., GREGORY T. and ZIERAHN U. (2017), *Revisiting the risk of automation* in *Economics Letters*, 159(C), pp. 157-160 (finding that “the automation potential is lower in jobs that require programming, presenting, training or influencing others”).

⁴²⁴ Figure 1. Author’s own elaboration. This two-by-two matrix, with routine versus non-routine tasks on one axis, and manual versus cognitive or, even better, analytical and interactive tasks on the other is borrowed by economic studies conducted by David H. Autor and his co-authors. See, for instance, AUTOR D. H. and DORN D. (2013), *The growth of low-skill service jobs and the polarization of the US labour market* in *American Economic Review*, 103(5), pp. 1553-1597 (presenting the hypothesis that computers and advanced machinery can more easily replace workers employed in jobs that are very intensive in routine tasks). Please note that the specific examples listed are purely illustrative. See also LOI M. (2015), *Technological unemployment and human disenchantment* in *Ethics and Information Technology*, 17(3), pp. 201-210. Moreover, Figure 1 could be adapted in such a way that it provides for an important resource for carrying out further research on the relationship between the nature of a job and the risk of taskification or platformisation (that is the substitution of a standard employment relationship with a non-standard template).

This view has gained consensus in mainstream economics. Conversely, the catastrophist conviction described above has been dubbed as the “lump of labour fallacy”, a sort of misinterpretation, provided that there is no static lump of labour, as the amount of work available can increase without quantitative limits or rather workers can be soaked up by different industries, and specialise in new and complementary tasks⁴²⁵.

This may suggest that the equilibrium as well as the impacts are theoretically ambiguous⁴²⁶. Major technological innovations directly substitute workers when holding output and prices constant resulting in substantial job losses in the short-term, but the final cost and price reductions also increase product and labour demand leading to the creation of more productive and rewarding jobs, as long as improvements in living standards⁴²⁷. Many experts still foresee devastating scenarios for different types of jobs: significant changes take place not only in traditionally “at risk” sectors such as manufacturing, office, and retail work but also in cognitive and interactive sectors such as law, financial services, trade and education, that have commonly been the exclusive domain of humans. In general, one may presage a relative increase in the demand for skilled workers performing non-codifiable and non-predictable tasks with enhanced digital tools. Concomitantly, other experts suggest “a relative increase in the demand for unskilled workers”⁴²⁸. Automation is a double-edged sword “hollowing out” the distribution of jobs into either high-paying skilled positions or low-paying routine positions. Over the long term, employment

⁴²⁵ “Labour liberated by technology should gravitate toward tasks and jobs in which humans retain an advantage” according to AUTOR D. H. (2015), *Why are there still so many jobs? The history and future of workplace automation* in *The Journal of Economic Perspectives*, 29(3), pp. 3-30 (arguing that “[a]utomating a particular task, so that it can be done more quickly or cheaply, increases the demand for human workers to do the other tasks around it that have not been automated”).

⁴²⁶ BAKHSHI H., SCHNEIDER P., DOWNING J., OSBORNE M. (2017, September 28), *Are robots taking our jobs?*, retrieved from <https://shar.es/1V000q> (arguing that “[r]ather than making definitive proclamations about the future of some occupations, we conclude that the majority of people (around 70 per cent) are in occupations with highly uncertain prospects”).

⁴²⁷ See generally MOKYR J., VICKERS C. and ZIEBARTH N. L. (2015), *The history of technological anxiety and the future of economic growth: Is this time different?* in *The Journal of Economic Perspectives*, 29(3), pp. 31-50.

⁴²⁸ ALMEIDA R., LEITE CORSEUIL C. H. and POOLE J. P. (2017), *The impact of digital technologies on routine tasks: do labor policies matter?*, Paper presented at the IZA Workshop: Labor Productivity and the Digital Economy, 30-31 October 2017 (assessing the impacts of technology depending on the industry’s exposure to labour market regulatory enforcement).

rates seem to be fairly stable⁴²⁹. While the direct impact of innovations aimed at determining the productivity-enhancing process might be job-destroying, these innovations, especially those leading to a partial automation of a given profession or to lower prices and new products, have a “spillover” potential to trigger new economic activities and create a number of jobs exceeding those lost (with a net positive effect at the aggregate level)⁴³⁰.

That said, however, it should not be forgotten that the dynamic process of technological innovation does not happen in an institutional, political or socioeconomic vacuum. In the face of fast and unpredictable changes that have unknown effects, it must be made clear that the advent of intelligent machinery is neither neutral nor exogenous⁴³¹. Despite all rationally calculated predictions, the course of digital transformation of work does not force inevitable outcomes⁴³². Quite simply, it sets the avenues of possibilities. The impact of “disruption” mainly depends on a firm’s entrepreneurial and managerial choices as well as its human resource culture⁴³³.

⁴²⁹ In the future, there could be a simultaneous growth in the bottom and top of the skill distribution accompanied by a substantial contraction of middle-skill jobs, which are commonly intensive in routine tasks. See also SUSSKIND R. and SUSSKIND D. (2015), *The future of the professions: How technology will transform the work of human experts*, Oxford, UK (predicting that many professional categories will soon become obsolete, while new and emerging roles will offer new opportunities, making the most of skills such as inventiveness and craftsmanship, critical reasoning, and emotional intelligence). For a critical point of view on this “ideological quarrel”, see VIVARELLI M. (2007), *Innovation and Employment: a Survey*, IZA Discussion papers, No. 2621 (arguing that the various possible versions of the so-called “compensation theory” fail to explain the phenomenon conclusively).

⁴³⁰ See ACEMOGLU D. and RESTREPO P. (2017), *Robots and Jobs: Evidence from US Labor Market*, NBER Working Paper, No. 23285.

⁴³¹ CASELLI F. and MANNING A. (2017), *Robot Arithmetic: Can New Technology Harm All Workers or the Average Worker?*, CEP Discussion Paper, No. 1497 (arguing that “firms [tend to] replace humans with machines if they lower costs by doing so”). However, in order to have a complete picture on recruitment policies, the impact of the (high) average and marginal tax wedges on labour need to be investigated further. Examining in detail all these issues goes beyond the scope of this section. See, for instance, JOURMARD I. (2001), *Tax Systems in European Union Countries*, OECD Economics Working Paper, No. 301. In countries such as Italy, a big share of the cost of social security and welfare benefits associated with standard contracts must be borne by the employer.

⁴³² SALENTO A. (2017), *Industria 4.0 ed economia delle piattaforme: spazi di azione e spazi di decisione in Riv. giur. lav.*, 2, pp. 30-39 (defining digital transformation as a path-dependent process).

⁴³³ Moreover, the fact that a task can be automated does not mean that it will be quickly. It depends on an overall assessments of feasibility, broader implications, costs involved in the process and “appetite to invest” by companies.

Further research is needed to understand how market institutions, such as employment protection legislation, collective bargaining agreements and union representation, might alleviate the extent of automation-induced job displacement and polarisation. Needless to say, what types of technologies are developed and how they are employed, all reflect the political decisions and social interests of competing constituencies and may culminate in numerous results in various contexts. Indeed, technology advancements are “socially embedded and legally mediated”⁴³⁴.

This paragraph was tasked with the objective of reacting to purely speculative arguments surrounding the future of work by drawing on a variety of sources. To conclude, it could be stressed that “adventurous predictions”⁴³⁵ on the supposed end of work have promptly been borne out by facts. Previous experience indicates that studying the mere substitution risk provides only unsatisfactory and partial answers, provided that the relationship between digitisation and job loss is at best indeterminate, both within and across countries⁴³⁶. In short, unlike the wolf – to which the title of this paragraph refers – robots never arrive in the end. Probably, they will supplant humans much more slowly than originally expected. Therefore, a too narrow focus on the upcoming wave of technological advances could undermine discussions on the effective measures that should be taken to enable countries, organisations and individuals to reap the benefits of automation and digitisation, thus relying on strong complementarities between machines and human labour.

While it cannot be ignored that there might be a potential conceptual overlap between automation and platformisation, it is important to distinguish the risk of massive substitution from the risk of pervasive platformisation. In this second hypothesis, where automation is not economically viable or technically possible, the *Cerberus* firm model described in the previous section might grow as a percentage of the economy and be adopted by more firms as a means of keeping labour costs down for jobs that cannot be robotised. One final point is that the topic being addressed should not be the coming workless society, but more specifically the risk of an

⁴³⁴ DEAKIN S. and MARKOU C. (2017), *The Law-Technology Cycle and the Future of Work*, paper presented at “Impresa, lavoro e non lavoro nell’economia digitale”, Brescia, 12-13 October 2017 (arguing that “the legal system facilitates technological change (intellectual property law, company law) and diffuses its social effects (labour law, social security law)”).

⁴³⁵ TULLINI P. (2016), *Economia digitale e lavoro non-standard*, op. cit., p. 7.

⁴³⁶ Ironically, despite the abundance, much of the data needed are not gathered in a systematic way. See MITCHELL T. and BRYNJOLFSSON E. (2017), *Track how technology is transforming work in Nature*, 544, pp. 290-292 (calling for the creation of an integrated information strategy combining public and privately held data).

aggressive deconstruction or, at least, a misguided reorganisation of the legal and institutional framework regarding the compact between social partners, under the assumption that work will become scarce. Which is why academic research in recent decades has tended to show that the main threat that the world in general, and Europe in particular, have to confront is technology exerting “slow but continual downward pressure on the value and availability of work” rather than the imminence of total unemployment⁴³⁷.

2. Back to the future. Re-casualisation, precariousness, vulnerability, insecurity: is non-standard the new normal?

Speculating too much about future scenarios on the burst of technological progress might end up dissuading the focus from what the labour market is undergoing: the expansion of services industries, the decline of trade unions, the increase in cheap labour, the impact of increased tax burden in particular on labour. It is therefore important to broaden the focus beyond a mere analysis of digital change. Concomitantly, understanding the direction work will take in the coming years must necessarily involve an emphasis on non-standard contractual arrangements⁴³⁸, as the relationship between technology and jobs is necessarily mediated by how labour is concretely organised⁴³⁹.

In order to grapple with a constant evolution, this investigation will shed light on the principles and aims underpinning the creation of various non-employment forms of work, including those channelled through digital infrastructure⁴⁴⁰. The reason is simple: many of the working templates organised by labour platforms “coincide with, or closely resemble, these forms of atypical work or a mixture thereof”⁴⁴¹,

⁴³⁷ See MUNGER M. C. (2018), *Tomorrow 3.0: Transaction Costs and the Sharing Economy*, op. cit., p. 125.

⁴³⁸ See, for instance, LANG C., SCHÖMANN I. and CLAUWAERT S. (2013), *Atypical forms of employment contracts in times of crisis*, ETUI Working Paper No. 03, Brussels.

⁴³⁹ ROGERS B. (2017), *People Analytics and Labor Standards*, Paper presented at the LLRN 3rd Conference, Labour Law Research Network, Toronto 25-27 June 2017 (arguing that “public debate around [digital transformation and inequality] is insufficiently focused on how technology is altering work processes and workplace power relationships”).

⁴⁴⁰ GILLESPIE A., RICHARDSON R., VALENDUC G. et al. (1999), *Technology Induced Atypical Work-Forms. Report for the Office of technology assessment of the European Parliament (STOA)*, Brussels.

⁴⁴¹ GARBEN S. (2017), *Protecting Workers in the Online Platform Economy: An overview of regulatory and policy developments in the EU*, European Risk Observatory Discussion paper, p. 92 (discussing “triangularity resembling temporary agency work, digitalisation leading to autonomy in workplace and time and thus to potentially dependent self-employment, crowd-sourcing leading to a casual, on-call nature of the working arrangement”).

sometimes with the only differentiation that they make use of a digital channel. Although the contours continue to change, by using a broad and inclusive definition, it could be said that non-standard forms of employment (hereinafter NSFE) include temporary employment, part-time work, temporary agency work, self-employment, dependent self-employment, disguised employment relationships and new forms of work (see Figure 2 at the end of this paragraph).

It would be premature at this stage to draw up the conclusions of a debate which is still intense, however, it should be admitted that, in the not too distant future, low-income and low-skill jobs that cannot be automated may run the risk of being outsourced on a just-in-time basis to the lowest bidder, thus undercutting employment and living standards⁴⁴². In addition to that, modern firms have been reduced by the “slimming course” due to industrial restructuring, corporate downsizing, outsourcing and production streamlining⁴⁴³. These business practices cause a departure from the traditional model of wage employment. This raises serious concerns about the quality of jobs left and created and the level of protection the workers involved will be entitled to, given the existing institutions and policies drawing an all-or-nothing alternative⁴⁴⁴.

In this respect, according to KALLEBERG, “[m]uch of the controversy and concern about the rise in nonstandard work arrangements is due to the assumption that they

⁴⁴² See, generally, SPASOVA S., BOUGET D., GHAILANI D. and VANHERCKE B. (2017), *Access to social protection for people working on non-standard contracts and as self-employed in Europe: A study of national policies*, European Social Policy Network, European Commission, Brussels. It has to be noted that “[i]nsofar as the nonemployment form offers advantages – including nonapplication of labour law – employees may be pushed aside [...]. More subtly, labour standards within employment relationships may face downward pressure from the threat of such displacement”, see ZATZ N. (2011), *The Impossibility of Work Law* in DAVIDOV G. and LANGILLE B. (Eds.), *The Idea of Labour Law*, Oxford, UK, p. 240. Already back in the Nineties, several authors warned that “the character of unemployment has decidedly shifted: a much larger proportion of the work force is either underemployed, overemployed, low paid, or trapped in unfavorable job situations”. See MISHEL L. and BERNSTEIN J. (1994), *The State of Working America 1994–1995*, Armonk, NY, p. 203. See also EICHHORST W. and MARX P. (2011), *Reforming German Labor Market Institutions: A Dual Path to Flexibility* in *Journal of European Social Policy*, 21(1), pp. 73-87 (describing a rising share of non-standard and low-pay employment).

⁴⁴³ See KELLER B. and SEIFERT H. (2005), *Atypical employment and flexicurity* in *Management Revue*, 16(3), pp. 304-323.

⁴⁴⁴ SCARPETTA S. (2016, November 16), *The Future of Work*, retrieved from <https://goo.gl/KCuk8Q>. See also RAMIOUL M. and VAN HOOTEGEM G. (2015), *Relocation, the restructuring of the labour process and job quality* in DRAHOKOUPIL J. (Ed.), *The outsourcing challenge*, Brussels, pp. 91-115 (arguing that the relocation of activities “not only affect[s] the voice of workers and their employment conditions, but also job content and intrinsic job quality”).

are associated with bad jobs"⁴⁴⁵. The most recent statistics indicate that the share of low-income jobs has ballooned due to a twofold situation: on the one hand, unemployment rates climbed significantly during the global financial crisis, on the other, "those who kept their jobs or emerged from unemployment often found themselves working for less pay, with fewer hours and reduced job security"⁴⁴⁶. Accordingly, to get a better understanding what these employment trends emerging across Europe are, the "marginalisation" of the employment relationship must be further investigated as a litmus test for understanding growing platform-coordinated work and its impact upon organisational patterns and employment protection legislation.

To begin with, it should be pointed out that *non-standardness* is about a (legitimate, yet still relatively under-protected) contractual form, whereas *precariousness* refers to the traits of the job⁴⁴⁷. Atypical or non-standard work⁴⁴⁸, now making up around 1 in

⁴⁴⁵ KALLEBERG A. L. (2000), *Nonstandard Employment Relations: Part-Time, Temporary and Contract Work in Annual Review of Sociology*, 26(1), p. 358.

⁴⁴⁶ As Eurofound has showed in a recent report, "the at-risk-of-poverty rate among workers on temporary contracts is higher than it is for their counterparts on permanent contracts in all Member States", leaving the "average worker" worse off than before. The highest risk is found among involuntary part-time workers and self-employed workers that do not employ staff. EUROFOUND (2017), *In-work poverty in the EU*, Publications Office of the European Union, Luxembourg, p. 1 (arguing that "there is a link between increases in non-standard forms of employment in many countries and the expansion in the proportion of Europeans at risk of in-work poverty"). An increased prevalence of self-employment is seen as one of the main determinants of in-work poverty during the crisis. See HALLERÖD B., EKBRAND H. and BENGTSOON M. (2015), *In-work poverty and labour market trajectories: Poverty risks among the working population in 22 European countries in Journal of European Social Policy*, 25(5), pp. 473-488. See also HERMAN E. (2014), *Working poverty in the European Union and its main determinants: An empirical analysis in Engineering Economics*, 25(4), pp. 427-436.

⁴⁴⁷ Moreover, Fudge clarifies how "the meaning of 'precarious' and 'vulnerable' overlap", despite different characterisations. The first definition "places greater emphasis on the demand side [...] accounting for workers' insecurity", while the second formula "tends to stress the workers' characteristics and status". See FUDGE J. (2005), *Beyond vulnerable workers: Towards a new standard employment relationship in Canadian Lab. & Emp. LJ*, 12, p. 160.

⁴⁴⁸ Both terms should be regarded as close substitutes and will therefore be used interchangeably. The Green Paper by the European Commission, "Modernising labour law to meet the challenges of the 21st century", presented in 2006, focused on atypical contracts by underlining the increase in their proportion, with a strong gender- and generational-biased dimension. See SCIARRA S. (2007), *EU Commission Green Paper 'Modernising labour law to meet the challenges of the 21st century' in Industrial Law Journal*, 36(3), pp. 375-382. According to the Italian Civil Code, art. 1322 par. 2 provides that "parties may also conclude contracts that do not belong to types having a peculiar regime, provided that such contracts are conceived to realise interest worthy of protection by legal order" (translation mine). It is worth noting that the term "atypical" is applied inconsistently in connection with the meaning under civil and contractual law and it is still used despite the fact some forms have been regulated both at the European and national level. Accordingly, the formula has a merely descriptive and non-technical

3 jobs in OECD countries⁴⁴⁹, may be prone to different interpretations. Generally speaking, their use might represent a legitimate response to volatile market demands while their misuse “embodies a breakdown of social norms regarding workplace solidarity and responsibility”⁴⁵⁰. However, it has to be conceded that such “discourse is hardly a 21st century novelty”⁴⁵¹: obviously, the rise of the contingent and scalable workforce predates the advent of the collaborative economy⁴⁵². In that regard, it has

value if specifically referred to employment law, which covers mainly “typical” contracts. See GHERA E. (2003), *La subordinazione e i rapporti atipici nel diritto italiano* in CARABELLI U. and VENEZIANI B. (Eds.), *Du travail salariè au travail indépendant: permanences et mutations*, Bari, pp. 47-89; ID. (1996), *La flessibilità: variazioni sul tema* in *Riv. giur. lav.*, 1, p. 123, now in AA.VV. (1996), *Lavoro decentrato, interessi dei lavoratori, organizzazione delle imprese*, Bari, p. 63 ff. One could conclude in legal terms that the expression is an adaptation from the international vocabulary. In this context “atypical” is used to signify a deviation from the standard employment relationship. See GRANDI M. (1989), *La subordinazione tra esperienza e sistema dei rapporti di lavoro* in PEDRAZZOLI M. (Ed.), *Lavoro subordinato e dintorni*, Bologna, pp. 77-91. See also SPEZIALE V. (2017), *Il lavoro subordinato tra rapporti speciali, contratti “atipici” e possibili riforme*, WP C.S.D.L.E. “Massimo D’Antona”.IT, 51; VALLEBONA A. (2005), *La nullità dei contratti di lavoro «atipici»* in *Arg. dir. lav.*, 2, p. 527. See also JEFFERY M. (1995), *The Commission Proposals on Atypical Work: Back to the Drawing-Board... Again* in *Industrial Law Journal*, 24(3), pp. 296-299.

⁴⁴⁹ See OECD (2015), *In It Together: Why Less Inequality Benefits All*, Paris, p. 139 (seizing the dimension of employment in NSFE arrangements in the OECD countries and providing evidence for the implication of trends in non-standard work).

⁴⁵⁰ A twofold approach emerges from the European legislator’s initiatives, to give an example. Part-time employment was convincingly encouraged (Council Directive 97/81/EC), whereas the main objective of the discipline in matter of fixed-term work was limiting the succession of temporary employment contracts (Clause 5 of Council Directive 1999/70/EC). It is striking how NSFE are depicted as a first step towards precariousness in the literature, whereas the employment policy documents valorise them as “beneficial” for employers, see MCCANN D. (2008), *Regulating Flexible Work*, UK, p. 11. See INTERNATIONAL LABOUR OFFICE (2016), *Non-standard employment around the world: Understanding challenges, shaping prospects*, op. cit., p. 2 (the report also argues that, when enterprises rely unduly on non-standard employment, the benefits of these business choices can be outweighed by long-term negative impacts on productivity and innovation).

⁴⁵¹ FUDGE J. and OWENS R. (2006), *Precarious work, women, and the new economy: The challenge to legal norms* in FUDGE J. and OWENS R. (Eds.), *Precarious work, women, and the new economy: The challenge to legal norms*, Oxford, UK, p. 20. TIPPETT E. C. (forthcoming), *Employee Classification in the Sharing Economy* in DAVIDSON N., FINCK M. and INFRANCA J. (Eds.), *Cambridge Handbook of Law and Regulation of the Sharing Economy*, Boston, MA (explaining how “companies [in the sharing economy] are simply accelerating an existing trend” towards “[s]ubcontracting to individual workers, expected to operate a nominally independent business”). Simply put, the “common denominator” is the widespread increase in the precarious nature of employment and the decline in workers’ protection.

⁴⁵² See OWENS R. (2002), *Decent work for the contingent workforce in the new economy* in *Australian Journal of Labour Law*, 15(3), pp. 209-234. In fact, it has been rightly pointed out that the model of working contingently is older, more generalised and much more pervasive than on-demand or platform-based work. “Contingent work” is basically an American terminology and was first coined by Audrey Freedman in 1985 to describe “a management technique of employing workers only when

been questioned whether “[t]he efficiencies associated with organizing work in standard, hierarchical employment relations and internal labor markets in the post–World War II period may have been more of an historical irregularity than is the use of nonstandard employment relations”⁴⁵³.

Such arrangements have developed as an outcome of multiple forces and their overall relevance has swelled over the past few decades. The reasons for the increasing incidence of atypical employment relations can be found on both the demand and the supply sides of the labour market⁴⁵⁴. Mainstream economic thinking has supported the idea that alternative employment forms might have a good potential to result in a “win-win” situation for workers and employers/clients; conversely, research shows that the disadvantages seem to dominate for the workers, and particularly for already disadvantaged groups, such as young workers, women with childcare responsibilities or migrants⁴⁵⁵. Correspondingly, the literature suggests that one of the key motivations for companies’ use of these arrangements is to avoid liabilities and obligations of various kinds accompanying the employment relationship. Over the last years, firms have been changing and the potential of the digital technology is accelerating the process, with substantial consequences. Even large corporations have shed their role as direct employers⁴⁵⁶, in favour of contracting out work to small business and micro- or auto-entrepreneur that are forced to compete fiercely with one another. Spinning out this line of thought, this paragraph

there was an immediate and direct demand for their services”. See FREEDMAN A. (1996), *Contingent work and the role of labor market intermediaries* in MANGUM G. and MANGUM S. (Eds.), *Of Heart and Mind: Social Policy Essays in Honor of Sar A. Levitan*, Kalamazoo, MI, pp. 177-199. See also POLIVKA A. E. (1996), *Contingent and alternative work arrangements, defined* in *Monthly Lab. Rev.*, 119(10), p. 3. The US Bureau of Labor Statistics referred to “individuals who do not perceive themselves as having an explicit or implicit contract for continuing employment”. See BEFORT S. F. (2003), *Revisiting the black hole of workplace regulation: A historical and comparative perspective of contingent work* in *Berkeley Journal of Employment and Labor Law*, 24(1), pp. 153-178. For an overview of individual and organisational-level consequences associated with the increased reliance on contingent work, see CONNELLY C. E. and GALLAGHER D. G. (2004), *Emerging trends in contingent work research* in *Journal of Management*, 30(6), pp. 959-983.

⁴⁵³ KALLEBERG A. L. (2000), *Nonstandard employment relations: Part-time, temporary and contract work*, op. cit., p. 342.

⁴⁵⁴ These arrangements might meet the requests of employees whose life circumstances prevent them from working full-time. See also DE GRIP A., HOEVENBERG J. and WILLEMS E. (1997), *Atypical employment in the European Union* in *Int’l Lab. Rev.*, 136(1), p. 52.

⁴⁵⁵ See also FREDMAN S. (2004), *Women at work: The broken promise of flexicurity* in *Industrial Law Journal*, 33(4), pp. 299-319.

⁴⁵⁶ See U.S. DEPARTMENT OF LABOR, WAGE AND HOUR DIVISION (WHD), *Misclassification of Employees as Independent Contractors*, available at <https://www.dol.gov/whd/workers/misclassification/>.

is aimed at describing the use of such contracts as the maximum expression of vertical disintegration, hierarchical outsourcing and, even worse, risk-shifting (that is, the transfer of labour expenses from the employer to the employee). For this purpose, taking the time to step back, it is important first to understand what is meant by atypical forms of employment⁴⁵⁷.

“Alternative to what?” – one might wonder⁴⁵⁸. There is no universally accepted legal definition of non-standard employment other than “employment offering less security and fewer benefits than the standard employment relationship”⁴⁵⁹, defined

⁴⁵⁷ A further category of non-standard work is that of “very atypical contractual arrangements”. This category encompasses “‘very short’ fixed-term work of less than six months (which may also include ‘very short’ temporary agency work), ‘very short’ part-time work of less than 10 hours a week, non-contract work, zero hours or on-call work”. See EUROFOUND (2010), *Flexible forms of work: ‘very atypical’ contractual arrangements*, Dublin.

⁴⁵⁸ For a comment on different notions and concepts, see LO FARO A. (2017), *Core and Contingent Work: a Theoretical Framework* in ALES E., DEINERT O. and KENNER J. (Eds.), *Core and contingent work in the European Union: a comparative analysis*, Oxford, UK, p. 10 (explaining how “the notion of contingent work appears to be so challenging when analysed from a labour law perspective: because it has to be constructed as the conceptual pendant of another notion – the core workforce – that is not a legal category but rather a product of the organisational economics debates”). See also CAPPELLI P. and KELLER J. R. (2013), *Classifying work in the new economy* in *Academy of Management Review*, 38(4), pp. 575-596 (disputing that surveys of individuals might not provide accurate reports of the incidence of alternative arrangements “because employer respondents are more likely to understand the distinctions between different arrangements and can report how often work is actually being performed”).

⁴⁵⁹ It might be tempting but misleading to group together these forms into a homogeneous category. These contracts are “under a variety of aliases, but none of the different terms really succeeds in capturing the essence of the debate” according to JEFFERY M. (1998), *Not really going to work? Of the directive on part-time work, ‘atypical work’ and attempts to regulate it* in *Industrial Law Journal*, 27(3), p. 2015. It would be tedious and beyond the scope of this paragraph to list and describe all synonyms in detail. Clearly, there are numerous definitions that, rightly or wrongly, in many cases have become used synonymously, sometimes causing ambiguity and misunderstanding. For instance, a seminal report used the expression “‘atypical’ work patterns” to refer to arrangements “which currently affect only a minority of the working population in Europe, but which appear to be growing” but also “to point to an apparent sea-change occurring in how societies organise economic production and work”. See VALENDUC G. and VENDRAMIN P. (1999), *Technology-induced Atypical Work-Forms*, op. cit., p. 4. Treu, instead, seems preferring to speak of “peripheral” or “precarious” employment: a reference to the atypical nature would cast a shadow over their proliferation, see TREU T. (1992), *Labour flexibility in Europe* in *Int’l. Lab. Rev.*, 131(4-5), pp. 497-512. For a pioneering investigation of their policy implications, see DELSEN L. (1991), *Atypical employment relations and government policy in Europe* in *Labour*, 5(3), p. 123. A classical dichotomy allows a clear distinction between those working arrangements that can be considered “a stepping stone to better and more stable employment and career opportunities” (or to reduce youth unemployment) and those representing a dead end trapping workers in a situation of poor pay and deteriorating socio-economic prospects. OECD data rather suggests that NSFÉ tend to be a trap. See BOOTH A. L., FRANCESCONI M. and FRANK J. (2002), *Temporary jobs: stepping stones or dead ends?* in *The Economic Journal*, 112(480), pp.

as a subordinate wage employment of indefinite duration which guarantees a stable income and secures pension payments and a wide range of benefits for the workers (hereinafter “SER”)⁴⁶⁰. It appears clear that this generally acceptable characterisation operates by contrast and encompasses a heterogeneous set of contractual forms, mostly work which “deviate”, along one or more axes, from the definition of SER which in turn is a rather strict classification, failing to take into account the diversity of this *genus*⁴⁶¹. Atypical forms are outside the realm of protective statutes and collective bargaining, “united more by their divergence from the standard employment relationship [...] than by any common features”⁴⁶². Moreover, criteria for identifying what the legal system recognises as a NSFE vary appreciably among local jurisdictions or may be influenced by the constantly evolving socioeconomic context. For instance, at the European level, casual work can be distinguished from other non-standard forms of employment such as part-time, fixed-term or temporary agency work which have already received growing political attention.

To be precise, this definition of NSFE shall not be confused with that of precarious employment, even though the two classes somehow overlap and cannot be compartmentalised and managed in isolation. In this respect, it should be said that, while not all precarious works are non-standard ones, yet all non-standard forms of

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⁴⁶⁰ Typical forms of work have essentially included “wage or salaried employment which are accompanied by certain obligations and privileges”. In this ideal model, the terms are contractual, binary and of a long-term nature, with a fixed number of hours, a pay, a workplace and a specific position in the internal job hierarchy. See MHONE G. C. (1998), *Atypical forms of work and employment and their policy implications*, op. cit., p. 199.

⁴⁶¹ REGALIA I. (Ed.) (2006), *Regulating new forms of employment: local experiments and social innovation in Europe*, London and New York, p. 6 (proposing a fourfold subdivision based on the level of deviation from the SER: a first category “comprising forms that do not respect the norm of full employment: the various types of part time or short time work”, a second category “includ[ing] forms which do not involve open ended employment, these being various kinds of occasional, prolonged or recurrent temporary work (short-term temporary employment, fixed terms contracts, seasonal work)”, a third one consisting of forms “where the worker does not directly depend on the user firm because he is temporarily or permanently taken by another organization: an agency or a contract company”, a third (and last) class where “the work is not performed on the employer’s premises (home based work, telework, distance work)”. This general remark requires further clarification regarding the fact that the abovementioned definitions are not legal categories, although they are commonly used in policy papers and institutional reports.

⁴⁶² FUDGE J. and OWENS R. (2006), *Precarious work, women, and the new economy: The challenge to legal norms* op. cit., p. 12. For an analysis of the Italian scenario, see GIASANTI L. (2008), *Lavoro subordinato non standard: tra regolazione giuridica e tutela sociale*, Roma and BANFI D. and BOLOGNA S. (2011), *Vita da freelance. I lavoratori della conoscenza e il loro futuro*, Milano.

employment are likely to be also precarious⁴⁶³. According to COUNTOURIS “[t]here is hardly any doubt that the initial intuition that these emerging forms of ‘atypical’ work contracts were intimately linked to the precarisation of people’s working lives was both accurate and insightful”⁴⁶⁴. The fact is that all employment relationships carry some risk of precariousness. Therefore, conditions of instability, insecurity and vulnerability are only part of the definition, not the full picture⁴⁶⁵.

Most notably, it is some combination of these factors that defines precarious jobs, and the margins around the concept are to some extent arbitrary. It must also be made clear that this cohesive investigation is not intended to analyse in depth opportunities and problems entailed by these contractual formulas, as the focus is rather on their role in offering a “legal toolkit” for platforms to flourish⁴⁶⁶. Moreover, although the situation varies from interpretation to interpretation, one thing is for sure: labour platforms have the potential to be a crucial channel for the creation and dissemination of these alternative – and often uncertain, unpredictable, and risky from the point of view of the worker – contractual arrangements⁴⁶⁷. It could be emphasised that the platform business model allows for the creation of *precariousness by design*: “a form of extreme outsourcing that could lead to further acceleration of

⁴⁶³ Alternative working arrangements and precarious employment could be considered to form a unique category, but opinion is more divided on this point. ILO detects a significant difference between “NSFE” and what is referred to as “precarious work” (i.e. “work that is low paid, especially if associated with earnings that are at or below the poverty level and variable; insecure, meaning that there is uncertainty regarding the continuity of employment and the risk of job loss is high; with minimal worker control, such that the worker, either individually or collectively, has no say about their working conditions, wages or the pace of work; and unprotected, meaning that the work is not protected by law or collective agreements with respect to occupational safety and health, social protection, discrimination or other rights normally provided to workers in an employment relationship”). See INTERNATIONAL LABOUR OFFICE (2016), *Non-standard employment around the world: Understanding challenges, shaping prospects*, op. cit., p. 18.

⁴⁶⁴ COUNTOURIS N. (2012), *The legal determinants of precariousness in personal work relations: A European perspective*, op. cit., pp. 23 and 45 (arguing that “precariousness is a dynamic affecting all personal work relations, with even relations once considered as ‘secure’ being increasingly affected by various legal determinants of precariousness”). See also FUDGE J. and OWENS R. (2006), *Precairous work, women and the new economy*, op. cit., p. 3.

⁴⁶⁵ ILO listed several areas of potential work insecurity: earnings, hours, occupational safety and health, social security, training, representation. See also STANDING G. (2014), *The precariat in Contexts*, 13(4), pp. 9-10.

⁴⁶⁶ For a detailed “profiling” study, see ARMANO E. and MURGIA A. (Eds.) (2017), *Mapping Precariousness, Labour Insecurity and Uncertain Livelihoods: Subjectivities and Resistance*, London.

⁴⁶⁷ See KALLEBERG A. L. (2009), *Precairous work, insecure workers: Employment relations in transition in American Sociological Review*, 74(1), pp. 1-22.

the race to the bottom and ultimately to further erosion of workers' rights and benefits"⁴⁶⁸.

Prior scholarship has addressed the multifaceted determinants of precariousness: elements of "precarity", a feature that spans multiple aspects of life, can be found in both standard and non-standard forms of employment⁴⁶⁹. To provide a comprehensive and systematic definition, several dimensions can be listed⁴⁷⁰. First and foremost, a concrete sense of uncertainty of continuity of work or time limitation (i.e. temporal precariousness)⁴⁷¹. Second, a hindrance to exercise full and effective control over job content, working conditions, wages and the pace of work (i.e. organisational precariousness). Third, the lack of a mandatory level of legal protection, either by law or through collective initiatives, against discrimination, unfair dismissal or improper working practices, but also in the sense of social protection, notably access to social security benefits covering health, accidents,

⁴⁶⁸ CHERRY M. A. (2016), *Virtual work and invisible labor*, op. cit., p. 73. See also RUCKELSHAUS C., SMITH R., LEBERSTEIN S. and CHO E. (2014), *Who's the boss: Restoring accountability for labor standards in outsourced work*, National Employment Law Project Report, available at <https://goo.gl/TrJwEr> (pointing out how "[t]he simplest outsourcing models are those that entail only a firm-to-worker engagement, with an employer converting all of its employees to 'independent contractors'").

⁴⁶⁹ See RODGERS G. (1989), *Precarious work in Western Europe: The state of the debate* in RODGERS G. and RODGERS J. (Eds.), *Precarious jobs in labour market regulation: the growth of atypical employment in Western Europe*, Geneva, Switzerland, pp. 1-16. For a summary, see MANTOUVALOU V. (2012), *Human rights for precarious workers: the legislative precariousness of domestic labor* in *Comp. Lab. L. & Pol'y J.*, 34(1), p. 133. For a conceptualisation of "social precarity", see MURGIA A. (2014), *Representations of precarity in Italy: collective and individual stories, social imaginaries and subjectivities* in *Journal of Cultural Economy*, 7(1), pp. 48-63.

⁴⁷⁰ FUDGE J. and OWENS R. (2006), *Precarious work, women, and the new economy: The challenge to legal norms* in FUDGE J. and OWENS R. (Eds.), *Precarious work, women, and the new economy: The challenge to legal norms*, Oxford, UK, p. 11. See also COUNTOURIS N. (2012), *The legal determinants of precariousness in personal work relations: A European perspective*, op. cit., p. 24 (defining three different, "though not necessarily mutually exclusive", approaches to conceptualising precarious work: a first one related to particular sectors of the labour market, a second one associating precarity to non-standard works, and a third one mainly focusing on "the dimensions and context of precariousness, and as potentially applying beyond atypical work relations"). For a cross-national comparison of indicators and characteristics of precarious employment, see also DÜLL N. (2004), *Defining and assessing precarious employment in Europe: a review of main studies and surveys*, Working Paper Economix.org.

⁴⁷¹ An unstable job is not necessarily precarious. At the same time, this form of precariousness affects both contracts of such a short period of time as not to activate the application of employment protection legislation and full-time or open-ended when the employer's prerogative to terminate it is "unrestrained by the legal framework, be it contractual, statutory, or collectively agreed". This conceptualisation builds on COUNTOURIS N. (2012), *The legal determinants of precariousness in personal work relations: A European perspective*, op. cit., pp. 26-27 (arguing that "employment status precariousness is possibly the most radical [one]" since the worker is deprived of "the stabilizing effects of employment protection legislation").

pensions, unemployment insurance (i.e. employment status precariousness). A fourth, more controversial aspect is the low level of income (i.e. income precariousness), determining a situation of poverty and insecure social insertion. Another core aspect of precarious work is the lack of clarity as to the identity of the employing entity which has been exacerbated by the fragmentation of the vertically-integrated enterprise into more horizontal arrangements involving subcontractors, franchisers and agencies.

As explained in the previous section⁴⁷², technological changes reduce, adjust or cut transactional costs associated with contracting out jobs (obtaining information, forming a price, negotiating and enforcing of a contract) and thus make disintermediation of work more convenient⁴⁷³, as a matter of fact. Organisations can rapidly specialise their production, “assemble temporary workers quickly for projects, and rely more on outside supplier”⁴⁷⁴. Consequently, firms “will more easily than ever be put in the position of externally purchasing, or contracting, human

⁴⁷² In the first section of this research, it has been showed how the historical tendency towards the internalisation of employment relationships within hierarchies is being reversed, as there currently seems to be “a proliferation of employment and work relationships that fall outside the norm”. In this respect, contingent work can be seen as an expression of a “non-standard firm”. In fact, by deciding “to buy rather than to make”, the flexible firm aims at increasing its business through a different organisation made of subcontracting, networking, partnership agreement, long-term relations with other economically dependent smaller firms or even with individual independent contractors. In short, a lean production process implying a diminution of direct employment relations is often sided by an increase of commercial relations concluded with other “functionally specialised supplier firms”. It is precisely in such a trade-off between employment and commercial transactions that the divide between core and contingent workers emerges. See FUDGE J. (2017), *The future of the standard employment relationship: Labour law, new institutional economics and old power resource theory* in *Journal of Industrial Relations*, 59(3), pp. 374-392. See also BENERÍA L. (2001), *Shifting the risk: New employment patterns, informalization, and women’s work* in *International Journal of Politics, Culture, and Society*, 15(1), p. 48 (describing changes taking place at the level of the firm).

⁴⁷³ See KATZ L. F. and KRUEGER A. B. (2016), *The rise and nature of alternative work arrangements in the United States, 1995-2015*, NBER Working Paper, No. 22667, p. 18.

⁴⁷⁴ KALLEBERG A. L. (2000), *Nonstandard employment relations: Part-time, temporary and contract work*, op. cit., p. 342. Indeed, new production models, including platform-facilitated ones, “allow for the downsizing of big companies, simultaneously increasing company flexibility and undermining the strongholds of worker resistance”. See INTERNATIONAL LABOUR ORGANIZATION (2011), *Policies and Regulations to Combat Precarious Employment*, available at: <https://goo.gl/TmmXTS>. See also MALONE T. W. (2004), *The future of work: How the new order of business will shape your organization, your management style and your life*, Boston, MA (describing a two-tier organisation based “categories of decentralised and temporary project work in temporarily active networks”, on the one hand, and skilled core workforce, on the other).

capital when necessary, even in the short-term"⁴⁷⁵, on an "if and when" basis and at attractive rates⁴⁷⁶. Also, this structure determines "a transfer of risk from employer to employee and, by extension, to the state"⁴⁷⁷. As a result, if something is undergoing a crisis, that is the traditional model of the firms and the salaried employment⁴⁷⁸, which is shortly to be discussed and rebutted.

This process results from converging public and managerial policies designed to implement flexibility and from intensive work carried out by many commentators in order to legitimise the rule of the market over that of welfare state institutions⁴⁷⁹. One possible explanation, though valid for only some cases, lies in the fact that organisations use both functional and numerical flexibility simultaneously, implementing "distancing strategies" to transform fixed costs into variable ones⁴⁸⁰. On the one hand, employers want to be free to redeploy workers from one task to another quickly as product market opportunities and consumer demand shift (what is defined functional or internal flexibility). On the other, they might want to adjust the volume of the workforce to severe fluctuations in demand by hiring and firing workers on the basis of contingent business needs or by adapting the duration of working relationships (i.e. external flexibility)⁴⁸¹. This is particularly the case of some sub-sectors within service industry such as restaurant, hospitality and logistics

⁴⁷⁵ EICHHORST W., HINTE H., RINNE U. and TOBSCH, V. (2016), *How Big is the Gig? Assessing the Preliminary Evidence on the Effects of Digitalization on the Labor Market*, op. cit., p. 1.

⁴⁷⁶ ARTHURS H. W. (2017), *The false promise of the Sharing Economy*, Paper presented at the LLRN 3rd Conference, Labour Law Research Network, Toronto 25-27 June 2017.

⁴⁷⁷ PURCELL K. (2000), *Changing Boundaries in Employment and Organizations* in EAD. (Ed.), *Changing Boundaries in Employment*, Bristol, p. 24.

⁴⁷⁸ See BOLTANSKI L. and CHIAPELLO E. (2005), *The new spirit of capitalism*, New York and London, p. 217 (drawing a parallel between mutations in the organisation and new contractual forms). See also CHERRY M. A. (2006), *No Longer Just Company Men: The Flexible Workforce and Employment Discrimination in Berkeley J. Emp. & Lab. L.*, 27, p. 213 (arguing that "[f]lexibility in the employee-employer relationship is the touchstone of the workplace, and the new motto is 'no long term'"). The expression "no long term" is borrowed from SENNETT R. (1998), *The corrosion of character: The personal consequences of work in the new capitalism*, New York and London, pp. 5, 9-10 and 24 (demonstrating that insecurity pushes workers to replace loyalty with an "armor" of detachment that erodes commitment to jobs and firms). As described in the previous section, flexible arrangements have replaced organisations allowing for mass production.

⁴⁷⁹ See THORNLEY C., JEFFERYS S. and APPAY B. (Eds.) (2010), *Globalization and precarious forms of production and employment: Challenges for workers and unions*, Cheltenham, UK and Northampton, MA.

⁴⁸⁰ See FREDMAN S. (1997), *Labour law in flux: the changing composition of the workforce* in *Industrial Law Journal*, 26(4), p. 338 ff.

⁴⁸¹ See EUWALS R. and HOGERBRUGGE M. (2006), *Explaining the Growth of Part-time Employment: Factors of Supply and Demand in Labour*, 20(3), pp. 533-557.

business, characterised by the need to provide services outside of standard working hours and to deal with peaks at certain times of the year and during holiday periods.

While “Industry 4.0” and, more in general, smart factories in the (“advanced”) manufacturing sector provide the bedrock for a new production system based on low-cost prototyping (internal flexibility), the “gig economy” model could represent an effective application of the external flexibility features by superseding traditional notions of wage, working hours, job demarcations thanks to new digital technologies, lower cost of infrastructure and advancements in logistics and transportation⁴⁸². This basic organisational principle underlies a significant part of platform-coordinated working arrangements: shifting the cost of uncertainty in demand, what used to be defined “business risk”, from the enterprise on to the worker’s shoulders, by transforming fixed into variable costs (i.e. financial flexibility⁴⁸³). Admittedly, firms are increasingly turning to contingent work not only to neutralise financial and competitive pressures, but also in response to regulatory constraints and incentives. Similarly, this practice may be driven by the pursuit to reduce or circumvent the costs associated with the application of labour law, collective bargaining and social security law (flexibility as non-compliance).

In parallel with these explanations, non-standard work is also closely related to notions of partial and selective “de-regulation”⁴⁸⁴ and “flexicurity”, meaning a set legislative tactics aimed at getting people into work, irrespective of the nature of the contract. These reforms have often pursued the goal of increasing the employment rate at the expense of quality jobs, on the assumption that the loosening of labour law (for instance, existing unfair dismissal laws) and reductions in social protection for workers could be counterbalanced by the people’s increased possibility of finding a work and by a growing sense of security deriving from a more buoyant and dynamic

⁴⁸² Within this stylised framework, it is worth noting that functional flexibility, including organisational mechanisms and work flow innovations, is “premised on securing the deeper engagement of core workers, on continually training them, and on exploiting their accumulated knowledge and experience” by reshaping the function of supervision and management. See SMITH V. (1997), *New forms of work organization in Annual Review of Sociology*, 23(1), p. 316. See also WOOD S. (Ed.) (1989), *The transformation of work? Skill, flexibility and the labor process*, Boston, MA.

⁴⁸³ The unintended consequence of this practice might be a restriction in the firms’ ability to counter changing markets.

⁴⁸⁴ See also ARNOLD D. and BONGIOVI J. R. (2013), *Precarious, informalizing, and flexible work: Transforming concepts and understandings in American Behavioral Scientist*, 57(3), pp. 289-308. ACCORNERO A. (2001), *La «società dei lavori» in Sociologia del lavoro*, 80, pp. 49-56, see also ID. (2001), *Pezzi di lavoro in il Mulino*, 50(1), p. 102-114.

labour market (i.e. employability)⁴⁸⁵. The dual approach of flexicurity, a linguistic blend of “flexibility” and “security”⁴⁸⁶, presupposes that alternatives to the SER are valid and legitimate. This is justified on the basis that some workers and employers may prefer the flexibility associated with non-standard forms.

To conclude, with regard to legal interventions, the dominant regulatory tool has consisted above all in statutes creating a duty of “pro rata equal treatment principle” between standard and non-standard forms of employment⁴⁸⁷. Contrariwise, it has rightly been mentioned that making certain non-standard forms more standard may simply boost the development of other forms of atypical work in their place⁴⁸⁸. Viewed in this way, regulation is at the heart of the emergence and spread of non-standard work in most countries. By giving its “blessing” to alternative forms thanks to specific incentives for enterprises, recent policies did not just condone but encouraged – either purposefully or unintentionally – the avoidance of the

⁴⁸⁵ For an analysis of the small but positive net effect on employment rate, see COURNÈDE B., DENK O., GARDA P. and HOELLER P. (2016), *Enhancing Economic Flexibility: What is in it for Workers?*, OECD Economic Policy Papers, No. 19. See also BOERI T., CAHUC P. and ZYLBERBERG A. (2015), *The Costs of Flexibility-Enhancing Structural Reforms: A Literature Review*, OECD Economics Department Working Papers, No. 1227.

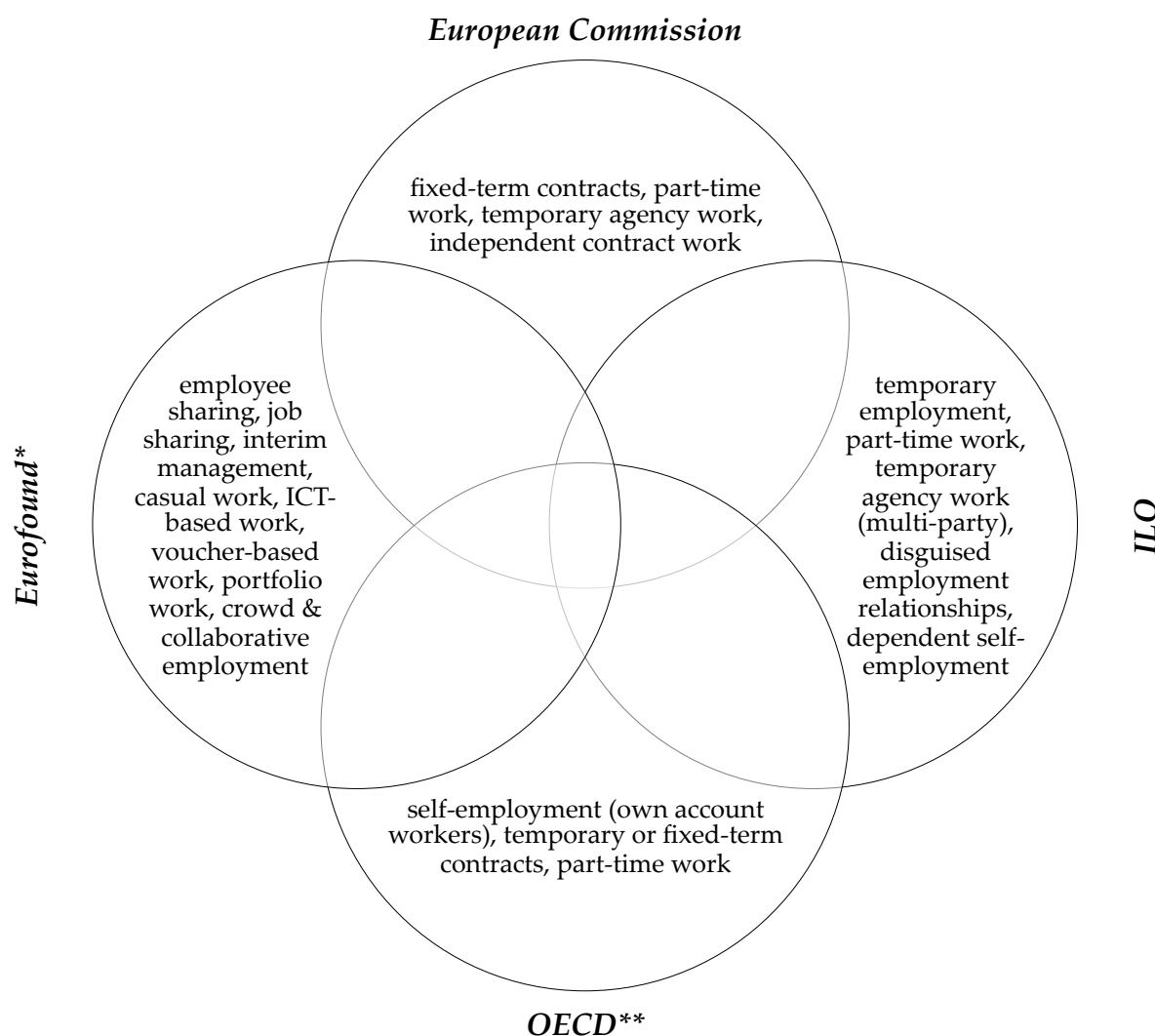
⁴⁸⁶ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Towards Common Principles of Flexicurity: More and Better Jobs through Flexibility and Security, Brussels, 29.6.2007, COM(2007) 359 final (<http://eur-lex.europa.eu/legal-content/eN/ALL/?uri=CeLeX%3A52007DC0359>). For a comprehensive overview, see BEKKER S. (2012), *Flexicurity: The Emergence of a European Concept*, Cambridge, UK.

⁴⁸⁷ In 2011 the European Commission called for reforms “to reduce over-protection of workers with permanent contracts, and provide protection to those left outside or at the margins of the job market”. See EUROPEAN COMMISSION (2011), *Annual Growth, Survey: advancing the EU's comprehensive response to the crisis*, COM(2011) 11 final.

⁴⁸⁸ Other strategies have been proposed such as reinforcing the role of collective bargaining. JEFFERY M. (1998), *Not really going to work? Of the directive on part-time work, ‘atypical work’ and attempts to regulate it*, op. cit., p. 212 (arguing that “a piecemeal approach to ‘atypical work’ may be like plugging only some of the holes in a sinking boat”). For a critical opinion, see DAVIES A. C. L. (2013), *Regulating Atypical Work: Beyond Equality* in COUNTOURIS N. and FREEDLAND M. (Eds.), *Resocialising Europe in a Time of Crisis*, Cambridge, UK, p. 232 (arguing that, “when designing regulation applicable to one form of non-standard work, it is important to consider how this may affect the attractiveness to employers of the newly regulated form compared to others”). According to Davies, “the equal treatment principle does not address the specific problems faced by atypical workers, so it may create the impression that ‘something is being done’ when in fact very little is being done”. DAVIES A. C. L. (2013), *EU Labour Law*, Cheltenham, UK and Northampton, MA, p. 183. See also BERCUSSON B. and ESTLUND C. (Eds.) (2008), *Regulating labour in the wake of globalisation: new challenges, new institutions*, Oxford, UK and Portland, OR.

regulations and the undermining of the general system of labour law and social security law (i.e. legislative precariousness).

Figure 2: Different definitions for non-standard forms of employment⁴⁸⁹



⁴⁸⁹ Figure 2: Author's own elaboration. There is no universally accepted definition of NSFE. See EUROPEAN COMMISSION (2015), *Employment and Social Developments in Europe 2014*, Luxembourg; INTERNATIONAL LABOUR OFFICE (2016), *Non-standard employment around the world: Understanding challenges, shaping prospects*, op. cit., p. 2; OECD (2016), *New forms of work in the digital economy*, Digital Economy Papers No. 260, p. 17. (*) Note that Eurofound's list contains only "new forms of work". See EUROFOUND (2015), *New forms of employment*, Luxembourg (conducting a "mapping exercise" resulting in the identification of nine distinct forms of employment as new since 2000). (**) In a different report, OECD uses the expression non-regular employment "to cover all types of employment that do not benefit from standard statutory employment protection" (temporary employment (fixed-term, TAW and casual work) and dependent self-employment). See OECD (2014), *OECD Employment Outlook 2014*, Paris, p. 146.

2.1. Self-employment as an escape from labour law's grasp. An attempt to dispel the conceptual fog surrounding the "borders" between categories.

To begin with, according to the classification provided in the picture above, self-employment should be listed as one of the numerous non-standard forms of work that, in spite of their residual characterisation, have become an entrenched feature of modern industrial relations⁴⁹⁰. This paragraph will therefore complete the exploration of such variegated selection in an attempt to dispel the conceptual fog surrounding the "borders" between categories⁴⁹¹, by addressing the topic of the "weak" variants of non-employment templates. A preliminary remark must be the distinction of two different phenotypes that are often overlapping from a material point of view but should be considered separately in strictly legal terms. Existing academic literature has commonly labelled these intermediate zones in the "grey area", identifying "work that lie[s] half-way between work under an employment contract and self-employment"⁴⁹², as (i) "economically dependent work" and (ii) "bogus self-employment"⁴⁹³.

It follows that one of the most challenging missions of employment law is to draw a line separating the genuinely self-employed workers and "those requiring protection [...], bringing the latter group within its protective scope"⁴⁹⁴. Broadly speaking, the indirect assumption of this binary divide, a basic approach in many countries, is that labour law is based on the need to protect employees, viewed as the weak party within the employment contract⁴⁹⁵, while affording employers with a

⁴⁹⁰ For an extensive analysis on this heterogeneous group of workers, see BURKE A. (Ed.) (2015), *The Handbook of Research on Freelancing and Self-employment*, Dublin.

⁴⁹¹ The expression is borrowed from MUEHLBERGER U. (2007), *Dependent Self-Employment: Workers on the Border between Employment and Self-Employment*, New York.

⁴⁹² PERULLI A. (2003), *Economically dependent/quasi-subordinate (parasubordinate) employment: legal, social and economic aspects*, Study for the European Commission, Brussels.

⁴⁹³ For the Italian context, see SANTORO-PASSARELLI G. (2013), *Falso lavoro autonomo e lavoro autonomo economicamente debole ma genuino: due nozioni a confronto* in *Riv. it. dir. lav.*, 1, pp. 109-112.

⁴⁹⁴ PRASSL J. and RISAK M. (2016), *Uber, Taskrabbit, and Co.: Platforms as Employers – Rethinking the Legal Analysis of Crowdfork* in *Comp. Lab. L. & Pol'y J.*, 37(3), p. 633 (arguing that "the distinction becomes very hard when more than two parties are involved" since the analytical approach has been conceptualised "in the context of bilateral employment relationships"). See also DAVIES P. L. (2000), *Lavoro subordinato e lavoro autonomo* in *Dir. rel. ind.*, 2, pp. 207-216.

⁴⁹⁵ EIRO (2002), "Economically Dependent Workers". *Employment Law and Industrial Relations*, European Industrial Relations Observatory, available at <https://goo.gl/QpcoVN>. In many jurisdictions, the notion refers *a contrario* to statutes regulating the contract of employment: independent work is defined as work "performed without subordination".

broad array of managerial prerogatives. Conversely, self-employed workers are perceived as “capable of autonomously bargain the conditions of their contract, without the heteronomous intervention of the lawmaker”⁴⁹⁶, and thus subject to market forces⁴⁹⁷. They assume all the risks and benefits of this situation including the freedom to self-determine the modalities of execution of the service⁴⁹⁸. Despite these premises, the fact is that the new geography of jobs is rugged and varied, and platform-based labour is just a part of a seismic shift in how jobs are (re)structured.

Accordingly, the success of the “new generation self-employment”, estranged from the ideal-type⁴⁹⁹, can be explained as a result of dislocating entrepreneurial practices that seek greater numerical flexibility and, in many cases, a significant

⁴⁹⁶ GRAMANO E. and DEL CONTE M. (forthcoming), *Looking to the other side of the bench: the new legal status of independent contractors under the Italian legal system* in *Comp. Lab. L. & Pol’y J.* Available at SSRN: <https://ssrn.com/abstract=3109978>.

⁴⁹⁷ BRODIE D. (2005) in *Employees, workers and the self-employed* in *Industrial Law Journal*, 34(3), p. 259 (explaining how “[a] ‘genuine’ relationship of self-employment involves a contract that is purely commercial, entered into at arms length [...]”).

⁴⁹⁸ For an influential analysis of the Italian model, see PERULLI A. (1996), *Il lavoro autonomo: contratto d’opera e professioni intellettuali*, Milano. Moreover, in many jurisdiction legislative provisions and prevailing case law allow for every kind of labour for which payment is calculated, whether intellectual or manual, to be carried out in either as subordinate (i.e. salaried) employment or as self-employment. The conclusive element in the distinction between the two categories is not the type of profession, but the way in which it is completed. (Cass., labour section, 03 April 2000, No. 4036). For the Italian case, see DEL CONTE M. and TIRABOSCHI M. (2004), *Diversification of the Labour Force: The Scope of Labor Law and the Notion of Employee: Italy* in ARAKI T. and OUCHI (Eds.), *Labour Law in Motion. Diversification of the Labour Force & Terms and Conditions of Employment*, Bulletin of Comparative Labour Relations Series, 53, The Hague, The Netherlands, p. 28. It is worth noting that – in many systems, including in the Italian one – the absence of financial risk is a primary criterion for determining the employment relationship. The Italian Supreme Court has indicated that, in order “to exclude the subordination in the employment relationship performed on an ongoing continuous basis with another subject, it is necessary for the Court to ascertain the financial risk for the worker; for example, that the purchase or use of materials required to carry out the work remains the responsibility of the respective worker, or that the relationship with third users is created and managed by the respective worker” (Cass., labour section, 8 August 2008, No. 21380). As a matter of fact, courts may ascertain “the value of a worker’s investment in his/her business”. A factor relevant to this test is, “such that the greater the investment value, the greater the likelihood that the worker is conducting a separate business and is therefore a [self-employed worker]”. Courts have concentrated on comparing “investments in physical assets related to intellectual/human capital”. See INTERNATIONAL LABOUR OFFICE (2013), *Regulating the employment relationship in Europe: A guide to Recommendation No. 198*, Geneva, Switzerland, p. 49.

⁴⁹⁹ See also BÖGENHOLD D., KLINGLMAIR R. and KANDUTSCH F. (2017), *Solo Self-Employment, Human Capital and Hybrid Labour in the Gig Economy in Foresight and STI Governance*, 11(4), pp. 23-32.

reduction in labour-related costs⁵⁰⁰. In the light of the above, the division between the two principal types is apparently becoming less marked. Concomitantly, defining the legal status of self-employed workers has become crucial and contentious⁵⁰¹. Thus, labour scholars and judiciaries face a nearly impossible assignment: crystallising a multifaceted reality in allegedly strict classifications for the purpose of providing “a clear-cut and commonly accepted definition” of the two categories and allocating entitlement accordingly⁵⁰².

As rightly pointed out, “a key feature of digital work platforms is that they attempt to minimize the outside regulation of the relationship between employer and employee”⁵⁰³. In the platform economy, independent work or intermediate categorisations, where applicable, are the norm. It can be argued that one of the most significant transformative impacts is the acceleration of the shift of activities “that traditionally relied on the employment relationship into activities of self-employment”⁵⁰⁴. Yet in many cases the practical way in which the jobs get done may result in the partial loss of autonomy, in terms of when and where to provide the

⁵⁰⁰ Collins offered a prominent representation of the challenge to labour law posed by independent contractors and by the breakdown of internal labour markets. Employers may avoid four different types of labour-related costs thanks to external contracting: (i) “quasi-fixed costs associated with employment, such as hiring and training”, (ii) “lower wage rates outside the firm, (...) taking advantage of non-union rates, regional differences and labour market segmentation”, (iii) “costs involved in compliance with employment protection rights”, and finally (iv) “the avoidance of long-term contractual relations with members of the organisation” thanks to the a “stricter contractual controls over performance” due to the increased contractual power. COLLINS H. (1990), *Independent contractors and the challenge of vertical disintegration to employment protection laws* in *Oxford J. Legal Stud.*, 10(3), pp. 356-360. See also PEDRAZZOLI M. (1998), *Dai lavori autonomi ai lavori subordinati* in *Giorn. dir. lav. rel. ind.*, 3, p. 545; PERRAUDIN C., THEVENOT N. and VALENTIN J. (2013), *Avoiding the employment relationship: Outsourcing and labour substitution among French manufacturing firms, 1984–2003* in *International Labour Review*, 152(3-4), pp. 525-547.

⁵⁰¹ FUDGE J. (2003), *Labour protection for self-employed workers* in *Just Labour*, 3, pp. 36-45.

⁵⁰² PEDERSINI R. and COLETTI D. (2009), *Self-employed workers: industrial relations and working conditions*, European Foundation for the of Living and Working Conditions, Dublin, p. 14 (listing a number of complications and arguing that “in all of the countries covered by the study, distinct definitions of self-employed worker exist according to various regulatory domains: self-employed worker is defined in various ways in employment law, tax law, trade law or social security law”).

⁵⁰³ It is against this background that platforms allow contracting out work and establishing business relationships that are constructed on both relational contracts and hierarchical structures, as shown in the previous section. GRAHAM M., HJORTH I. and LEHDONVIRTA V. (2017), *Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods* in *Transfer: European Review of Labour and Research*, 23(2), pp. 135-162.

⁵⁰⁴ DRAHOKOUPIL J. and FABO B. (2016), *The platform economy and the disruption of the employment relationship*, op. cit., p. 4.

work, thus making platform-coordinated arrangements more resembling to direct employment (with ever greater degrees of control and corporate discipline)⁵⁰⁵. At the same time, by bringing together demand and supply, platforms may facilitate the canvassing of clients, contracts and assignments thanks to search tools: this clearly provides a strong incentive for authentic self-employed workers to invest in this specific infrastructure. In such circumstances, it goes without saying that there is a potential trend that more and more activities once carried out in firms by workers with employment status will now be completed by self-employed workers under platform-based arrangements. The preponderance of evidence suggests this trend will continue in the short future. In short: if the boundaries of the firm have become porous, equally permeable seems to be the boundary between employment and self-employment⁵⁰⁶. Whether this is a liberating new dimension or rather a new form of precariousness is at present still a matter of debate⁵⁰⁷.

In order to place the phenomenon in its proper context, it has to be noted that the self-employed work, in turn, forms a very heterogeneous group⁵⁰⁸; therefore, it may

⁵⁰⁵ LINDER M. and HOUGHTON J. (1990), *Self-employment and the Petty Bourgeoisie: Comment on Steinmetz and Wright in American Journal of Sociology*, 96(3), p. 727 ff. (arguing that some of the growth of US self-employment derives from “unilaterally imposed employer scams”). See also LINDER M. (1999), *Dependent and Independent Contractors in Recent US Labor Law: An Ambiguous Dichotomy Rooted in Simulated Statutory Purposelessness in Comp. Lab. L. & Pol’y J.*, 21(1), pp. 187-230.

⁵⁰⁶ EICHHORST W. and RINNE U. (2017), *Digital Challenges for the Welfare State*, IZA Policy Paper, No. 134, p. 2 (arguing that “the categories of self-employed and dependent employees appear not sufficient to properly classify and treat platform workers, the concept of a “firm” cannot be easily applied to virtual companies that operate in the cloud, and also national and country-specific policy approaches are substantially challenged”).

⁵⁰⁷ BUSCHOFF K. S. and SCHMIDT C. (2009), *Adapting labour law and social security to the needs of the ‘new self-employed’ – comparing the UK, Germany and the Netherlands in Journal of European Social Policy*, 19(2), pp. 147-159.

⁵⁰⁸ See FUDGE J. (2006), *Fragmenting work and fragmenting organizations: The contract of employment and the scope of labour regulation*, op. cit., p. 621 (arguing that “the self-employed do not make up an homogeneous category: they range from the high-income professional who employs others to the child-care provider who works out of her home and employs no one”). See also LYON-CAEN G. (1990), *Le droit du travail non salarié*, Paris, p. 301 (advancing a proposal on the “*droit de l’activité, qu’elle soit*”). However, “the independent workforce share looks remarkably similar across countries”. By surveying the United States and UK, Germany, France, Spain, and Sweden, a recent study identifies four key segments of self-employed workers. These include: (i) “free agents” who voluntarily choose this form and derive their primary income from it (accounting for thirty per cent), (ii) “casual earners” using independent work for supplemental income and by choice (approximately 40 per cent), (iii) “reluctant” (involuntarily) self-employment workers who make their primary living from independent work (making up 14 per cent), (iv) “financially strapped” workers who do supplemental independent work out of necessity (16 per cent). Unfortunately, vendors, subcontractors, self-employed people with employees and people on continuously renewed short-term contracts (defined

be difficult to get a full picture of its variety as data are unable to reveal the richness within this group, provided that the individuals themselves are not always aware of their status and its designation⁵⁰⁹. Following an objective assessment, self-employment incorporates two main subcategories: self-employed with employees and self-employed without employees. For obvious reasons, the analysis will be focused mainly on own-account workers without employees. From a theoretical point of view, instead, key features of authentic self-employment are: irreplaceability, determination of the task, duration in time, risk-taking, and the transformation of the personal work into *opus perfectum* (that is “piece of work” understood as final result)⁵¹⁰.

That having been said, recent statistics on sizes of the phenomenon have showed that the “independent workforce” represents between 20 and 30% of the working-age population in the United States and Europe, up to 162 million individuals in absolute terms⁵¹¹. Moreover, the same survey reveals that 15% of self-employed workers have used digital platforms to earn income⁵¹², although only 6% of them used a labour platform as opposed to capital and rental one (9 million in the USA and EU-15). Examining the reasons behind the decision to be self-employed, according to the

“fissured work”) do not fit in the definition taken into account, “[b]ecause most of these workers are traditional employees of subcontracting companies”. For a compelling illustration, see MANYIKA J., LUND S., BUGHIN J., ROBINSON K., MISCHKE J. and MAHAJAN D. (2016), *Independent work: Choice, necessity, and the gig economy*, McKinsey Global Institute.

⁵⁰⁹ EUROFOUND (2017), *Sixth European Working Conditions Survey – Overview report (2017 update)*, Publications Office of the European Union, Luxembourg, p. 21. The same report shows that “[t]he incidence of self-employment, 14% in 2016, has remained stable during the crisis and subsequent recovery in the EU”; at the same time, since 2008, “[t]he number of self-employed people without employees has remained stable in absolute terms (around 21.5 million) while their share of total employment increased slightly. By contrast, the number of self-employed workers with employees has decreased by almost a million since the start of the crisis”. The differences between some Member States and others are considerable, “self-employment ranged from less than 8% of total employment in Denmark to more than 20% in Italy and Greece in 2016” (p. 23).

⁵¹⁰ RAZZOLINI O. (2009), *The Need to Go Beyond the Contract: Economic and Bureaucratic Dependence in Personal Work Relations*, op. cit., p. 270.

⁵¹¹ According to Eurostat Labour Market data, self-employed workers are currently estimated at under 14 per cent in Europe. See also HATFIELD I. (2015), *Self-employment in Europe*, Institute for Public Policy Research, London.

⁵¹² See FARRELL D. and GREIG F. (2016), *Paychecks, Paydays, and the Online Platform Economy: Big Data on Income Volatility*, JP Morgan Chase Institute (finding that only about 4 per cent of the working-age population has used “gig economy” platforms to generate income).

European Working Conditions Survey carried out by the Eurofound⁵¹³, self-employment has been considered a viable option as, for one in five self-employed workers (18%), there were no other work alternatives. However, the proportion of the “no other alternatives” group rises to nearly one in four for the self-employed without employees (23%) – compared to 9% for the self-employed with employees⁵¹⁴. This is worrisome because, as a recent study commissioned by the European Parliament shows, the likelihood of ending up in precarious employment is higher for those who did not choose voluntarily to become self-employed⁵¹⁵.

Theoretical and empirical research on the determinants of self-employment shows that factors such as labour market and organisational changes, the current situation of a high rate of youth unemployment, domestic private savings of individuals, new demographic developments, increased migratory flows and the tax and social security systems are crucial in influencing the number of self-employed workers⁵¹⁶. In recent years, self-employment has begun to be seen as an important “potential source of new jobs” and a way of nurturing the entrepreneurial spirits in countries where large and increasing unemployment has emerged as a constant⁵¹⁷. That notwithstanding, it is worth putting aside the cultural and even anthropological stereotypes of the risk-taking ideology selling the (misleading) representation of independent workers who enjoy rewarding and satisfying flexibility together with high profits⁵¹⁸. On the contrary, the typical independent worker whose activities are mediated by platforms is less fortunate and stuck in precarious and dependent work

⁵¹³ EUROFOUND (2017), *Sixth European Working Conditions Survey – Overview report (2017 update)*, Publications Office of the European Union, Luxembourg.

⁵¹⁴ For the sake of completeness, it should be stated that 61% of self-employed workers have opted for this employment status through personal preference, the figure is even higher for the self-employed with employees (71%).

⁵¹⁵ Due to its ambiguous nature, this group of worker has been defined “para-autonomous” (in opposition to “para-subordinate”). See GALANTINO L. (1992), *Diritto del lavoro*, Torino, p. 87.

⁵¹⁶ EICHHORST W., BRAGA M., FAMIRA-MUHLBERGER U., GERARD M. et al. (2013), *Social protection rights of economically dependent self-employed workers*, European Parliament Directorate General for Internal Policies, p. 18.

⁵¹⁷ See PIETROBELLI C., RABELLOTTI R. and AQUILINA M. (2004), *An empirical study of the determinants of self-employment in developing countries* in *Journal of International Development*, 16(6), pp. 803-820.

⁵¹⁸ It is often thought that self-employment is connected to a certain set of attitudes and values, encompassing “individualism, self-reliance and risk-taking, attitudes that have been found among self-employed workers, persons who have just left self-employment and persons who consider becoming self-employed”. ENGBLOM S. (2003), *Self-employment and the personal scope of labour law: comparative lessons from France, Italy, Sweden, the United Kingdom and the United States*, Doctoral Dissertation, p. 27.

situations. In many cases, self-employment ceases to be an entry-point into personal fulfilment and economic stability. Rather, behind the facade of autonomy and flexibility, one of the secrets of the success of this model “lie[s] primarily in passing some of the risks of the enterprise onto the worker”⁵¹⁹. Some types of small businesspersons and independent professionals belong to this category, which does not fit with an image of entrepreneurship.

In addition to the need for a sharper status definition, more and more workers seem to fall into an in-between category. Atypical work formats have recently emerged that do not entirely correspond to traditional prototype of self-employment or to proper subordinate employment. Some situations are more *like* those of employees in certain respects, while in others situations are similar to the type of the self-employed. International organisations like the ILO are particularly sensitive about this issue and stress the urgency of detecting and eradicating the blurring of boundaries and abusive forms of employment. Already in 1997 a report sketched the situation in which these relationships become even more critical: “specific problems of social and legal protection may arise when job contracting is performed by individual subcontractors whose relationship with user enterprises differs from that existing in truly independent businesses”. Moreover, “[s]uch individual workers may carry out certain work or perform services for a user enterprise on a permanent or periodical basis and may, to a certain extent and in different respects, be dependent on it. The user enterprises may also exercise control over the performance of services provided to them by these individual workers”⁵²⁰. This is why institutions and inspectorates are called upon to “patrol” this border.

The scope of this study does not allow to go too much into detail on the topic of genuinely self-employed workers, rather the focus will be on the intermediate area,

⁵¹⁹ See FREDMAN S. (2006), *Precarious Norms for Precarious Workers* in FUDGE J. and OWENS R. (Eds.), *Precarious Work, Women and the New Economy*, Oxford, UK, p. 187. This leads to “tension between the process of new labour market differentiation – often justified by social innovation or modernisation – and the objective of a fair social security system” according to SPASOVA S., BOUGET D., GHAILANI D. and VANHERCKE B. (2017), *Access to social protection for people working on non-standard contracts and as self-employed in Europe: A study of national policies*, op. cit., p. 15. See also BÖGENHOLD D., KLINGLMAIR R. and KANDUTSCH F. (2018), *Self-employment on the way in a digital economy: A variety of shades of grey*, IfS Discussion Paper No. 01, p. 12 (arguing that “[f]indings reveal that the life and work situation of self-employed and liberal professions cannot be interpreted in simple black and white schemes”).

⁵²⁰ INTERNATIONAL LABOUR ORGANIZATION (1997), *Contract Labour – Report VI(1) to the 85th Session of the International Labour Conference*, Geneva, Switzerland, p. 12 (arguing that “[i]n spite of their formal independence, the latter actually has a status which is very close to that of a traditional employment relationship”).

particularly on those described in terms of being “non-core workers”⁵²¹. But a few points are worth noting. Building on a seminal distinction proposed by PERULLI, it should be said that the term “grey area” can be interpreted in two different ways: (i) “to describe those types of work that do not easily fit into the binary system as, objectively speaking, they display some employment and some self-employment characteristics” (that is, objectively ambiguous employment relationships)⁵²², and (ii) “to describe certain types of work which appear to be self-employment but which, in fact, are subordinate employment” (improperly classified workers). In most cases, “economically dependent” and “bogus” self-employment share working conditions reflecting those of employees rather than of the self-employed workers or, at least mix two apparently opposite characteristics: flexibility and (inter)dependence. But these commonalities aside, each expression emphasises a different “prevailing feature”. In many countries, the first group represents a positive law definition for an intermediate category (often singled out as a subset of self-employment), while the second formula relates to “pathological” cases of evasion. When it comes to “false self-employment”, the illicit and premeditated aim is to conceal an employment relationship and circumvent statutory or collectively agreed provisions, payroll taxes and social security contribution⁵²³. It should be clarified that “disguised employment relationships” merely constitutes a case of noncompliance, rather than a genuine category or even a province in the “grey area”. Although this “item” has been included in the list of NSFEE for the sake of convenience, such a form does not represent a genuine depart from the SER, but rather a methodical attempt of just masking it. It should be noted that, when such a situation occurs, it is important to restore the proper classification for those workers wrongfully denied status.

⁵²¹ ATKINSON J. (1987), *Flexibility or fragmentation? The United Kingdom Labour Market in the Eighties in Labour and Society*, 12(1), p. 87.

⁵²² According to the ILO, this “is not a case of a deliberate attempt to disguise it, but rather one of genuine doubt as to the existence of an employment relationship”. In many cases, “especially in work environments affected by major changes”, employment arrangements may differ much from the traditional pattern of the employment relationship or the main factors that characterise the employment relationship may not be readily visible. To successfully overcome this problem, there should be a strategy “aimed at clarifying, supplementing and stating as precisely as possible the scope of the law” (p. 32). INTERNATIONAL LABOUR ORGANIZATION (1997), *Contract Labour – Report VI(1) to the 85th Session of the International Labour Conference*, op. cit., p 11 and p. 15.

⁵²³ THÖRNQUIST A. (2015), *False Self-Employment and Other Precarious Forms of Employment in the ‘Grey Area’ of the Labour Market in Int’l J. Comp. Lab. L. & Ind. Rel.*, 31(4), p. 412 (“false self-employment” could prove to be a more appropriate expression).

In addition to interventions in a “proactive/protective sense”⁵²⁴, as has been well documented, the state ends up exacerbating inequalities among different groups of workers – often working side by side – in terms of rights, benefits, and protections they are or should be entitled to⁵²⁵. As noted by BISOM-RAPP et al., the role of the state – which can shape labour markets and industrial relations in its multiple roles⁵²⁶ – is somehow “contradictory” as it first creates contested territories, only later and in some cases does it “take steps to lessen precariousness, as when it prosecutes employee misclassification or bogus self-employment”. There is clearly a need for a more systematic approach in order to avoid a repeat of such paradoxical situation where “grey zone resistance coexist[s] with grey zone complicity”⁵²⁷. However, what truly matters is that these conflicting impulses undermine the credibility of the regulatory system and of the authorities’ capacity to apply the rules. As a consequence, trust in the legal as well as the economic system in all its parts suffers if national policies address ineffectively the difference between fraudulent practices and genuine civil and commercial law relationships⁵²⁸.

2.1.1. *Quasi-subordinate and economically dependent self-employment.*

It may be clear from the above discussion that, through action and inaction, legislatures and governments have been partly responsible for a relaxation of the rigid employee/self-employed dichotomy. “Economically dependent workers” might be defined as those self-employed persons situated in an intermediate area between labour law and private or commercial law. This characterisation is rather vague and

⁵²⁴ Research shows that collective bargaining may limit precarious work and “the state can support collective bargaining through union recognition laws and the extension of collective agreements to unorganised sectors of the economy”. See GRIMSHAW D., JOHNSON M., RUBERY J. and KEIZER A. (2016), *Reducing precarious work protective gaps and the role of social dialogue in Europe*, available at <https://goo.gl/xBHddy>.

⁵²⁵ Likewise, it has been argued that the presence of contractors might issue a gentle reminder about what “may happen to employees’ jobs if they fail to meet expectations”. CROWLEY M., TOPE D., CHAMBERLAIN L. J. and HODSON R. (2010), *Neo-Taylorism at work: Occupational change in the post-Fordist era in Social Problems*, 57(3), p. 425.

⁵²⁶ O’SULLIVAN M., TURNER T., LAVELLE J., MACMAHON J., MURPHY C., RYAN L., GUNNIGLE P. and O’BRIEN M. (2017), *The role of the state in shaping zero hours work in an atypical liberal market economy in Economic and Industrial Democracy*, 38(2), pp. 256-270 (focusing on the Irish context).

⁵²⁷ BISOM-RAPP S. and COIQUAUD U. (2017), *The Role of the State towards the Grey Zone of Employment: Eyes on Canada and the United States*, in *Revue Interventions économiques in Papers in Political Economy*, 58, p. 15.

⁵²⁸ INTERNATIONAL LABOUR OFFICE (2013), *Regulating the employment relationship in Europe: A guide to Recommendation No. 198*, Geneva, Switzerland, p. 22.

controversial⁵²⁹. For our immediate purposes, it is convenient to focus on “quasi-subordination”, described as the hallmark of those working relationships in which workers are classified under a contract different from a contract of employment but perform services predominantly or exclusively for one client. In this case, workers depend on the given principal for their income and may receive direct instructions on how the work has to be completed. Moreover, they typically have the same fiscal and social security regimes as for the other self-employed, which is typically less oppressive for their clients. As already mentioned in the previous section, looking at the organisational logic, these dependent forms of self-employment are based on both relational contracts and hierarchical structures. In several countries, “[i]nstead of an ‘all or nothing’ approach, it is acknowledged (...) that some workers present only *some* characteristics of “employees” but not others, and that it is justified to apply only *some* labor laws to them”⁵³⁰: a floor of rights specifically has been “selectively extended” to this group of vulnerable workers.

⁵²⁹ Dependent forms of self-employment vary significantly depending on sectoral differences peculiarities and heterogeneous conditions of industries. Understandably, both the degree of economic dependency and the extent of “coordination prerogatives” show great differences. See SCIARRA S. (2004), *The Evolution of Labour Law (1992-2004)*, General Report. Project for the European Commission, p. 21 ff. (emphasising the difficulty in assessing dependent forms of self-employment, “a phenomenon which is still largely undefined” because of its complexity and ambiguity).

⁵³⁰ DAVIDOV G., FREEDLAND M. and KOUNTOURIS N. (2015) *The Subjects of Labor Law: “Employees” and other Workers* in FINKIN M. W. and MUNDLAK G. (Eds.), *Comparative Labor Law. Research Handbooks in Comparative Law Series*, Cheltenham, UK, p. 128. The ILO focuses on “workers who provide work or perform services to other persons within the legal framework of a civil or commercial contract, but who in fact are dependent on or integrated into the firm for which they perform the work or provide the service in question”. See INTERNATIONAL LABOUR ORGANIZATION (2003), *The Scope of the Employment Relationship*, Report V, International Labour Conference, 91st Session, Geneva, Switzerland, p. 9. The OECD Employment Outlook (2014) defines dependent self-employed workers as “independent contractors with no employees, who either autonomously produce and sell goods or engage with their clients in contract for services, regulated by commercial law, with limited autonomy and often closely integrated into its organisational structure”, see OECD (2016), *New forms of work in the digital economy*, op. cit., p. 150. The Supiot report concentrates on self-employed workers “who cannot be regarded as employed persons, but are in a situation of economic dependence vis-à-vis a principal”. The author argues that these workers “should be able to benefit from the social rights to which this dependence entitles them” (p. 220). See SUPIOT A. (2001), *Beyond employment: Changes in Work and the Future of Labour Law in Europe*, Report prepared for the European Commission, Oxford, UK, pp. 3-6 and 220. See also VOSKO L. F. (2011), *Precarious Employment and the Problem of SER-Centrism in Regulating for Decent Work* in LEE S. and MCCANN D. (Eds.), *Regulating for Decent Work: New Directions in Labour Market Regulation*, London and Geneva, pp. 58-90. For a critical opinion, see ROCCELLA M. (2008), *Lavoro subordinato e lavoro autonomo, oggi* in *Quaderni di Sociologia*, 46, pp. 71-112 (arguing that expressions such as “next generation self-employment” or “economically dependent work” and alike are a dangerously misleading and should be avoided when considering applicable national law).

As envisioned by SCIARRA, the model of economically dependent work might attract “new forms of employment, all similarly characterised by the non-continuity of employment, the low level of earnings and the lack of precise prospects in creating career paths”⁵³¹, thus marking a fundamental break with the traditional notion of quasi-dependent work in the pre-digital age. Understandably, the emergence of platform-based labour makes these discussions even more relevant and urgent, as many elements defining such intermediate categories (a functional link with the principal’s business organisation, a coordination mainly arranged by the client, economic or organisational dependence as opposed to personal dependence⁵³²) may be easily found in a common relationship between an *Uber*-like firm and its fleet of “providers”⁵³³. This applies all the more so to those relationships which are shaped in the form of relational contracts allowing firms to develop “specific strategies to mitigate the problems of control, commitment and loyalty”, thus reducing the control-flexibility problem⁵³⁴. As far as working conditions of dependent self-employed are concerned, it can be said that the actual situation varies enormously. Despite dependent self-employed workers being more easy targets of abuses in working hours and facing greater difficulties in organising their task schedule, this is

⁵³¹ SCIARRA S. (2004), *The Evolution of Labour Law (1992-2004)*, op. cit., pp. 22.

⁵³² The Italian case law has developed the notion of “double alienness” to define personal dependence. Subordination is seen as “the alienness (i.e. the exclusive destination to other than the worker) of the result attained by the work performance, and of the productive organization in which the worker’s activities are performed”. This hermeneutical tool may be used for “those forms of collaboration in which elements of subordination coexist at the same time with elements of autonomy”. See PIETROGIOVANNI V. (2017), *Redefining the Boundaries of Labour Law: Is Double Alienness a Useful Approach for Crowdworkers?*, Paper presented at the LLRN 3rd Conference, Labour Law Research Network, Toronto 25-27 June 2017 (arguing that “[t]he double alienness and the socio-economic dependence are two completely different criteria” in the Italian system). For further reference see also DE STEFANO V. (2011), *Evoluzione del potere organizzativo e direttivo del datore di lavoro e conseguenze sulla nozione giuridica di subordinazione*, Doctoral Dissertation, Bocconi University, Milano.

⁵³³ See also RAZZOLINI O. (2009), *The Need to Go Beyond the Contract: Economic and Bureaucratic Dependence in Personal Work Relations*, op. cit., p. 296 (the author defines the Italian case of “*parasubordinazione*” as “something physiologically connected to certain kinds of economic organizations that the law has to recognize and regulate”).

⁵³⁴ See MUEHLBERGER U. and BERTOLINI S. (2007), *The organizational governance of work relationships between employment and self-employment*, op. cit., p. 466 ff. When dependent self-employed workers rely on a single client, a “lock-in effect” may materialise as a result of idiosyncratic investments. This situation allows the principal to exert a certain degree of authority over workers in the context of an incomplete contract. See CORAZZA L. (2014), *Dipendenza economica e potere negoziale del datore di lavoro* in *Giorn. dir. lav. rel. ind.*, 4, p. 653 (arguing that “economic dependency represents a useful tool in regulating the contract rather than a mere index of social weakness”). See also LISO F. (2010), *Lo Statuto dei lavoratori, tra amarcord e prospettive del futuro* in *Lav. dir.*, 1, p. 75 ff.

not necessarily the case. Dependent self-employment is often used to lower social insurance contributions, although this must not automatically lead to an undermining of labour law.

If employee status is the “gateway” to full employment coverage, in several jurisdictions an intermediate category has been created to offer a “secondary entrance” to a limited set of social rights. Accordingly, an intermediate category of “quasi-subordinate” workers already exists in a legal sense in some jurisdictions and its acceptance, or tolerance, whatever it may be called, is increasing. Some authors have claimed that “[t]he description or definition of economically dependent workers starts from the premise that (1) such workers are not employees, and (2) economically dependent work must not be used to hide the true nature of the employment relationship”⁵³⁵. From a social policy point of view, “[s]urely when an intermediate category is considered, it should not be seen as a solution to misclassification (sham self-employment); rather, the goal should be to add some (partial) protection to people who are not (even without any sham) within the group of ‘employees’”⁵³⁶. Depending on the specific national rules, these workers are commonly outside the scope of labour law protection (such as the rules on dismissals) and collective bargaining coverage and are subject to “promotional” fiscal and tax regulations. Whether it is called “dependent contractor” (as in Canada), “employee-like person” (as in Germany), “para-subordinate” (as in Italy), “economically dependent autonomous worker” (as in Spain), simply “worker” (as in the United Kingdom) or “semi-dependent workers”⁵³⁷, the goal of such class remains more or less the same: allowing for better refinement in the application of labour laws.

Irrespective of labels and legislative techniques adopted, the main purpose of the legal recognition of such an intermediate category is to broaden the scope of protection to the advantage of people who may be “substantially distinguishable

⁵³⁵ ROSIORU F. (2014), *Legal Acknowledgement of the Category of Economically Dependent Workers*, op. cit., p. 296.

⁵³⁶ DAVIDOV G., FREEDLAND M. R. and KOUNTOURIS N. (2015), *The Subjects of Labor Law: ‘Employees’ and other Workers*, op. cit., p. 129.

⁵³⁷ As proposed by FREEDLAND M. R. (2003), *The Personal Employment Contract*, Oxford, UK. For a first reaction to this proposal, see DEAKIN S. (2007), *Does the ‘Personal Employment Contract’ Provide a Basis for the Reunification of Employment Law?* in *Industrial Law Journal*, 36(1), pp. 68-83 (explaining that Freedland’s proposal places the boundary between categories “at the point where personal service gives way to a contract of sale or other commercial relationship, and where economic dependence – that is to say, the dependence of the worker on a particular enterprise – is displaced by the presence of a professional relationship or independence business entity”).

from ‘employees’⁵³⁸, without classing them as employees. This has resulted in numerous initiatives clarifying the legal status of this category of workers through various routes. These include: (i) the introduction of a new and distinct legal employment status, (ii) the extension of labour protection to certain forms of self-employment by legislative intervention (typically social security coverage, including sometimes health and safety provisions), (iii) the introduction of a presumption of subordination for certain categories of workers or beyond certain thresholds⁵³⁹, (iv) the interpretative activism of courts, and (v) the introduction of soft regulation. Despite the extension of protective measures that has taken place over time, it would not be correct to maintain that quasi-subordinate employment is a third category of employment, different from employment or self-employment. In practice, it is still included in the self-employment category. And its existence may be also seen as reinforcement to the binary divide.

Undoubtedly, the most distinguishing feature is the concept of economic dependence⁵⁴⁰, meaning that the worker performs services under a non-employment contract taking (part of) the entrepreneurial risk and depending on one or a small

⁵³⁸ See also DAVIDOV G. (2005), *Who is a Worker?* in *Industrial Law Journal*, 34(1), p. 61 ff. (arguing that “the idea has been to extend protection to individuals that normally do not, and should not, enjoy the protection of labour laws”).

⁵³⁹ Perhaps not surprisingly, both the techniques were used in Italy, before the recent legislative intervention which limited the scope of the intermediate category and established employee status is the default.

⁵⁴⁰ According to some commentators, “self-employed workers face both economic and personal dependence” (subordination or democratic deficit). Economic dependence is mainly determined by “the exclusiveness of the work relationship and financial support measures that tie the worker closely to the firm by increasing the costs of outsider options” while subordination is shaped “by support measures that increase the managerial control over the worker”, in terms of time, place and content of the work. Moreover, economically dependent workers may perform the same tasks as some of the existing employees, or tasks which were formerly carried out by employees and later contracted out. See also VALENDUC G. (2017), *Les travailleurs indépendants économiquement dépendants*, Working Paper Université Catholique de Louvain (describing “la dépendance organisationnelle”, “la dépendance à l’égard d’infrastructures matérielles” as well as “la dépendance économique”). See MUEHLBERGER U. and BERTOLINI S. (2007), *The organizational governance of work relationships between employment and self-employment*, op. cit., p. 451 (analysing work arrangements on the border between employment and self-employment and the consequences of making use of such new forms of work, especially on the side of firms). See also GROFF A. L., CALLEGARI P. and MADDEN P. M. (2015), *Platforms Like Uber and the Blurred Line Between Independent Contractors and Employees* in *Computer Law Review International*, 16(6), pp. 166-171. According to Caruso, criteria defining a *tertium genus* “could include the nature of the work, the lack of direct contact with the market, the exclusivity of the market relationship, functional integration into the company’s structure, the strength of the employer’s power of coordination, the length of the relationship”. See CARUSO B. (2013), “*The Employment Contract is Dead: Hurrah for the Work Contract!*” *A European Perspective*, op. cit., p. 105.

number of clients for her income. This “classical” factor has been raised to the dignity of basis for obtaining access to specific rights. As regards conceptual designation, serious problems arise from the fact that “economic dependence” of a worker on one client/employer is supposed to be one of the outcomes of an employment relationship, rather than a “deliberate construction” of the arrangement⁵⁴¹

As noted in a previous article, such an intermediate category of worker is quite widespread⁵⁴². Several legal systems have experimented with implementing a legal tool similar to an “in-between” category to cover non-standard workers⁵⁴³, but the level of protection afforded and even the definition of dependency vary among countries. Among the countries identifying a third status, two main approaches exist⁵⁴⁴: either the creation of a totally new hybrid worker status with specific rights, or the recognition of a specific subcategory in the independent work domain. Some jurisdictions have concentrated on a legal threshold of economic dependency (e.g. Germany⁵⁴⁵ and Spain⁵⁴⁶) while others focused on the worker’s strict coordination with the principal’s business organisation (e.g. Italy).

⁵⁴¹ As rightly pointed out in the seminal EIRO’s research, “different aspects of economic dependence may be used by courts to appreciate the subordination of a worker, but it must be clear that economic dependence may characterise even contractual relations which corresponds unquestionably to self-employment”. Several indicators have been taken into account, such as the exclusivity of engagement or the proportion of income derived from a single principal. See CORAZZA L. (2014), *Dipendenza economica e potere negoziale del datore di lavoro*, op. cit., p. 650 (arguing that Barassi shaped Italian employment law by focusing only on managerial powers: the refusal to “include” the notion of economic dependence within the definition of subordinate employee was aimed at making employment law not only address to a specific social class. See also PERULLI A. (2015), *Un Jobs Act per il lavoro autonomo: verso una nuova disciplina della dipendenza economica?* in *Dir. rel. ind.*, 1, p. 117 (arguing that, “in the case of systems that regulate economically dependent self-employed, economic dependence becomes a constituent element of the case”). For a complete analysis, see MENGONI L. (2000), *Il contratto individuale di lavoro in Giorn. dir. lav. rel. ind.*, p. 183 ff.; ID. (1971), *Lezioni sul contratto di lavoro*, Milano; ROMAGNOLI U. (1967), *La prestazione di lavoro nel contratto di società*, Milano.

⁵⁴² This subparagraph owes a debt to a co-authored article, which explored classification issues in Canada, Italy, and Spain in greater length than in this section. For more on the approaches in these countries, see CHERRY M. A. and ALOISI A. (2016), *Dependent Contractors in the Gig Economy: A Comparative Approach* in *Am. UL Rev.*, 66, p. 635. Certain parts and new sections will be published in DAVIDSON N., FINCK M. and INFRANCA J. (Eds.) (forthcoming), *Cambridge Handbook of Law and Regulation of the Sharing Economy*, Boston, MA.

⁵⁴³ FREEDLAND M. (2007), *Application of labour and employment law beyond the contract of employment in International Labour Review*, 146(1-2), pp. 3-20.

⁵⁴⁴ For a broader description of regulatory techniques, see generally PALLINI M. (2013), *Il lavoro economicamente dipendente*, Padova.

⁵⁴⁵ German law also recognises a third category of employee-like person (*arbeitnehmerähnliche Person*). In 1974 the category was codified in Section 12a of the German Collective Bargaining Act (*Tarifvertragesgesetz*). According to Section 12a, an employee-like person must perform his or her duty to

In this comparative overview, the impression is that the technique of creating intermediate categories can be hazardous, as every definition implies a certain degree of approximation⁵⁴⁷. After examining how, in Italy, some employees have actually seen their rights narrowed because their status was levelled down into an intermediate “para-subordinate” category, one should be very careful about creating an intermediate category⁵⁴⁸. In many cases, businesses tried to take advantage of a

1) the benefit of a client; 2) under service contract for a specific project; 3) personally and largely without collaboration of subordinate employees. Importantly, the provision also states that the employee-like person works mainly for one client and relies on a single client for 50% of his or her income. They cannot claim unfair dismissal, but do have access to labour courts, collective bargaining, conclude collective agreements with normative effect. Moreover, they are entitled to annual leave and protection against discrimination. See SORGE S. (2009), *German Law on Dependent Self-Employed Workers: A Comparison to the Current Situation Under Spanish Law in Comp. Lab. L. & Pol’y J.*, 31(2), pp. 249-252. According to Waas, the requirement of working for one client for fifty per cent of income could prove a significant hurdle for establishing employee-like person status for gig workers. This problem may be overcome thanks to the “joint employer” doctrine in order to “associate” different companies who hire the same worker to perform work on a given platform. See WAAS B. (2017), *Crowdwork in Germany* in WAAS B., LIEBMAN W. B., LYUBARSKY A. and KEZUKA K., *Crowdwork – A Comparative Law Perspective*, Frankfurt, p. 160 ff.

⁵⁴⁶ In Spain, a specific category for economically dependent autonomous workers has existed since 2007. The Spanish Statute for Self-Employed Workers crafted a third category of workers: “*Trabajador Autonomo Economicamente Dependiente*” (or TRADE). The TRADE were extended a fairly comprehensive package of benefits and protections that are almost as good as those given to employees. The crucial component for determining whether a worker is a TRADE rests on a 75% threshold of economic dependency. There are other criteria that inform the distinction between TRADE and other categories of workers. Four factors help distinguish TRADE workers from employees: (1) amount of independent work or reliance on the principal’s directives, (2) the worker undertakes an obligation of personal service, without using subcontractors, (3) the worker bears the entrepreneurial risk, and (4) actual ownership of the tools and instrumentalities of production. To distinguish TRADE from independent contractors or self-employed workers, three factors are instructive: (1) a dependence on the principal for at least seventy-five percent of the worker’s income, (2) not hiring subcontractors, and (3) the performance of an economic or professional activity directly and predominantly vis-à-vis one single principal. The TRADE worker must “register” the position with the social administration agency and notify them of any changes. These strict requirements are burdensome and time-consuming for both workers and businesses. See CRUZ VILLALÓN J. (2013), *Il lavoro autonomo economicamente dipendente in Spagna* in *Diritti lavori mercati*, 2(2), pp. 287-315.

⁵⁴⁷ ROSIORU F. (2014), *Legal Acknowledgement of the Category of Economically Dependent Workers in European Labour Law Journal*, 5(3-4), p. 305.

⁵⁴⁸ In Italy, contracts of coordinated and continuous collaboration (“*contratti di collaborazione coordinata e continuativa*”) have existed since 1973 when Law 533 prescribed that the rules of procedure for labour litigation also applied to the “relationship of agency, of commercial representation and other relations of collaboration materialising in a continuous and coordinated provision, predominantly personal, even if not of subordinate character” (that is a tranche of self-employed workers, which would later come to be known as “*lavoratori parasubordinati*” or “quasi-subordinate” workers). See FREDLAND M.R. and KOUNTOURIS N. (2011), *The Legal Construction of Personal Work*

discounted status of the “*lavoratore parasubordinato*” to evade regulations applicable to employees, such as social security contributions. The quasi-subordinate category created a loophole by artificially drawing a new border between employees and quasi-subordinate workers, in addition to the already existing one. Through the years, the legislature attempted to fix this situation in order to provide appropriate coverage for workers. Many political interventions have been carried out aimed at “moving as many employment contracts as possible, in a gradual manner over a period of time, from the uncertain grey area of atypical employment to the area of salaried employment”⁵⁴⁹. The ultimate result was confusion and, since 2015, the intermediate category has been extremely limited due to an “annexationist” logic⁵⁵⁰.

Relations, Oxford, UK. As explained elsewhere, “the legislature extended some protection to a tranche of self-employed workers”. Four “concurrent” factors denote this intermediate category: (i) collaboration, (ii) continuity and length of the relationship over time, (iii) functional coordination with the principal’s organisation, and (iv) a predominantly personal service. Above all, in recent years quasi-subordinate contracts have undergone a huge expansion, in many cases for fraudulent purposes. Over time, the result was employer arbitrage between the categories. As a consequence, workers saw a “gradual erosion of the protections afforded to employees through jobs that are traditionally deemed to constitute master-servant relationships in the strict sense[,] progressively entering the no man’s land of an inadequately defined notion”. See LIEBMAN S. (1999), *Italy: Employment Situations and Workers’ Protection*, ILO Nat’l Studies, available at <https://goo.gl/fCXLsg>. In order to curb abuses of this kind, in 2003, the legislature amended the content of the quasi-subordinate category with Legislative Decree No. 276/2003 (the so-called Biagi Reform). The legislature required the collaboration be linked to at least one “project” to ensure their authenticity and protect against businesses disguising employees as quasi-subordinate. The project was an external “device” aimed at ensuring that the collaborator was indeed autonomous. Thus, a new definition emerged for quasi-subordinate workers: “*lavoro a progetto*” (i.e. project work, also “co.co.pro”). For a comprehensive analysis, see NAPOLI M. (2005), *Riflessioni sul contratto a progetto* in AA.VV., *Diritto del lavoro: i nuovi problemi. L’omaggio dell’Accademia a Mattia Persiani*, Padova, pp. 1343-1359. In 2012, the Italian legislature passed Law No. 92/2012 (Monti-Fornero Reform) to counteract the misuse of the intermediate category by specifying that the project could not consist in a repetitive or merely executive activity nor it could overlap with the firm’s core business. According to statistics, in 2014, para-subordinate workers (“*collaboratori*”) accounted for 1.7 per cent (378,000 workers) of total employment. Ultimately, the 2015 “Jobs Act” fundamentally eliminated the concept of project work. The Jobs Act firmly established employee status is the default. See MAGNANI M. (2016), *Autonomia, subordinazione, coordinazione* in MAGNANI M., PANDOLFO A. and VARESI P. A. (Eds.), *I contratti di lavoro*, Torino, p. 8 ff. For an updated overview of the Italian case, see also PERULLI A. (2017), *Il lungo viaggio del lavoro autonomo dal diritto dei contratti al diritto del lavoro, e ritorno* in *Lav. dir.*, 2, p. 266.

⁵⁴⁹ TIRABOSCHI M. (2005), *The Italian Labour Market after the Biagi Reform* in *Int’l J. Comp. Lab. L. & Indus. Rel.*, 21(2), p. 170.

⁵⁵⁰ In a different article analysing the Italian case, I argue that Article 2 of Legislative Decree No. 81/2015 (the “Jobs Act”) has designed a new notion of “collaborations organised by the principal” (“*collaborazioni eterorganizzate*”), whereby the client organises all performance-related aspects, including above all time and site. Should this be the case, all employment statutory provisions afforded to subordinate workers apply. The result of what has been labelled as an “assimilation

Experience has shown that adding a new category could increase the possibility for arbitrage relocating the borders of the “grey-area” between a newly deregulated employment and self-employment rather than provide for adequate protections for the latter. On top of all this, “the drawback is nevertheless that [these workers] are deliberately prevented from qualifying as employees, even though the activity in question is usually overseen by someone, so that the worker often finds him/herself in the position of mere executor of an organized task”⁵⁵¹. For the past two decades, the quasi-subordinate category in several countries has resulted in arbitrage, struggle, and ultimately reversal. Such tantalising policy strategies proved to be a fiasco⁵⁵².

Drawing preliminary conclusions by this experience, it could be said that the unintended consequences of an in-between category far outweigh those envisaged by its proponents as they have resulted in an increased level of uncertainty, paving the way for a possible legal arbitrage⁵⁵³. Against the background of the renewed

process” is, in practice, a considerable broadening of the scope of protections granted to standard employees, even without manipulating notions and definitions. See ALOISI A. (2016), *Il lavoro “a chiamata” e le piattaforme online della collaborative economy: nozioni e tipi legali in cerca di tutele* in *Labour & Law Issues*, 2(2), pp. 16-56.

⁵⁵¹ PRASSL J. and RISAK M. (2017), *The Legal Protection of Crowdworkers: Four Avenues for Workers’ Rights in the Virtual Realm* in MEIL P. and KIROV V. (Eds.), *Policy Implications of Virtual Work*, London, p. 287. In the U.K., the notion of worker as a category was introduced in the mid-90s in order to extend the scope of some labour protections to individuals performing personally any work or service irrespective of the existence of an employment relationship between the parties, excluding work or services carried out in a professional or independent-business capacity. Workers are covered by minimum wage legislation and working time regulation. They are however excluded from several statutory protections such as regulation against unfair dismissal and redundancy protections.

⁵⁵² DE STEFANO V. (2016), *Casual Work beyond Casual Work in the EU: The Underground Casualisation of the European Workforce—And What to Do about it* in *European Labour Law Journal*, 7(3), p. 435 (arguing that workers may “be stuck in a dependent employment relationship preventing them from accessing to important set of rights”).

⁵⁵³ Crafting an intermediate category has created more room for mischief, with the sole exception perhaps of the Canadian experience. See LANGILLE B. A. and DAVIDOV G. (1999), *Beyond Employees and Independent Contractors: A View from Canada* in *Comp. Lab. L. & Pol’y J.*, 21(1), pp. 7-46. The concept of “dependent contractor” became established within Canadian Law during the 1970s. The effect was significant and beneficial in terms of bringing more workers within the scope of collective bargaining. The category was enacted to help those workers who were essentially working on their own in a position of economic dependency, thus requiring labour protections. The end result was increased coverage and the provision of a safe harbour for workers in need of protections, based on economic dependency. The third category seems to have worked well in terms of expanding the coverage of the laws to an increasing number of workers. See also ARTHURS H. W. (1965), *The dependent contractor: A study of the legal problems of countervailing power* in *The University of Toronto Law Journal*, 16(1), pp. 89-117.

political debate on the third option, many scholars have called for an updated legal category of “independent workers”⁵⁵⁴ highlighting the empowering potential of labour platforms and their scope to provide more labour opportunities⁵⁵⁵. Furthermore, such advocates have demanded that the creation of a sort of para-subordinate category, “for if this is not done, there will be adjustments in the form of a massive expansion of atypical forms of employment already in high gear (freelancing, casual work, self-employment, etc.)”⁵⁵⁶. It should be recognised however that this idealised discourse on the virtues of web-mediated casual labour overshadows the fact that these companies gain an unfair advantage over others thanks to the lack of legal compliance and their business is highly dependent on regulatory arbitrage. An unclear status may be even more advantageous for

⁵⁵⁴ It has been proposed to create an intermediary status, that would be specifically suited for crowdworkers. HARRIS S. D. and KRUEGER A. B. (2015), *A Proposal for Modernizing Labor Laws for Twenty-First-Century Work: The “Independent Worker”, Hamilton Project, Brookings* (according to the proposal cornering the U.S.A. system, such “independent workers” would gain rights to organise and bargain collectively under the NLRA and would also gain anti-discrimination protections. However, this proposal excludes payment for overtime and minimum wage arrangements). See also KENNEDY J. V. (2016), *Three Paths to Update Labor Law for the Gig Economy, Information Technology & Innovation Foundation*. According to Rogers, this proposal has several faults as regards the potential increase in litigation, the failure to define employment with precision and the risk of reclassifying genuine employees as independent workers. In particular, the author draws attention to the fact that such legislative initiative would force “courts to delineate the boundaries between three legal categories rather than two”. See ROGERS B. (2016), *Redefining Employment for the Modern Economy, Issue Brief, The American Constitution Society (ACS)*, available at <https://goo.gl/8qJYm3>. A legally operative language distinguishing independent workers from other categories of worker would not in all likelihood ensure the proper functioning of this category. For a critical view, see EISENBREY R. and MISHEL L. (2016), *Uber Business Model Does Not Justify a New “Independent Worker” Category*, Economic Policy Institute, available at <https://goo.gl/EJd4i6>. See also SACHS B. (2015, June 22), *A New Category of Worker for the On-Demand Economy?*, retrieved from <https://goo.gl/gyGwnt> (arguing that “this kind of a dependence test [based on the proportion of income from a single source] is not appropriate for the on-demand economy in contemporary America”); LOBEL O. (2017), *The Gig Economy & The Future of Employment and Labor Law* in *University of San Francisco Law Review*, 51(1), pp. 64-71.

⁵⁵⁵ SALTSMAN E. (2017), *A Free Market Approach to the Rideshare Industry and Worker Classification: The Consequences of Employee Status and a Proposed Alternative* in *J.L. Econ. & Pol’y*, 13(2), p. 231 (presenting *Berwick v. Uber Techs. Inc.*, 11-46739 EK, at 1 (Cal. Mar. 10, 2015) and arguing that “[a] third classification is a common-sense approach to the classification problem [...]. However, [it] might muddle the classifications distinctions even more. This threshold-type rule may not work in the sharing economy since workers are not solely dependent on a single firm, but on a handful of different firms”).

⁵⁵⁶ MEDA D. (2016), *The future of work: the meaning and value of work in Europe*, op. cit., p. 12.

platforms firms, as it provides them with an escape route from statutory responsibilities⁵⁵⁷.

A number of objections have been presented against the creation of an intermediate category of workers between employees and self-employed. The above concerns also apply to a category specifically designed to meet the needs of platforms. Many scholars have recommended a cautious approach towards ad hoc solutions⁵⁵⁸. Creating an intermediate category of workers such as dependent contractors or dependent self-employed persons implies to identify suitable definitions. But legal definitions may be slippery when they are applied in practice: First and foremost, proposing a new legal bucket for grey-zone cases may complicate matters, rather than simplifying the issues surrounding classification. For instance, fixing a threshold may involuntarily encourage the development of contracts that skirt the boundaries of the definitions (for instance by specifying numbers of working hours that are just below the qualifying thresholds).

Arguably, the adoption of an “attractive”⁵⁵⁹ intermediate category has often the consequence of depriving many workers that would have been entitled to the full protection of labour law rather than broadening the scope of protection. Researchers have generally agreed that the real risk is shifting the grey-zone somewhere else without absorbing the risk of arbitrage and significant litigation in this respect, especially if the rights afforded to workers in that category encompass any meaningful protection. More importantly, this solution overestimates the role of the

⁵⁵⁷ The intermediate category has become topical once again, as a result of legislative proposals at the national level. The first example is Belgium, where in 2016 an attempt has been made to introduce a new status for platform workers. More specifically, this new status could be ‘autonomous employee’ (who would be less (more) protected than traditional employees (self-employed), but also have more (less) autonomy). The underlying aim of this exercise would be not only to clarify the employment status of platform workers, but also to have an impact on other workers outside the platform economy whose status is unclear. In France, a similar approach has been adopted. The idea of introducing a new status is being considered as a solution to address issues that arise for other types of employment that fall outside the traditional categorisations. Here, after exploring the possibility of introducing a new status, the labour inspectorate arrived at the conclusion that this would not be needed, as the existing models should already cover the activities and relationships that are established in the platform economy. See LENAERTS K., BEBLAVÝ M. and KILHOFFER Z. (2017), *Government Responses to the Platform Economy: Where do we stand?*, op. cit., p. 7 (concluding that there is little support at the governmental level for the idea of introducing a new status).

⁵⁵⁸ See, among others, WEISS M. (2016), *Tecnologia, ambiente e demografia: il diritto del lavoro alla prova della nuova grande trasformazione*, op. cit., p. 654.

⁵⁵⁹ See also WEISS M. (1999), *The evolution of the concept of subordination: the German experience in AA.VV., Le trasformazioni del lavoro. La crisi delle subordinazione e l'avvento di nuove forme di lavoro*, Milano, p. 57 ff.

legal constraints, since legally redefining who benefits from statutory protections does not address the power of firms to choose how to arrange their workforce.

2.1.2. *Bogus self-employment: the old mistake of seeing a “camouflage” as a crystallised category.*

There is considerable agreement among scholars on what a “disguised employment relationship” is. As there is little to interpret differently in the expression “falsely classified”⁵⁶⁰, this fraudulent situation occurs when a company manipulates employment contracts in order to misrepresent the underlying reality thus nullifying or attenuating legal responsibilities and protection afforded by the law⁵⁶¹. But there is actually a more important point to make here. Judges in different jurisdictions have been wrestling with the task of correctly classifying workers. Part of the difficulty in recognising false self-employment stems from how the definition of contract of employment is crafted and interpreted⁵⁶². In the absence of a definitive answer to the characterisation question, the expression “bogus self-employment” emphasises the intention to side-step labour, tax and social security rights and

⁵⁶⁰ See EUROFOUND (2013), *Self-employed or not self-employed? Working conditions of ‘economically dependent workers’*, Background paper, Dublin.

⁵⁶¹ According to the Employment Relationship Recommendation, 2006 (No. 198), “disguised employment relationships” is the situation occurring “when an employer treats an individual as other than an employee in a manner that hides his or her true legal status as an employee”. In all systems, the judge must normally decide on the basis of the facts, irrespective of how the parties construe or describe a given contractual relationship. See HEYES J. and HASTINGS T. (2017), *The Practices of Enforcement Bodies in Detecting and Preventing Bogus Self-Employment*, European Platform Undeclared Work, European Commission, Brussels. But disguised employment relationships “may also involve masking the identity of the employer, when the person designated as an employer is an intermediary, with the intention of releasing the real employer from any involvement in the employment relationship and above all from any responsibility to the workers”. See INTERNATIONAL LABOUR OFFICE (2006), *The employment relationship*, International Labour Conference, 95th Session, 2006 Report V(1).

⁵⁶² Davidov has exhorted to put in practice a purposive approach to determining the scope of employment, for rehabilitative purposes. DAVIDOV G. (2005), *Who is a Worker?* in *Industrial Law Journal*, 34(1), pp. 57-71; DAVIDOV G. (2017), *The status of Uber drivers: A purposive approach in Spanish Labour Law and Employment Relations Journal*, 6(1-2), pp. 6-15 (provided that “re-drawing the lines is necessary; avoiding them altogether is problematic”, “[t]he main advantage of a purposive approach is that it avoids technical-legalistic application of tests that could be out-dated, instead looking for the ultimate goals behind labour laws – and consequently behind the distinction between ‘employees’ and independent contractors – to decide who should be protected”). See also ID. (2002), *The three axes of employment relationships: A characterization of workers in need of protection* in *The University of Toronto Law Journal*, 52(4), pp. 357-418 (identifying three dimensions of what make employee vulnerable, namely democratic deficit, psychological and economic dependence, roughly overlapping with three traditional tests such as control, integration and economic realities).

regulations, with a view to reducing costs and avoiding payments and obligations⁵⁶³. In this case, self-employment arrangements are used to hide a genuine employment relationship. For this reason, the most effective way to contrast this condition is to challenge the formal classification before a tribunal⁵⁶⁴, being the judiciary the first line of defence when a new practice of evasion comes to light⁵⁶⁵.

⁵⁶³ See ALES E. and FAIOLI M. (2010), *Self-employment and bogus self-employment in the European construction industry*, Expert Report, Self-employment and bogus self-employment in the construction industry in Italy, p. 8 (arguing that “[t]he malpractice of bogus self-employment is mainly determined by the social security contribution gap between employment relationship and self-employment”).

⁵⁶⁴ In 2014, the Court of Justice of the European Union stated, in a breakthrough judgment, that “false self-employed” workers, “disguised [...] in order to avoid the application of some specific legislation (for example, labour or fiscal regulations) which is considered unfavourable by the employer”⁵⁶⁴, have access to the right to collective bargaining. CJEU 4 December 2014, C-413/13 (FNV KIEM) ECLI:EU:C:2014:2411 The CJEU describes false self-employment as follows: “[o]n a proper construction of EU law, it is only when self-employed service providers who are members of one of the contracting employees’ organisations and perform for an employer, under a works or service contract, the same activity as that employer’s employed workers, [...], in other words, service providers in a situation comparable to that of those workers, that a provision of a collective labour agreement, such as that at issue in the main proceedings, which sets minimum fees for those self-employed service providers, does not fall within the scope of Article 101(1) TFEU” (Para. 42). The case was about a collective agreement setting a minimum salary for both employees and self-employed people. The provision of a minimum pay, provided for by the collective agreement, can be applied to falsely self-employed workers, regardless the national notion of worker and without prejudice to competition. As a consequence, Article 101.1 TFEU does not apply “only when self-employed service providers who are members of one of the contracting employees’ organisations and perform for an employer, under a work or service contract, the same activity as that employer’s employed workers, are ‘false self-employed’”. When the situation of self-employed workers is comparable to that of employees, collective bargaining agreements are exempt from EU legislation on cartels (price fixing) and are thus legal. For an analysis, see FREEDLAND M. and KOUNTOURIS N. (2017), *Some Reflections on the ‘Personal Scope’ of Collective Labour Law in Industrial Law Journal*, 46(1), pp. 52-71.

⁵⁶⁵ In a parallel trend, the Court of Justice of the European Union (CJEU) has stated ensuring that the employment law entitlements bestowed to EU Member States’ workers by European directives were actually enjoyed by their addressees, whatever the position of national jurisdiction. “Where it perceived that some national legal systems were in effect depriving some of their workers of these rights by misclassifying them as ‘self-employed’ persons, or as workers employed under *sui generis* work relations, [the Court] has boldly asserted that ‘the formal classification of a self-employed person under national law does not exclude the possibility that a person must be classified as a worker within the meaning of [EU law] if his independence is merely notional, thereby disguising an employment relationship’, and that ‘the *sui generis* legal nature of the employment relationship under national law cannot have any consequence in regard to whether or not the person is a worker for the purposes of European Union law’”. Coming now to the legal techniques, it must be said that, in these cases, “the CJEU, while refraining from labelling these domestic arrangements as ‘shams’, has superimposed an EU reclassification resulting in their falling within the protective coverage of EU employment protection laws. In some more recent judgments it went even further by suggesting that, even in those cases where it is ultimately for national referring courts to determine whether a domestic worker is also a worker for the purposes of EU law”. In addition to this, “[t]he Court may, however, mention to

The rise of NSFE and misclassification of employment relationships are strongly intertwined, not least because the emergence of the latter “ambiguous” forms of employment could make the disguise of “bogus self-employment” easier.

3. From wishful thinking to reality. The reports of the crisis of the standard employment relationship have been greatly exaggerated.

The previous paragraph has defined the standard employment relationship (SER) as a benchmark for employment regulations⁵⁶⁶. It has been argued that the best way to “de-precarise” non-standard work could be to make its regulation conform to that of the SER⁵⁶⁷. Nevertheless, commentators have warned that the choice made by the

the referring court a number of principles and criteria which it *must take into account* in the course of its examination”. See FINKIN M. W. and MUNDLAK G. (Eds.) (2015), *Comparative Labor Law*, Cheltenham, UK, p. 123.

⁵⁶⁶ In addition to this, it should not be overlooked that the employment relationship has developed as a general platform of rules allowing to achieve an “effective degree of cooperation despite divergent interests”. MARSDEN D. (2004), *The ‘network economy’ and models of the employment contract* in *British Journal of Industrial Relations*, 42(4), pp. 659-684. Contrary to what has been repeatedly claimed, Taylorism is also conducive to flexibility. “Taylorism does boost numerical flexibility: it makes it easy to quickly integrate new workers in a production process, and it allows laying off workers without losing knowledge from the organization. Faced with the need to respond more quickly to varying customer demands, managers might be able to retain large Tayloristic production units for the predictable parts of production, while having semi-autonomous teams operating in parallel with this to provide flexible quick response capability”. See PRUIJT H. (2000), *Repainting, modifying, smashing Taylorism* in *Journal of Organizational Change Management*, 13(5), p. 444. Despite the differences in processes and mechanisms, over the last 20 years, the literature has revealed labour law regimes across industrialised countries to have been shaped around this model of the SER, either by analogy or by contrast, with the analogous effect that the standard model has been the primary subject of labour law, in the sense that individuals whose working arrangements are best aligned with this paradigm have been the beneficiaries of the most expansive regulatory protection. Moreover, the employment contract is also intertwined with other areas of regulation such as social security, tax, and corporate law. As argued by Zatz, “[a] common refrain is that labour law was designed around the traditional workplace and needs to be updated to grasp ‘new’ forms of work. On a certain naïve view, all the fuss is puzzling. After all, if labour law’s *raison d’être* is to address problems specific to a particular relational form (employment), then the decline of that form and the growth of others is no cause for worry. The old problems continue to be addressed where they occur, and the new forms fail to present these problems”. See ZATZ N. (2011), *The Impossibility of Work Law*, op. cit., p. 240 (discussing misclassification, displacement, and exclusion).

⁵⁶⁷ Described as “the general form of employment relationship”, it was conceived in the post-war period in industrialised societies. Traditionally it has been associated with a notion of “regular” employment, characterised by three elements: it is full-time, indefinite and part of a subordinate employment relationship. See respectively, paragraphs 6 and 15 of the Preambles of the Directives 99/70 on fixed-term work and 2008/104 on temporary agency work. It “developed through the interplay of state intervention into working of the labor market, the achievements of collective bargaining and the rules of social custom when the labor contract was gradually enriched with

firm between divergent alternatives “should not engender complacency about the contemporary nature of standard jobs by obscuring the substantial deterioration of their terms and conditions in recent decades, in a process of convergence with non-standard forms of employment”⁵⁶⁸. Thus, the discourse on NSFE is compounded by the necessity to avoid the “disintegration” of the SER⁵⁶⁹. Notably, like “baby seals”, non-standard workers are catching the attention of policy makers, diverting them from other evolving labour market trends. After investigating (new and old) forms of work deviating from the standard “prototype” and before discussing the alleged collapse of the binary distinction between employment and self-employment, several questions arise: is the standard employment relationship under attack by various forces that have combined to undermine labour law as a whole⁵⁷⁰? As a consequence, has the underlying normative model of employment been fatally injured⁵⁷¹? Is this archetype anachronistic or, even worse, incapable of governing complex organisational patterns⁵⁷²? Is the SER internal structure too rigid or unsuitable to accommodate modern and multifaceted arrangements?

individual and collective stratus rights regulating dependent labor and its exchange”. See HINRICHS K. and JESSOULA M. (Eds.) (2012), *Labour Market Flexibility and Pension Reforms: Flexible Today, Secure Tomorrow?*, New York, p. 7.

⁵⁶⁸ See MCCANN D. (2008), *Regulating Flexible Work*, Oxford, UK, p. 6. See also SCHOUKENS P. and BARRIO A. (2017), *The changing concept of work: When does typical work become atypical?* in *European Labour Law Journal*, 8(4), pp. 306-332 (describing “a weakening of the features of the standard model as a result of the increasing flexibilisation of the labour market”, on the one side, and the spread of “the forms of work that deviate from this standard [...]occupying often a grey area between employment and self-employment”, on the other).

⁵⁶⁹ In the context of a two-tier labour market, comparing an old-fashioned, high paying and subject to social insurance, full-time, open-ended job performed at the employer’s place of business and contingent online-based work may not, therefore, be currently the most proper exercise. Rather, particular attention should be paid to the progressively “acute sense of job insecurity” that workers face, no matter how legally classified. See generally STONE K. V. W. (2006), *Rethinking Labor Law: Employment Protection for Boundaryless Workers* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and Frontiers of Labour Law: Goals and means in the regulation of work*, Oxford, UK and Portland, OR, pp. 155-179.

⁵⁷⁰ To highlight its prominence in the legal arena, the expression “standard employment relationship” is preferred here to the terms “employment contract”. For a comprehensive discussion, see CASTELVETRI L. (2002), *Perché discutere (ancora) di alternativa tra contratto e rapporto di lavoro?* in *Dir. rel. ind.*, 3, p. 467.

⁵⁷¹ FUDGE J. (2017), *The Future of the Standard Employment Relationship: Labour Law, New Institutional Economics and Old Power Resource Theory* in *Journal of Industrial Relations*, 59(3), pp. 374-392.

⁵⁷² BRONZINI G. (2016), *Il (futuro) giuridico del lavoro autonomo nell’era della share-economy* in *Riv. it. dir. lav.*, 1, p. 77 (describing the employment relationship as a “cage”).

In order to answer exhaustively the doctrinal dilemma, this concluding paragraph will shed further light on the foundations of the concept of the SER, understood as an all but monolithic paradigm whose “descriptive validity, statistical incidence and normative power” have been allegedly weakened⁵⁷³. The opinions expressed so far range from the identification of profound variations pointing to completely new architectures of employment regulation to the opposite assertion that no significant transformations are taking place⁵⁷⁴. Nevertheless, the predominant opinion revolves almost exclusively around a narrative of identity crisis⁵⁷⁵ rather than metamorphosis of the long-lasting legacy of the SER⁵⁷⁶. Understandably, critics argue that the

⁵⁷³ STONE K. V. W and ARTHURS H. (2013), *The transformation of employment regimes: A worldwide challenge* in ID. (Eds.), *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, New York, p. 7 (listing a set of developments that represent “both a cause and an effect” of the decline of the SER, namely the embattlement of workers, the disarray of labour markets, the flux of labour law, and advocating a new paradigm, rather than seeking to resuscitate the SER). See also FUDGE J. (2006), *Fragmenting work and fragmenting organizations: The contract of employment and the scope of labour regulation*, op. cit., p. 618 ff. (arguing that “subordination is not very helpful in distinguishing between employment and independent contracting”); COUNTOURIS N. (2007), *The Changing Law of the Employment Relationship. Comparative Analyses in the European Context*, Ashgate, p. 45 ff. (describing the challenge to the traditional notions of autonomy and subordination). For a dissimilar opinion, see DAVIDOV G. (2006), *The Reports of My Death are Greatly Exaggerated: Employee as a Viable (Though Overly-Used) Legal Concept* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and Frontiers of Labour Law*, Oxford, UK and Portland, OR, pp. 133-152 (ruling out the thesis “in opposition to the continued use of the employee/independent contractor distinction” and providing “useful insight on the way this concept should be practically used”).

⁵⁷⁴ For a comprehensive overview, see MEARDI G. (2014), *The (claimed) growing irrelevance of employment relations* in *Journal of Industrial Relations*, 56(4), pp. 594-605. See also DEL CONTE M. (2015), *Premesse e prospettive del Jobs Act* in *Dir. rel. ind.*, 4, p. 939 ff.

⁵⁷⁵ Note that “conventional wisdom can be wrong” as argued in ADAMS Z. and DEAKIN S. (2014), *Institutional Solutions to Inequality and Precariousness in Labour Markets* in *British Journal of Industrial Relations*, 52(4), p. 779. Freedland’s acute statement is worth mentioning: “[t]hose who speak of the diminution or demise of the standard employment contract often turn out to be making a factual observation rather than offering an analysis of a legal evolution”, see FREEDLAND M. (2013), *Burying Caesar: what was the standard employment contract?* in STONE K. V. W. and ARTHURS H. (Eds.), *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, New York, p. 82. See also BUELENS J. and PEARSON J. (2012), *Standard work: an anachronism?*, Antwerp and Cambridge, UK.

⁵⁷⁶ BOSCH G. (2004), *Towards a new standard employment relationship in Western Europe* in *British Journal of Industrial Relations*, 42(4), pp. 617-636 (summarising three main discourses on the SER: “First, it is maintained that [it] has declined in importance. Second, it is predicted that the [it] will decline further in significance in future. Third, it is often suggested that the [it] is not even worth defending”). See also CARUSO B. (2013), *“The Employment Contract is Dead: Hurrah for the Work Contract!” A European Perspective*, op. cit., p. 96 (claiming that “the SEC has ceased to be the sun in the galaxy and has become a mere planet, a contract like any other”). See also ID. (2004), *Flexibility in Labour Law: The Italian Case* in CARUSO B. and FUCHS M. (Eds.), *Labour Law and Flexibility in Europe: The Cases of Germany and Italy*, Baden Baden, pp. 11-46.

progressive decline of the conventional employment contract has not only thrown into crisis the correspondent model of employment legislation. It has also called into question the very key issue of labour law's scope. Anyway, it is worthwhile stressing how, in line with a consistent series of surveys, full-time employment as a percentage of total employment continues to prevail in the labour market⁵⁷⁷.

It is then crucial to be clear on one thing: claiming that the rise of the platform economy is going to make wage employment a distant memory seems simplistic and inadequate. As a matter of fact, although the social environment is characterised by an increasing heterogeneity of arrangements, standard employment is still dominant across Europe. If the "quantitative" argument should be insufficient to dispel concerns, the social relevance of the SER deserves to be assessed from a theoretical standpoint.

Several studies have begun to illustrate the complexities and nuances of the dichotomist division of employees versus self-employed workers⁵⁷⁸. It has been said that the "orthodox polarisation" conceals a great deal of variety⁵⁷⁹. Similarly, several scholars have argued that the "fossilised binary divide"⁵⁸⁰ between the two main categories of employment and self-employment should be obliterated or, at least, softened, with the protections afforded to the former be extended to the latter⁵⁸¹. In

⁵⁷⁷ The SER accounted for 59% of the total share employment in 2015 in Europe, while more contingent forms of work continue to "grow in both significance and size". See HUDSON-SHARP N. and RUNGE J. (2017), *International Trends in Insecure Work: A Report for the Trades Union Congress*, National Institute of Economic and Social Research, p. 17. See also MCCANN D. (2008), *Regulating Flexible Work*, Oxford, UK, p. 8. However, "SER-type relationships are still dominant at least in their weak forms in OECD countries and more needs to be done to reinforce and renew the guarantees associated with these contracts to reduce the scope for employers to pass labour costs on to the state", see RUBERY J. (2015), *Re-regulating for inclusive labour markets*, Conditions of Work and Employment Series No. 65, Geneva, Switzerland, p. 15.

⁵⁷⁸ See ROSIORU F. (2014), *Legal Acknowledgement of the Category of Economically Dependent Workers in European Labour Law Journal*, 5(3-4), 280 (arguing that "the traditional binary distinction between employees and self-employed persons has proven inadequate to depict the economic and social reality of work").

⁵⁷⁹ As outlined in the White Paper on the Italian Labour Market in October 2001, "due to the profound changes brought about in organisation of companies and employment relationships, the Government considers the traditional regulatory approach based on the binary divide as an inappropriate tool means to address the economic shortcomings"

⁵⁸⁰ The definition is borrowed from ALLEVA P. (1996), *Ridefinizione della fattispecie di contratto di lavoro. Prima proposta di legge* in GHEZZI G. (Ed.), *La disciplina del mercato del lavoro. Proposte per un testo unico*, Roma, p. 188.

⁵⁸¹ See also FUDGE J., TUCKER E. and VOSKO L. F. (2003), *Changing boundaries in employment: developing a new platform for labour law in Canadian Lab. & Emp. LJ*, 10, pp. 329-366.

addition to this, the existence of an intermediate area of murkiness has cast serious doubts about whether the employment relationship should continue to represent the only “vehicle for the delivery of rights and entitlements”⁵⁸². Among others, FREEDLAND⁵⁸³ commented on the alleged “false nature” of the rigid duality, since it would be based on a “false unity” of the two concepts⁵⁸⁴. The quite justified concern of the traditional dualistic alternative between employment and self-employment being obsolete or ill-suited to the fast-changing realities has become a popular mantra of contemporary commentaries on work organisation⁵⁸⁵.

⁵⁸² DAVIDOV G. and LANGILLE B. (2006), *Introduction: Goals and Means in the Regulation of Work* in ID. (Eds.), *Boundaries and Frontiers of Labour Law: Goals and means in the regulation of work*, Oxford, UK and Portland, OR, p. 4. See also WAAS B. (2010), *The Legal Definition of the Employment Relationship* in *Eur. Lab. LJ*, 1, pp. 45-58. The actual capacity of SER to work as a selective device capable of conferring protection to those who need and deserve it has been definitively impaired. See MARIUCCI L. (2016), *Culture e dottrine del giuslavorismo*, op. cit., pp. 606-607.

⁵⁸³ FREEDLAND M. (2003), *The personal employment contract*, Oxford, UK, pp. 15-20 (explaining how the contract of employment came to be systematically contrasted with another contract type, that of the contract for services, and arguing that this distinction has proved to be an equally false or unsatisfactory one). See also ID. (2006), *From the Contract of Employment to the Personal Work Nexus* in *Industrial Law Journal*, 35(1), pp. 1-26 (describing “the permeable outer boundaries moving along the five dimension encompassing the workers, the employing enterprise, duration and continuity, personality and purpose and motivation” and providing a new model for determining the scope of different elements of labour law in relation to different types of work arrangements). For a similar initiative, see BOOKS A. (1988), *Myth and Muddle-an Examination of Contracts for the Performance of Work* in *University of New South Wales Law Journal*, 11(2), pp. 90-92; FUDGE J. (1999), *New Wine into Old Bottles: Updating Legal Forms to Reflect Changing Employment Norms* in *U. Brit. Colum. L. Rev.*, 33(1), pp. 147-148.

⁵⁸⁴ More recently, Prassl and Risak also proposed to consider the “interdependent net of contracts that only make sense as a whole” rather than splitting complex multi-party “arrangements underlying crowdwork scenarios into a series of bilateral contractual relationships and attempt to classify each relationship separately”. This “holistic approach” could provide a remedy to the problems that may arise when drawing “the line between the status of an employee and a self-employed person or independent contractor”. See PRASSL J. and RISAK M. (2017), *The Legal Protection of Crowdworkers: Four Avenues for Workers’ Rights in the Virtual Realm*, op. cit., p. 278 (arguing that “[l]ooking only at individual relationships at a time, without also considering their interwoven nature because of the crowdsourcing platform is akin to determining the nature of cloth by looking only at its differently colored threads of wool without taking into account the knitting pattern”).

⁵⁸⁵ Moving away from the traditional binary division of employment and self-employment, Supiot was an ardent advocate for a new conceptual framework, organised in four concentric circles of labour and social protection and aimed at delinking social rights from the employment status. This theory uses a method of addition. The largest circle, universal social rights, was expected to provide a very general amount of protection guaranteed to all (health, safety, training, minimum income), the second circle included rights for non-occupational work (unpaid care and domestic work), while the third one defined additional rights for persons in occupational activities such as major collective freedoms. The smallest circle, employment, hinged on bureaucratic dependency and provided the highest level of protection, based on the degree of subordination. The fact is that even a different system based on gradually protected categories does not obviate the need to ascertain who is to be allowed access to

Rather than an on-off toggle (“entitle[ment] to a significant package of rights or to no protection at all”⁵⁸⁶), a continuous spectrum, ranging from a minimum level of protection available for all workers to a robust security system for subordinate employees, has been proposed in order to redesign protections in a gradual and modular manner⁵⁸⁷. In fact, many of these projects have never come about or alternatively, when realised, have raised the level of uncertainty and unpredictability of potential outcome in a potential misclassification case.

This analysis is aimed at supporting the viability and resilience of the employment relationship and to disprove the discourse around its eclipse⁵⁸⁸. According to some commentators, indeed, the prophecy of the demise of employment law is a political

various sets of protections. See SUPIOT A. (2001), *Beyond Employment: Changes in Work and the Future of Labour Law in Europe*, Oxford, UK. See also BIAGI M. and TIRABOSCHI M. (1999), *Le proposte legislative in materia di lavoro parasubordinato: tipizzazione di un “tertium genus” o codificazione di uno “Statuto dei lavori”?* in *Lav. dir.*, 4, pp. 571-592. In Italy, an alternative notion of “coordinated labour” has been proposed. See DE LUCA TAMAJO R., FLAMMIA R., PERSIANI M. (1998), *La crisi della nozione di subordinazione e della sua idoneità selettiva dei trattamenti garantistici. Prime proposte per un nuovo approccio sistematico in una prospettiva di valorizzazione di un tertium genus: il lavoro coordinato* in AA.VV., *Subordinazione e autonomia: vecchi e nuovi modelli*, Torino, pp. 331-345 (suggesting that “a broad array of interdependent relationships” shall fall within this category). A complete list of alternative proposals would far exceed the scope of this analysis. Reference must be made to the concept of “sans phrase labour”, see PEDRAZZOLI M. (1998), *Lavoro sans phrase e ordinamento dei lavori. Ipotesi sul lavoro autonomo*, op. cit., pp. 49-104; ID. (1998), *Consensi e dissensi sui recenti progetti di ridefinizione dei rapporti di lavoro* in AA.VV., *Subordinazione e autonomia: vecchi e nuovi modelli*, Torino, p. 9 ff. See also D’ANTONA M. (1996), *Ridefinizione della fattispecie di contratto di lavoro. Seconda proposta di legge* in GHEZZI G. (Ed.), *La disciplina del mercato del lavoro. Proposte per un Testo Unico*, Roma, p. 195 ff. Similarly, many commentators have argued that the traditionally personal scope of labour law no longer reflects the modern work organisation. See BURCHELL B., DAY D., HUDSON M., LADIPO D., MANKELOW R., NOLAN J., REED H., WICHERT I. and WILKINSON F. (1999), *Job Insecurity and Work Intensification: Flexibility and the Changing Boundaries of Work*, York. For a recent proposal, see DAVIDOV G. (2014), *Setting labour law’s coverage: Between universalism and selectivity* in *Oxford Journal of Legal Studies*, 34(3), pp. 543-566. For a complete review of “factors acting on the ongoing process of transformation which is impacting both the world of work and society as a whole”, see STONE K. V. W., DAGNINO E. and MARTÍNEZ FERNÁNDEZ S. (Eds.) (2017), *Labour in the 21st Century: Insights into a Changing World of Work*, Cambridge, UK.

⁵⁸⁶ DAVIDOV G., FREEDLAND M. R. and KOUNTOURIS N. (2015), *The Subjects of Labor Law: ‘Employees’ and other Workers*, op. cit., p. 115.

⁵⁸⁷ See DEL CONTE M. and TIRABOSCHI M. (2004), *Diversification of the Labour Force: The Scope of Labor Law and the Notion of Employee: Italy*, op. cit., p. 28 (recommending “[a]longside [the] bedrock of fundamental and inalienable rights, providing the basis for a modern Statute of Labour, [...] a series of additional variable rights, reflecting the degree of economic dependence of the employee”).

⁵⁸⁸ See also SANTORO-PASSARELLI G. (1999), *Attualità della fattispecie lavoro subordinato* in AA.VV., *Le trasformazioni del lavoro. La crisi della subordinazione e l’avvento di nuove forme di lavoro*, Milano, p. 57 ff. (arguing that the Italian notion of employment relationship is both well-defined and flexible enough to adapt to new needs and situations).

manifesto aimed at “deleting what remains of workers’ rights”⁵⁸⁹. Hence, the debate on the alleged decline of the notion of the employee may well represent nothing more than a convenient attempt to provide legal arguments to justify business practices which result in responsibility being taken away from entrepreneurs. Moreover, it may be questioned if the employment relationship is “either a Dodo or a phoenix”⁵⁹⁰. And yet, for all of the evidence that big changes are underway, it is precisely the *chameleon* that would most probably be the appropriate allegory for this legal “baseline for labour protection and social benefits”⁵⁹¹. Designed in the late nineteenth century in the guise of a contract⁵⁹², this heterogeneous “legal platform” is able to adapt to the quickly evolving environment, without losing its identity and autonomy in the socio-economic context. Accordingly, a set of arguments will be set forth in order to defend the continuing conceptual and normative salience of the notion of standard employment, by assessing “usefulness of an important instrument for the delivery of workers’ rights”⁵⁹³.

⁵⁸⁹ BAVARO V. (2017), *Questioni in Diritto su Lavoro Digitale, Tempo e Libertà*, op. cit., p. 4. See also MONTUSCHI L. (1993), *Il contratto di lavoro fra pregiudizio e orgoglio giuslavoristico* in *Lav. dir.*, 1, pp. 21-45 (arguing that the main result obtained by the combination of these theories is the marginalisation of employment law, increasingly less “universal” and “scientific”). For a complete review, see GRANDI M. (1999), *Il problema della subordinazione tra attualità e storia* in AA.VV., *Le trasformazioni del lavoro. La crisi della subordinazione e l'avvento di nuove forme di lavoro*, Milano, p. 11 (defining the crisis of SER as the “failure to absorb new complex realities within the ‘ideal-type’”). In the early nineties, a seminal contribution by Ichino described the “escape from employment law” as a result of the obsolescence of the model of spatial-temporal coordination of the employee with the employer. In Ichino’s view, the new arrangements render “the contract of employment in the undertaking” almost unnecessary. ICHINO P. (1989), *Subordinazione e autonomia nel diritto del lavoro*, Milano, p. 231 ff. See also ID. (1990), *La fuga dal lavoro subordinato* in *Democrazia e diritto*, 1, p. 69 (arguing that the developments of ICT imply that the (spatial and temporal) organisational integration of the worker is no longer needed for productive purposes).

⁵⁹⁰ FUDGE J. (2017), *The future of the standard employment relationship: Labour law, new institutional economics and old power resource theory* in *Journal of Industrial Relations*, 59(3), pp. 374-392.

⁵⁹¹ VOSKO L. F. (2010), *Managing the margins: Gender, citizenship, and the international regulation of precarious employment*, Oxford, UK, p. 52.

⁵⁹² For a different opinion, see SCOGNAMIGLIO R. (2007), *La natura non contrattuale del lavoro subordinato* in *Riv. it. dir. lav.*, 4, pp. 379-425.

⁵⁹³ DAVIDOV G. (2006), *The Reports of My Death are Greatly Exaggerated: Employee as a Viable (Though Overly-Used) Legal Concept*, op. cit., p. 134 (explaining how “employee status is understood as the umbrella under which workers must stand to achieve security”). See also KOCH M. (2013), *Employment Standards in Transition: From Fordism to Finance-Driven Capitalism* in KOCH M., FRITZ M. and HYMAN R. (Eds.), *Non-Standard Employment in Europe: Paradigms, Prevalence and Policy Responses*, London, pp. 29-45.

In terms of business models, it is true that organisations of all kinds are experimenting with new decentralised formats somehow inconsistent with the “*topos*” of the industrial model. Still such templates are perfectly in line with the ample scope of the SER with regard to the extent of the entrepreneurial prerogatives exercised. While the classic model, defined as the “Aristotelian rule of labour law” in the pre-digitised society, “was based on the unities of place and work (work performed on the premises of the firm), of time and work (work carried out in a single temporal sequence), and of action and work (a single occupational activity)”⁵⁹⁴, the current model is somehow diverse, yet fully and consistently in line with the general archetype.

With that said, it is even more significant to rebut the hypothesis of the embeddedness of the employment relationship into the Fordist mode of production, that – in the original formula – has proven effective over the first three-quarters of the twentieth century. This approach is often used to justify the crisis of the notion: being post-Fordist production patterns characterised by non-wage forms of employment, labour law can be described as a conceptual tool in disarray or even in retreat⁵⁹⁵. Such dominant view consists of three different stages: (i) employment law should be considered as an expression of the early Taylor-Fordist “form of organizing production, built on the large, vertically integrated corporation”⁵⁹⁶, (ii) that model was built around the standard employment relationship, (iii) lastly, the overcoming of such model of production, due to the pulverisation of the vertical firm, should result in the simultaneous collapse of the SER. In order “to dispel nostalgia for a rather false retrospective vision of its supposed heyday”⁵⁹⁷, the misunderstandings that may have taken place between scholars on the “Taylor-Fordist” nature of the standard employment relationship must be overcome⁵⁹⁸.

⁵⁹⁴ VENEZIANI B. (2009), *The Employment Relationship* in HEPPLER B. A. and VENEZIANI B. (Eds.), *The Transformation of Labour Law in Europe. A Comparative Study of 15 countries: 1945-2004*, Oxford, UK and Portland, OR, p. 114.

⁵⁹⁵ See also NEILSON B. and ROSSITER N. (2008), *Precaarity as a political concept, or, Fordism as exception* in *Theory, Culture & Society*, 25(7-8), pp. 51-72 (questioning whether indeed it should be Fordism that is seen as the exception and the casualised pattern as the norm).

⁵⁹⁶ See GRIMSHAW D., WILLMOTT H. and RUBERY J. (2005), *Inter-organizational networks: Trust, power, and the employment relationship* in MARCHINGTON M., GRIMSHAW D., RUBERY J and WILLMOTT H. (Eds.), *Fragmenting work. Blurring organizational boundaries and disordering hierarchies*, Oxford, UK, pp. 39-62.

⁵⁹⁷ FREEDLAND M. (2013), *Burying Caesar: what was the standard employment contract?*, op. cit., p. 88. See also *Digital Taylorism* (2015, September 12), retrieved from <https://goo.gl/7WupqE>.

⁵⁹⁸ CROWLEY M., TOPE D., CHAMBERLAIN L. J. and HODSON R. (2010), *Neo-Taylorism at work: Occupational change in the post-Fordist era*, op. cit., p. 422 (identifying key components of this paradigm:

To begin with, employment law's origins do not date back to the period of peak industrialisation⁵⁹⁹ or, to put it differently, its original beneficiaries had very little to do with people working in the heavy industries, all the more so because, in countries like Italy, where vast mass production and even large size companies have lagged behind until the second half of the last century⁶⁰⁰. It could be said that the post-Fordist era started even before the Fordist model was at its height. The most that can be agreed is that the last few decades have seen a transition from large manufacturing enterprises to the ICT-based companies where different derivations of the Fordist scientific building blocks are still in place⁶⁰¹. In addition to this, a tentative conclusion seems that Taylorism is, contrary to earlier optimistic opinions, very much alive⁶⁰². To conclude, it could be said that flexible innovations represent a

close supervision, task segmentation, automation, and bureaucratic constraint). To sum up, "[a] workable concise definition of Taylorism is, 'management strategies that are based upon the separation of conception from execution'" as in PRUIJT H. (2000), *Repainting, modifying, smashing Taylorism*, op. cit., p. 440.

⁵⁹⁹ BAVARO V. (2017), *Questioni in Diritto su Lavoro Digitale, Tempo e Libertà*, op. cit., p. 6.

⁶⁰⁰ For an analysis of the Italian case, see SETTIS B. (2016), *Fordismi: Storia politica della produzione di massa*, Bologna, p. 205 ff. (focusing on the approaches taken by the "late comers" such as the FIAT Automobili S.p.A., the largest Italian automobile manufacturer).

⁶⁰¹ The transition to the knowledge economy began in earnest after the crisis of Fordism in the 1970s. See TOURAINE A. (1971), *The post-industrial society: tomorrow's social history: classes, conflicts and culture in the programmed society*, New York. Moreover, deeper examination reveals that "the employment contract predates the standard employment relationship and was the legal format upon which it was built". See FUDGE J. (2016), *Challenging the Borders of Labour Rights* in DU TOIT T. (Ed.), *Labour Law and Social Progress Holding the Line or Shifting the Boundaries? Bulletin for Comparative Labour Relations*, Alphen an den Rijn, The Netherlands, pp. 73-88 (explaining how "[t]he standard employment relationship was both the basis for, and outcome of, labour law in general and collective bargaining in particular. Large manufacturing firms, the paradigmatic Fordist enterprises, needed a stable supply of workers disciplined to accept managerial authority, and these workers, in turn, formed industrial unions in order both to limit that authority and obtain employment and income security").

⁶⁰² To this extent, it must be conceded that the apparently large success of the narrative describing the decline of Fordism is far from justified. SPRAGUE R. (2007), *From Taylorism to the Omniscipion: Expanding employee surveillance beyond the workplace*, op. cit., p. 3 (reviewing the basic surveillance techniques employed in the workplace). One is immediately reminded of (and tend to agree to) this striking observation used by SCHOLZ with regard to modern management practices: "[i]t's Taylor's scientific management on steroids". SCHOLZ T. (2015, April), *Think outside the boss*, retrieved from <https://goo.gl/Y7e8XC>. See also CHERRY M. A. (2016), *Beyond misclassification: the digital transformation of work*, p. cit., p. 596 (arguing that some aspects of platform labour look more like "a throwback to the earlier industrial model"). Oddly, it becomes clear that the Fordist model has been progressively abandoned in favour of a hyper-Tayloristic one. It is inappropriate from any standpoint to talk about Neo-Taylorism, as original principles moved seamlessly into the following era. Aglietta proposed a model termed "Neo-Fordism" to capture an intensified version of Fordism: mass production

revision of production methods such that principles of scientific management not previously incorporated into Fordist regimes have assumed key positions in the post-Fordist era – for instance, employers and principals tend delegate more responsibility to workers, while retaining an enhanced possibility to control and manage them even more sophisticatedly⁶⁰³.

Taking a step forward in this direction, within the systemic-evolutionary model of labour championed by DEAKIN⁶⁰⁴, the standard employment relationship can be better appreciated when it comes to its resilience, and its systematic, social and

combining flexible automation with the new flexible working arrangements. AGLIETTA M. (2000), *A theory of capitalist regulation: The US experience*, London. See also CROWLEY M., TOPE D., CHAMBERLAIN L. J. and HODSON R. (2010), *Neo-Taylorism at work: Occupational change in the post-Fordist era*, op. cit., p. 423 (“demonstrat[ing] how core principles of scientific management neglected under Fordism were implemented through flexible innovations in manual and professional work, revealing the shared foundations of Fordist and post-Fordist-era practices in this single, internally consistent doctrine”). A similar observation can be made about the risk of dehumanisation and commodification of labour. See KITTUR A., NICKERSON J. V., BERNSTEIN M., GERBER E., SHAW A., ZIMMERMAN J., LEASE M. and HORTON J. J. (2013), *The future of crowd work in Proceedings of the 2013 Conference on Computer Supported Cooperative Work*, p. 1303. With regards to other features of Fordism, such as homogeneous and standardised working styles, it is worth noting that, in the context of collaborative economy, homogenisation of processes, end of the fragmentation and sequencing of the phasing lead to uniform services. For a sharp distinction between Taylorism and Fordism, see STONE K. V. W. (2004), *From widgets to digits: Employment regulation for the changing workplace*, op. cit., p. 49 (arguing that Taylorism is centred on the hierarchical structure of the business organization, while Fordism relies on the flattened job structure characteristic of the assembly line).

⁶⁰³ As clarified in the previous section, much of the platform economy can be read as reengineered Fordism with externalised employment. As has been rightly pointed out, “these practices represent not a departure from scientific management as is often presumed, but rather adoption of Taylorist principles not fully manifested in Fordist-era mass production. Flexible practices have thus expanded the influence of scientific management in manual work, and extended the scope of its application into the professions in an era perhaps more aptly termed neo-Taylorist than post-Fordist”. See CROWLEY M., TOPE D., CHAMBERLAIN L. J. and HODSON R. (2010), *Neo-Taylorism at work: Occupational change in the post-Fordist era*, op. cit., pp. 421-447. Experts have argued that post-Fordist production techniques not only failed to challenge the core of Fordism; instead, they applied its stereotyped ideals of standardisation, efficiency, intensification, and control to the manufacturing process as a whole. See KRAFT P. (1999), *To Control and Inspire: U.S. Management in the Age of Computer Information Systems and Global Production* in WARDELL M., STEIGER T. L. and MEIKSINS P. (Eds.), *Rethinking the Labor Process*, Albany, pp. 17–36; VALLAS S. P. (1999), *Rethinking Post-Fordism: The Meaning of Workplace Flexibility in Sociological Theory*, 17(1), pp. 68-101; VELTZ P. (2017), *La société hyper-industrielle. Le nouveau capitalisme productif*, Seuil.

⁶⁰⁴ DEAKIN S. (2016), *The Contribution of Labour Law to Economic Development and Growth* in DU TOIT T. (Ed.), *Labour Law and Social Progress Holding the Line or Shifting the Boundaries? Bulletin for Comparative Labour Relations*, Alphen an den Rijn, pp. 19-39. See also DEAKIN S. (2013), *What exactly is happening to the contract of employment? Reflections on Mark Freedland and Nicola Kountouris’s Legal Construction of Personal Work Relations* in *Jerusalem Review of Legal Studies*, 7(1), pp. 135-144.

normative capacity to provide a comprehensive umbrella for atypical and non-standard forms of work. It continues to provide “fairness to workers and coordination for capital” while ensuring that the protective and redistributive goals of labour are achieved⁶⁰⁵. Following from the above, there are sufficient reasons to conclude that it is a category error to argue that labour law and its main organisational platform, as a mode of regulation which grew out of and responded to the rise of capitalist forms of production, have now become otiose or redundant. Conversely, they are more necessary, but also more relevant, than ever.

3.1. Against obsolescence: the enduring (and capacious) persistence of the standard employment relationship. A flexible approach to “subordination”.

The overlapping between the concept of the SER and the notion of subordination⁶⁰⁶, determining both content and boundaries of labour law, is a highly sensitive issue requiring further clarification⁶⁰⁷. One of main elements of the classical employment relationship is the subjection of the worker to the organisational, hierarchical and disciplinary powers of the employer⁶⁰⁸. Understanding the scope of

⁶⁰⁵ See BOSCH G. (2004), *Towards a new standard employment relationship in Western Europe*, op. cit., p. 632 (arguing that “[t]he old SER was intended to achieve the following goals: (1) protect employees against economic and social risks, (2) reduce social inequality and (3) increase economic efficiency”). Instead of thinking about whether the SER is capable of dealing with current, expected and unpredictable transformation, it more important to assess whether the business choices are consistent with the legal organizational modules. See ROCCELLA M. (2008), *Lavoro subordinato e lavoro autonomo, oggi*, op. cit., pp. 71-112.

⁶⁰⁶ This concept was “crafted” in Italy by the father of modern Italian labour law, Lodovico Barassi. See, for instance, Cass., 29 November 2007, No. 24903 (“the principal element of an employment contract – and the criterion that distinguishes it from a self-employment contract – is subordination, understood as a link of personal subjection to the power of direction). See also LUNARDON F. and TOSI P. (1998), *Subordinazione in Digesto IV edizione, Discipline privatistiche, Sezione Commerciale, XV*, p. 260 ff. It is important to note that the Italian Civil Code do not provide a definition of the employment relationship, but of the subordinate worker. See Cass., 18 July 2008, No. 20532. In the Italian Law, subordination is a technical and functional notion: the employee undertakes the obligation to work under the authority of the employer, who has the right to direct and control the work, as well as to inflict disciplinary sanctions.

⁶⁰⁷ Through the employment relationship reciprocal rights and obligations are created between the employee and the employer; in the same time, workers gain access to labour law and social security rights and benefits associated with employment. The employment relationship is the key point of reference for determining the nature and extent of employers’ rights and obligations towards their workers. See INTERNATIONAL LABOUR OFFICE (2006), *The employment relationship*, International Labour Conference, 95th Session, 2006 Report V(1), p. 3.

⁶⁰⁸ Cass., 13 May 2004, No. 9151; Cass., 29 November 2007, No. 24903, Cass., 11 May 2005, No. 9894 (on the notion of “hetero-organisation”). For a complete overview, see NOGLER L. (2009), *The concept of*

the notion is essential when it comes to (re)conceptualising the employment relationship. In particular, despite the broad array of auxiliary test that have been developed, it is argued that the deployment of managerial prerogatives can still identify the “genetic line” of the employment relationship, regardless the instrument by which such hierarchical powers are exercised⁶⁰⁹.

In the fourth section of this study, it will be argued that, within a relation of subordination, the worker’s position of subjection to management is to some extent necessary for the efficient coordination of production⁶¹⁰, which is precisely what can be detected also in the most common platform-coordinated working formats. To prove the enduring persistence of the SER it is worth noting that it provides important protections for workers, while supporting employers, who can rely on a stable workforce for their enterprise, retain and benefit from their workers’ expertise – which is crucial in an innovation-drive environments – and gain the managerial prerogative and authority to organise and direct their performances⁶¹¹. In particular, it must be understood that regular or standard forms of work imply several efficiencies and cost advantages compared to atypical ones. Firstly, typical arrangements allow the fully-fledged deployment of managerial power(s) and the related flexibility in the use of the labour force to implement organisational strategies⁶¹². Secondly, they constitute an effective tool to deliver training and

“subordination” in *European and comparative law*, Trento, p. 88 ff. See also GHERA E. (2006), *Subordinazione, statuto protettivo e qualificazione del rapporto di lavoro* in *Giorn. dir. lav. rel. ind.*, 1, p. 6 ff.

⁶⁰⁹ During its “golden period”, from the mid-1930s to the end of the 1970s, labour law was concerned with production and protection. By stipulating that employees were legally, not only economically, subordinate to their employers it safeguarded managerial prerogatives. See FUDGE J. (2017), *The future of the standard employment relationship: Labour law, new institutional economics and old power resource theory*, op. cit., pp. 374-392.

⁶¹⁰ In the Italian context, “an unfailing element of a subordinate employment relationship is subordination, intended as a form of personal submission by the employee to the managing power of the employer that is inherent in the ways one performs one’s work rather than simply in the result; on the contrary, the other elements of the employment relationship (such as collaboration, observance of a given working time, continuity of the services rendered, inclusion of the respective services in the business organisation and coordination with the entrepreneurial activity, the lack of risk for workers and their salary) are incidental. These factors should be taken into consideration as a whole and, in any case, in relation to subordination” (Cass., 1 December 2008, No. 28525).

⁶¹¹ BERG J., ALEKSYNKA M., DE STEFANO V. and HUMBLET M. (forthcoming), *Non-standard employment around the world: regulatory answers to face its challenges*, op. cit.

⁶¹² “The Italian legal system reacted to the recent trends by introducing deep changes in the regulation of the subordinate employment contract in order to allow for the complete development of the permanent employment relationship beyond the organisational model of the Fordist-type enterprise. This enables employers to unilaterally adjust the contract’s object to their variable business

develop specific skills. Thirdly and finally, they “facilitate and enhance closure of ‘pores’ in the labour process”⁶¹³ by fostering “functional flexibility”⁶¹⁴. This said, disadvantages such as the rigidity and incapacity to adapt more speedily to turbulent market flows cannot be denied⁶¹⁵. However, many constraints have been lessened as a result of recent reforms⁶¹⁶.

In the Italian system, the notion of subordination laid down in Article 2094 of the Civil Code, referring to the “subordinate employee”, “should be interpreted as referring to an employment relationship characterised by directives given by the entrepreneur”. While the managerial power is commonly interpreted “as referring to specific and precise orders, inherent to the intrinsic execution of work”⁶¹⁷, there can

needs and enables employees to work ordinarily outside the company’s premises and the pre-defined working hours, thus also regardless of the time made available to the entrepreneur. In particular, the most relevant changes, [...], were introduced by Article 3, decree No. 81/2015 on the regulation of the employers’ managerial prerogative to unilaterally change the duties for which the employee has been hired and by Articles 18-24, Law No. 81/2017 on so called ‘smart working’”. GRAMANO E. (2018), *Working performance and organisational flexibility: at the core of the employment contract*, Paper presented at the Sixteenth International Conference in commemoration of Professor Marco Biagi, Modena, Marco Biagi Foundation, 19-20 March 2018, p. 4. See also SIMON H. A. (1951), *A formal theory of the employment relationship* in *Econometrica*, 19(3), p. 293 (describing the implicit promise of economic security for workers in return for the subjection to bureaucratic power); ZOLI C. (1997), *Subordinazione e poteri dell'imprenditore tra organizzazione, contratto e contropotere* in *Lav. dir.*, 2, pp. 241-260 (describing the enduring binomial relation between managerial power and personal subjection).

⁶¹³ MHONE G. C. (1998), *Atypical forms of work and employment and their policy implications*, op. cit., p. 203.

⁶¹⁴ Defined as “a reversal of the division of labour and the fragmentation of work organization which were typical of the traditional production-line model; this is achieved both by extending the range of tasks and skills involved in a job and by increasing internal mobility”. See TREU T. (1992), *Labour flexibility in Europe* in *Int'l. Lab. Rev.*, 131(4-5), p. 505. See also CAPPELLI P. and NEUMARK D. (2004), *External Churning and Internal Flexibility: Evidence on the Functional Flexibility and Core-Periphery Hypotheses* in *Industrial Relations*, 43(1), pp. 148-182.

⁶¹⁵ See HOUSEMAN S. N. (2001), *Why employers use flexible staffing arrangements: Evidence from an establishment survey* in *ILR Review*, 55(1), p. 149 (presenting evidence to demonstrate how employer use flexible arrangements in order to adjust for workload fluctuations).

⁶¹⁶ GRAMANO E. (2018), *Working performance and organisational flexibility: at the core of the employment contract*, op. cit., p. 2 (arguing that “the very same factors which are shaping the labour market [...] are influencing the employment relationship itself. Even “inside” the most regular and clearly subordinate employment contract, such factors are profoundly changing the ways that employers and employees execute their relationship”)

⁶¹⁷ PERULLI A. (2017), *The Notion of ‘Employee’ in Need of Redefinition, A Thematic Working Paper for The Annual Conference of the European Centre of Expertise (ECE): The Personal Scope of Labour Law in Times of Atypical Employment and Digitalisation*. According to Treu, “an employer’s directive power is the counterpart of the duty of obedience of an employee”, see TREU T. (2014), *Labour law in Italy*, 4th ed, op. cit., p. 79.

be less direct forms of power in line with a different form of organisation⁶¹⁸. In such cases, subordination can thus be identified as the “continuous, loyal and diligent availability of the worker for the employer pursuant to the instructions of the counterparty”⁶¹⁹.

This point can be further illustrated by reference to the adaptive nature of the employment relationship. The notion of employee is not a sort of immutable “ideal-type”, rather it needs to be constantly curbed to the social and above all organisational conditions⁶²⁰. As argued above, the elasticity of the notion of employee and its hermeneutical resilience, coupled with the flexible indexes developed by the national and European case law, offer viable guarantees of ensuring the effectiveness of labour law⁶²¹. For instance, in the platform economy, it is easy to identify an “organisational form of subordination”⁶²² or a traditional personal subjection to the employer’s guidelines “pre-defining” modalities and conditions of execution⁶²³.

Therefore, changes in the external reality should not be invoked as a sufficient condition for reinventing legal-conceptual forms⁶²⁴. The legal determinants laid

⁶¹⁸ Courts on their side struggle in solving disputes on the qualification of the working relationships, especially in front of activities facilitated or carried out through advanced technological tools, which do not require the exercise of an incisive directive power by the employer.

⁶¹⁹ See also NAPOLI M. (1995), *Contratto e rapporti di lavoro, oggi*, op. cit., pp. 1102-1109 (arguing that the claim to design the fundamental pattern of the employment contract on the typical performance must be replaced by a flexible interpretation of the notion which privileges the descriptive synthesis of a typical set of interests, as is the case for all the typified contracts, instead of the description of a legal type built on a normative prototype).

⁶²⁰ AURIEMMA S. (2017), *Subordinazione nell'epoca dell'economia digitale* in *Riv. giur. lav.*, 2, p. 132 (arguing that the notion of subordination, as defined in art. 2094 of the Italian Civil Code, allows a continuous adaptation to the increasingly frequent and diversified transformations of the enterprise, the organisation of work and the nature of the employer).

⁶²¹ FERRARO G. (1998), *Dal lavoro subordinato al lavoro autonomo* in *Giorn. dir. lav. rel. ind.*, 3, p. 485 ff. (stressing the importance of the employment relationship, also in the presence of remarkable social and organisational transformations). See also DE LUCA TAMAJO R. (2005), *Profili di rilevanza del potere direttivo del datore di lavoro* in *Riv. it. dir. lav.*, 1, p. 467 ff. (bureaucratic power is seen as the key feature of this relationship); PERULLI A. (2002), *Il potere direttivo dell'imprenditore. Funzioni e limiti* in *Lav. dir.*, 3, pag. 397 (pointing out that some limits prevent the employer from exercising such power arbitrarily, setting a way to “govern discretion”); NAPOLI M. (1995), *Contratto e rapporti di lavoro, oggi* in AA.VV., *Le ragioni del diritto. Scritti in onore di Luigi Mengoni*, Milano, pp. 1057-1142; RAZZOLINI O. (2014), *La nozione di subordinazione alla prova delle nuove tecnologie* in *Dir. rel. ind.*, 4, p. 981 ff.

⁶²² DE LUCA TAMAJO R. (1997), *Per una revisione delle categorie qualificatorie del diritto del lavoro: l'emersione del “lavoro coordinato”* in *Arg. dir. lav.*, 5, p. 43.

⁶²³ DAVIDOV G. (2017), *The status of Uber drivers: A purposive approach*, op. cit., p. 11 (describing a situation of “submission to commands or to rules of the organization”).

⁶²⁴ The efficacy of the SER “as a conceptual form was never a function of its close resemblance to

down by provisions regulating the standard contract of employment have no real meaning until one considers the “historical model of work organisation”⁶²⁵. Indeed, “[t]o assume that the SER is in irreversible decline, is to neglect the possibility of its adjustment to changing conditions”⁶²⁶. What is more, the adaptive capacity of the legal system suggest that the evolutionary potential of the SER is more likely to be part of the answers to these issues, rather than an obstacle to their resolution⁶²⁷. The employment relationship will remain at the core of the labour market as the tool that can efficiently allow those who organise an economic activity to address rapid change⁶²⁸. This is the recipe of its “eternal youth”⁶²⁹.

the ‘reality’ of work relations”. BARASSI L. (1915), *Il contratto di lavoro nel diritto positivo italiano*, Milano, p. 4 (claiming that, taking into account its very nature, today’s contract of employment what it was two thousand years ago).

⁶²⁵ Indeed, the existence and the extent of the managerial power should not be assessed in absolute terms but “in relation to the specific nature of work”. D’ANTONA M. (1995), *Limiti costituzionali alla disponibilità del tipo contrattuale nel diritto del lavoro*, op. cit., p. 80. See SPAGNUOLO VIGORITA L. (1967), *Subordinazione e diritto del lavoro: Problemi storico-critici*, Napoli, pagg. 139-140 (arguing that “the notion of subordination takes shape in a constantly changing way, according to the different organisational contexts in which the job performance takes place”).

⁶²⁶ Furthermore, increases in non-standard work, and the recognition of non-standard employment forms as distinct legal categories, often end up reinforcing the SER. “[...] a labour market in which nonstandard working arrangements and the SER can co-exist. See ADAMS Z. and DEAKIN S. (2014), *Institutional Solutions to Inequality and Precariousness in Labour Markets*, op. cit., p. 803.

⁶²⁷ See also VARDARO G. (1986), *Tecnica, tecnologia e ideologia della tecnica nel diritto del lavoro*, op. cit., p. 284 (arguing that labour law principles are intended “to enhance, and not to restrict, the entrepreneurial powers”). In the same vein, “technological innovation (including through the 4th industrial revolution) and collective bargaining are not mutually exclusive; an inability to conceive of their coexistence is nothing more than a failure of the imagination”, see JOHNSTON H. and LAND-KAZLAUSKAS C. (2018), *On Demand and Organized: Developing Collective Agency, Representation and Bargaining in the Gig Economy*, op. cit., p. 2.

⁶²⁸ GRAMANO E. (2018), *Working performance and organisational flexibility: at the core of the employment contract*, op. cit., p. 21. The author argues that “the employment contract was originally conceived and still is one of the most flexible legal tools for the regulation of work relationships: a tool that has internalised organisational flexibility as a core feature of the employment relationship. This fundamental legal tool has unquestionably been disregarded or underestimated within the analysis and legal research regarding fair flexibility in the employment relationship” (p. 4). See also CUNNINGHAM-PARMETER K. (2016), *From Amazon to Uber: defining employment in the modern economy in Boston University Law Review*, 96(1), pp. 1617-1672.

⁶²⁹ PEDRAZZOLI M. (1998), *Dai lavori autonomi ai lavori subordinati*, op. cit., p. 520. See also PEDRAZZOLI M. (1985), *Democrazia industriale e subordinazione: poteri e fattispecie nel sistema giuridico del lavoro*, Milano. For recent analyses, see CESTER C. (2016), *Il neotipo e il prototipo: precarietà e stabilità in MAZZOTTA O. (Ed.), Lavoro ed esigenze dell’impresa tra diritto sostanziale e processo dopo il Jobs Act*, Torino, pp. 73-87 and PESSI R. (2016), *Il tipo contrattuale: autonomia e subordinazione dopo il Jobs Act in MAZZOTTA O. (Ed.), Lavoro ed esigenze dell’impresa tra diritto sostanziale e processo dopo il Jobs Act*, Torino, pp. 31-46.

AT THE TAP OF AN APP: EXPLORING WORKING CONDITIONS AND UNDERSTANDING THE EXISTING LEGAL FRAMEWORK

TABLE OF CONTENTS: 1. "The umbrella has become a tent". An updated nomenclature of platform-mediated labour. – 1.1. A preliminary distinction: crowdsourcing and work on-demand via platform. – 2. Investigating working conditions in the platform economy: a multi-stage analysis. – 2.1. Access to the platform and registration. – 2.2. Selection process and hiring. – 2.3. Performance execution and command power. – 2.4. Rating and ranking, monitoring and disciplinary power. – 2.5. Payment rewards for completed tasks. – 3. Understanding the legal frameworks applying to platform-mediated labour. An introduction to European and national requirements to comply with. – 3.1. The Communication on the European agenda for the collaborative economy. – 3.2. The European Pillar of Social Rights, the parliamentary resolution on the collaborative economy and other institutional initiatives. – 3.3. Sectoral analysis: passenger transport services. – 3.3.1. The Court of Justice and the legal nature of *Uber's* "underlying service". – 3.4. Sectoral analysis: online crowdsourcing. – 3.4.1. Platforms as temporary work agencies, an "indirect" approach. – 3.5. Sectoral analysis: work on demand via platform (household services). – 3.5.1. On-call work, voucher-based or zero-hours contracts?

1. "The umbrella has become a tent". An updated nomenclature of platform-mediated labour.

Digitally mediated working relationships have been a subject of academic and political debate for well a decade now⁶³⁰, and the topic has recently experienced a voracious attention. Yet it is not always clear what it is like to work through a platform and how to regulate it. After a first chapter focused on the typified business model of digitally enabled firms and a second one discussing the notion of the employee in times of non-standard employment, the aim of this third section is to shine a spotlight on the working conditions in the collaborative economy. In particular, understanding how the process operates and analysing the adaptability of the existing regulatory system may help situate this segment in a broader context, without denying its distinctive and novelty elements.

⁶³⁰ Pioneering studies were carried out about ten years ago. Cherry, for instance, has written extensively on topics associated with web-enabled forms of work. See CHERRY M. A. (2010), *A taxonomy of virtual work* in *Ga. L. Rev.*, 45(4), pp. 951-1014 (describing the beginning of "a dialogue about the legal issues present in virtual worlds"). See also CHERRY M. A. (2009), *Working for (virtually) minimum wage: applying the Fair Labor Standards Act in Cyberspace* in *Alabama Law Review*, 60(5), pp. 1077-1110 and SCHOLZ T. (Ed.) (2013), *Digital Labor: The Internet as Playground and Factory*, New York. More recently, platform labour has come under increased scrutiny by legislative bodies, labour courts, academia and trade unions.

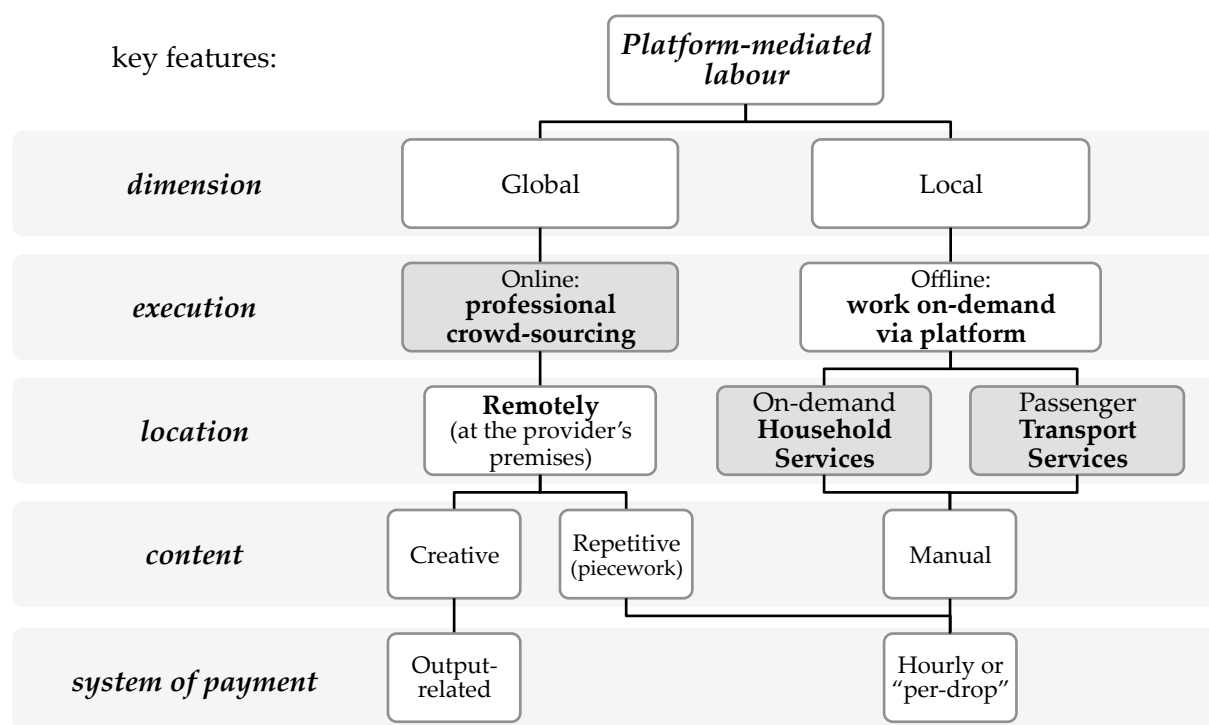
As repeatedly maintained elsewhere, not all platforms are alike. Accordingly, recent studies on this topic have attempted to classify several typologies of platforms as well as digitally enabled work arrangements, by adopting an increasingly complete nomenclature. To fully appreciate the multifaceted models that fall under the “tent” definition of “platform economy”, one should consider a set of key features characterising labour platforms⁶³¹. Anyway, at the moment, a case-by-case assessment rather than a universal one is necessary, especially when it comes to dealing with unresolved legal dilemmas regarding the demarcation of the relevant market, the nature of the service provided by intermediaries and the classification of platform workers, just to list a few. To this extent, the purely descriptive method used to illustrate how a performance is rendered will be followed by a review aimed at situating labour platform arrangements in the present legal framework.

Admittedly, many commentators agree on dividing the broad array of contractual forms into two main models: (a) crowd-sourcing and (b) work on-demand via platform or app⁶³². Besides this leading binary distinction, different approaches in emphasising the major characteristics of these schemes may lead to alternative categorisation. Without going too far, platforms may be classified taking into account several features, as shown in the table below: (i) the dimension of the platforms, distinguishing between global or local presence, (ii) the site of execution, differentiating between online tasks (i.e. remotely completed) and “real world” tasks, (iii) the content of the “gigs”, distinguishing between creative, routine or manual jobs, (iv) the service offered, distinguishing between “task specific” and “generalist” platforms, (v) the nature of the performances, distinguishing between “low-skill” and “high-skill” activities⁶³³, (vi) the way of adjudication (competition/contest vs. procurement/specification), (vii) the system of payment (output-related, hourly or “per-drop”). Besides, looking at the location of the performance, work on-demand can be split into household services and passenger transport services.

⁶³¹ The expression used in the title of this paragraph is borrowed from FRENKEN K. and SCHOR J. (2017), *Putting the sharing economy into perspective* in *Environmental Innovation and Societal Transitions*, 23, p. 3.

⁶³² See BERG J. and DE STEFANO V. (2015, July 10), *Regulating work in the ‘gig economy’*, retrieved from <https://goo.gl/cs3tXp> (presenting the results of two dedicated sessions at the *Fourth Conference of the Regulating for Decent Work Network*, held at the ILO on 8-10 July 2015).

⁶³³ ZITTRAIN J. (2009, July 12), *The Internet creates a new kind of sweatshop*, retrieved from <https://goo.gl/UBUfjs> (describing “a pyramid of sorts, with services designed to tap serious (and rare) smarts at the top, and others to enlist anyone with a brain wave at the bottom”).

Figure 3 Typologies of (labour) platforms according to a set of key features⁶³⁴

In the name of completeness, the very first distinction is between labour platforms and platforms that facilitate access to goods, property and capital⁶³⁵. Among the latter, one can list capital platforms (such as the British *Funding Circle*⁶³⁶), pure rental

⁶³⁴ Figure 3. Author's own elaboration. The three boxes marked with a grey background indicate the subsectors that will be analysed in the following paragraphs. For a similar conceptualisation, see SCHMIDT F. A. (2017), *Digital Labour Markets in the Platform Economy, Mapping the Political Challenges of Crowd Work and Gig Work*, Berlin. Diversification of services available on a given platform may be a key factor for growth.

⁶³⁵ DRAHOKOUPIL J. and FABO B. (2016), *The platform economy and the disruption of the employment relationship*, op. cit., p. 2. See also FARRELL D. and GREIG F. (2016), *Paychecks, Paydays, and the Online Platform Economy: Big Data on Income Volatility*, op. cit. Also in this pattern, "there is some work to be done, such as driving the vehicle by the car owner or the guest's accommodation by flat owners". Nevertheless, these activities seem to be "completely secondary in comparison to the rental of the goods". See TODOLÍ-SIGNES A. (2017), *The End of the Subordinate Worker? The OnDemand Economy, the Gig Economy, and the Need for Protection for Crowdworkers*, op. cit., p. 244. A different dividing line could be mere sharing of costs vs. profit-seeking motive. See also BOCK A.-K., BONTOUX L., FIGUEIREDO DO NASCIMENTO S., SZCZEPANIKOVA A. (2016), *The future of the EU collaborative economy – Using scenarios to explore future implications for employment*, JRC Science for Policy Report.

⁶³⁶ *Funding Circle* is a platform connecting small and medium enterprises with lenders and investors.

services (such as *AirBnB*, *HomeAway*⁶³⁷ or *Turo*⁶³⁸), peer-to-peer car sharing services (such as the French *BlaBlaCar*⁶³⁹) and peer-to-peer marketplace for exchanging goods (such as the Spanish *Grownies*⁶⁴⁰). Understandably, the analysis will not address this group of platforms. Conversely, this chapter focuses on three main subsegments: (i) passenger transport services, (ii) professional tasks completed online (crowdemployment)⁶⁴¹, (iii) manual services carried out at the customer's premises, whether domestic or commercial.

Having outlined the borders of the notion of labour platform for the purposes of this research, a preliminary remark is done in order to get a better understanding of the "new" employment trends emerging across Europe. It is nearly impossible to enclose a very complex phenomenon into rigid schemes, at least in its embryonic or experimental stages of development. Each platform is organised in such a peculiar way that regulating, or even studying, this issue with a "one-size-fits-all" approach results short-sighted as well as unfeasible⁶⁴². Taking into account this significant heterogeneity, which may entail intense juridical implications, a common business

⁶³⁷ *AirBnB* is probably the most known hospitality service. It matches hosts and guests enabling the lease or rent of short-term lodging. It was founded in the U.S.A. *HomeAway* is a vacation rental platform.

⁶³⁸ *Turo*, formerly *RelayRides*, is a company that operates a peer-to-peer car-sharing marketplace. It allows private car owners to rent out their vehicles via an online platform.

⁶³⁹ *BlaBlaCar* is a platform connecting drivers with idle seats with travellers or passengers paying a contribution to the costs for long-distance or city-to-city routes. Founded in France. See AURIEMMA S. (2017), *Impresa, lavoro e subordinazione digitale al vaglio della giurisprudenza* in *Riv. giur. lav.*, 1, p. 281 (explaining how its business model can be distinguished from other services in the same sector by virtue of the cost-sharing mechanism).

⁶⁴⁰ *Grownies* is a peer-to-peer marketplace for goods and clothes for young children. Founded in Spain.

⁶⁴¹ See HUWS U. (2009) *The making of a cybertariat? Virtual work in a real world* in *Socialist Register*, 37, p. 2. (claiming that the formula "non-manual work" would have denied "the physical reality of pounding a keyboard all day").

⁶⁴² TULLINI P. (2016), *Digitalizzazione dell'economia e frammentazione dell'occupazione. Il lavoro instabile, discontinuo, informale: tendenze in atto e proposte d'intervento* in *Riv. giur. lav.*, 1, p. 748. See GRAGNOLI E. (2017), *Conclusioni*, Seminar "Il lavoro a distanza", Università Cattolica del Sacro Cuore, Milan, 15 May 2018 unpublished manuscript quoted in BIASI M. (2018), *Dai pony express ai riders di Foodora. L'attualità del binomio subordinazione-autonomia (e del relativo metodo di indagine) quale alternativa all'affannosa ricerca di inedite categorie* in ZILIO GRANDI G. and BIASI M. (Eds.), *Commentario Breve allo Statuto del Lavoro Autonomo e del Lavoro Agile*, Padova, p. 71 (arguing that this issue should be addressed by considering differences, rather than focusing on specific analogies). See also CARUSO B. (2017), *La rappresentanza delle organizzazioni di interessi tra disintermediazione e re-intermediazione* in *Arg. dir. lav.*, 3, p. 562 (distinguishing between material and immaterial performance execution and analysing collective action initiatives targeted specifically at unorganised workers).

model could be conceptualised consisting in the seamlessly matching of demand and supply of labour, facilitated and coordinated by digital systems that make it easy to manage a large and “low-cost” workforce. In general, workers take on specific “gigs” without any security of further employment. Dissimilarities among companies, as will be clarified in the following paragraphs, go much beyond.

The purpose of this chapter is to contribute to the ample research on platform-based labour. In particular, after defining and describing in full detail the main categories of platforms and their operation⁶⁴³, this section will provide an overview of regulatory frames applying to a set of working arrangements, by presenting related achievements and challenges for policy-makers. Having thus looked into those requirements that platform companies have to comply with, measures taken by different Member States will be discussed, if any. The research will review national practices and legal cases as well as early legislation introduced with regard to platform-facilitated arrangements and new forms of (web-based or -intermediated) work. Particular attention will be given to European measures aimed at ensuring decent work in the collaborative economy, by taking into account various aspects including classification of workers, working conditions and fair competition in these regimes. In doing so, several European countries will be taken into account, on the basis of availability of data as well as knowledge about legislative, judicial, entrepreneurial or collective initiatives⁶⁴⁴.

1.2. A preliminary distinction: crowdsourcing and work on-demand via platform.

As mentioned above, classing “salient instantiations”⁶⁴⁵ is an intricate assignment when it comes to developing a consolidated or consistent terminology. It has to be stressed that dissimilar patterns may entail different, or indeed opposite, legal qualifications and implications. Thus, setting a detailed categorisation could help in selecting the most important features deserving to be assessed from a legal

⁶⁴³ This section refers to labour platforms as those digital intermediaries allowing individuals, families or companies in need of a service to hire a worker who is available to offer timed and monetised tasks. Representativeness remains a challenge that is difficult to address.

⁶⁴⁴ For an analysis of the role of “traditional” Italian trade union confederations, see FAIOLI M. (2017), *Jobs “App”, Gig-Economy e sindacato*, op. cit., p. 299 (mapping achievements, ongoing initiatives and remaining challenges).

⁶⁴⁵ PRASSL J. and RISAK M. (2016), *Uber, Taskrabbit, and Co.: Platforms as Employers – Rethinking the Legal Analysis of Crowdwork*, op. cit., p. 622.

standpoint⁶⁴⁶. Scholarship seems to agree on a “*summa divisio*” between crowdsourcing and work on-demand via platform; legal experts tend to “focus separately [...] on online and offline workers, because their places of work (remote versus face-to-face) and the relationship with clients (tele-mediated versus direct) create very different patterns of work, exposing workers to different risks”⁶⁴⁷. In an attempt to resolve this definitional dilemma, a preliminary distinction between crowdsourcing and work on-demand can be drawn by taking into account the place of performance of work and considering the mechanisms through which work is requested or obtained. In the first model, the client and the service provider rarely (if ever) experience a face-to-face interaction and services are electronically transmittable⁶⁴⁸, while the second form is often carried out in-person, locally, with customer and worker in physical proximity⁶⁴⁹.

Before venturing on the task of scrutinising the phenomenon more in depth, a comprehensive assessment of the two main stylised models will be carried out⁶⁵⁰. It has to be pointed out that professional crowdwork (or “crowdsourcing”⁶⁵¹) includes

⁶⁴⁶ Researches from the MIT have proposed a “functional” categorisation of crowdsourcing grounded on the main functions of platform-based companies. KAGANER E., CARMEL E., HIRSCHHEIM R. and OLSEN T. (2013), *Managing the human cloud in MIT Papers*, p. 23.

⁶⁴⁷ HUWS U., SPENCER N. H. and JOYCE S. (2016), *Crowd Work in Europe. Preliminary Results from a Survey in the UK, Sweden, Germany, Austria and The Netherlands*, Foundation for European Progressive Studies, p. 9. Nonetheless, outlining an inflexible dichotomy between these two forms of work is not convincing. See DE STEFANO V. (2016), *Introduction: Crowdsourcing, the Gig-Economy, and the Law in Comp. Lab. L. & Pol’y J.*, 37(3), p. 461.

⁶⁴⁸ See POPMA J. (2013), *The Janus face of the ‘New Ways of Work’: Rise, risks and regulation of nomadic work*, ETUI Working Paper, No. 07, p. 7 (defining “new ways of work” (NewWoW) as “place- and time-independent working, with place-independence perhaps the most striking aspect”).

⁶⁴⁹ For a complete description, see DAGNINO E. (2016), *Uber law: prospettive giuslavoristiche sulla sharing/on-demand economy in Dir. rel. ind.*, 1, pp. 137-163.

⁶⁵⁰ Please note that, in the following pages, references to platforms will be not exhaustive, as a complete list would amount to several pages.

⁶⁵¹ The journalist Jeff Howe coined the term “crowdsourcing” in 2006. See HOWE J. (2006, June), *The Rise of Crowdsourcing*, retrieved from <https://www.wired.com/2006/06/crowds/> (describing “the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call”). On a closer inspection, the prefix “crowd” resounds the rhetoric of the “wisdom of the crowd” and its problem solving potential. The notion was introduced in SUROWIECKI J. (2004), *The wisdom of crowds*, New York. For a complete picture, see DURWARD D., BLOHM I. and LEIMEISTER J. M. (2016), *Principal Forms of Crowdsourcing and Crowd Work* in FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS), *The Digital Economy and the Single Market*, Brussels, p. 41 (distinguishing this phenomenon in three main forms “in relation to the individual effort the single crowd worker has to spend within the initiative”: (i) “crowdvoting”, in these crowdsourcing initiatives the crowd workers only have to evaluate or review,

services completed solely on computer and delivered remotely over the Internet⁶⁵², encompassing a wide variety of activities, clerical or repetitive (so-called “click work”) as well as creative and intellectual ones, such as conceiving marketing campaigns or proofreading academic contributions⁶⁵³. The list of dominant performances, also labelled as “human intelligence tasks” (HITs on *Amazon Mechanical Turk*)⁶⁵⁴, is rather long, ranging “from data entry and admin work over graphic design and coding to legal and business consulting”⁶⁵⁵. The pattern involves routine performances (*ClickWorker* is an example) executed from the provider’s house – or from any place equipped with Wi-Fi – and delivered electronically to a “crowdsourcer”⁶⁵⁶. These activities can be simply performed by humans, but are still too complicated to be accomplished by computer algorithms.

On the other hand, there are numerous examples of platforms dedicated to relatively “creative” or specialised services requiring specific prerequisites (*Zooppa* is the typical model of a so-called “talent pool”). In the most common forms of crowdsourcing work is split into very small subtasks, while professional freelancing might not entail a significant degree of segmentation⁶⁵⁷. As will be argued below, workers’ flexibility in terms of the choice of working time and workload in many cases turns out to be illusory⁶⁵⁸. Needless to say, much of this work can be

(ii) “crowdfunding”, the crowd is asked to give a certain sum of money or to invest in requesters’ projects, (iii) “crowdcreation”, in this case the effort of the individual crowdworker is higher than in the other forms as something must be produced, “for example, they design a logo, develop software or test websites”). See also DÄUBLER W. and KLEBE T. (2016), *Crowdwork: datore di lavoro in fuga?* in *Giorn. dir. lav. rel. ind.*, 3, p. 471 (distinguishing between “external” and “internal” crowdsourcing).

⁶⁵² Although workers complete their task remotely, it is worth reiterating that there is no such thing as “cyberspace”. See IRANI L. (2015, January 15), *Justice for ‘data janitors’*, retrieved from <http://www.publicbooks.org/justice-for-data-janitors/>.

⁶⁵³ The most common activities on *Amazon Mechanical Turk* include, but are not limited to: building and cleaning databases, testing software, validating search results, labelling items, transcribing audio clips and recordings, harvesting email, editing documents, conducting surveys, recognising irony, placing ad on videos, and detecting obscene images.

⁶⁵⁴ BERGVALL-KÅREBORN B. and HOWCROFT D. (2014), *Amazon Mechanical Turk and the commodification of labour in New Technology, Work and Employment*, 29(3), p. 217.

⁶⁵⁵ OECD (2016), *New forms of work in the digital economy*, Digital Economy Papers, No. 260, p. 17.

⁶⁵⁶ See EUROFOUND and INTERNATIONAL LABOUR OFFICE (2017), *Working anytime, anywhere: The effects on the world of work*, Luxembourg and Geneva, Switzerland.

⁶⁵⁷ DURWARD D., BLOHM I. and LEIMEISTER J. M. (2016), *Principal Forms of Crowdsourcing and Crowd Work*, op. cit., pp. 39-55.

⁶⁵⁸ See MEANS B. and SEINER J. A. (2015), *Navigating the Uber Economy* in *U.C. Davis Law Review*, 49(4), p. 1542.

performed irrespective of the physical location, in this case “competitive dynamics (in which there is more demand for work than supply of it)” may result in “a situation in which low-cost, low-capability suppliers of work (for instance digital workers) could be disadvantaged and become clear price-takers with little bargaining power”⁶⁵⁹.

Online tasks, part of a larger pattern that has been defined as “human cloud” tasks, call for special mention⁶⁶⁰. At the moment, consumers, as well as policy-makers tend to underestimate the fact that large portions of online activities are run by humans. As it may be clear, humans are behind the digital curtain. To this extent, *Clickworker*'s presentation is disarming: “[a]s much as modern computing power has increased, there are still many things only humans can do. (...) *Clickworker* gets tasks done that computers can't process, won't process, (because the cost of programming or equipment is too high) or those you can't do because you don't have enough human resources to complete the project on time and on budget”⁶⁶¹. Artificial intelligence has been described, in a way, as anything but “artificial”⁶⁶², since it is powered by human labour which can be employed beyond the capabilities of current technology.

According to the World Bank, “microwork” is becoming a significant part of digital work, allowing “broader access to specialized skills, more flexible and faster

⁶⁵⁹ GRAHAM M., HJORTH I. and LEHDONVIRTA V. (2017), *Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods*, op. cit., pp. 140-142 (explaining how “demand is relatively geographically concentrated, but supply is relatively geographically diffuse and workers from low- and high income countries end up competing in the same contexts”).

⁶⁶⁰ The Oxford Internet Institute has developed the Online Labour Index (OLI), an index measuring the changes in the volume of projects transacted in major online platforms. The research maps the occupation taxonomies to 6 broadly similar occupation classes, namely (i) clerical and data entry, (ii) creative and multimedia, (iii) professional services, (iv) sales and marketing support, (v) software development and tech, (vi) writing and translation. See KÄSSI O. and LEHDONVIRTA V. (2016), *Online Labour Index: Measuring the Online Gig Economy for Policy and Research*, Paper presented at Internet, Politics & Policy, 2016, 22-23 September, Oxford, UK. See also WEXLER M. N. (2011), *Reconfiguring the sociology of the crowd: exploring crowdsourcing* in *International Journal of Sociology and Social Policy*, 31(1/2), p. 6-20.

⁶⁶¹ See *Clickworker*'s presentation: <https://www.clickworker.com/how-it-works/>.

⁶⁶² PRASSL J. (2018), *Humans as a service*, Oxford, UK. In an open acknowledgment in 2013, former *Waymo* and *Uber* engineer Anthony Levandowski, with such complete disregard for human dignity, presented a Google team in India made up of what he called “human robots”, who were cataloguing images from Street View application. See BRADSHAW T. (2017, July 9), *Self-driving cars prove to be labour-intensive for humans*, retrieved from <https://on.ft.com/2uHBiJq>.

hiring processes, and 24-hour productivity”⁶⁶³. Platforms can *decomponetise* work into a broad range of tiny jobs that can be disseminated, claimed and performed⁶⁶⁴. Ranging from simple tasks to more complex ones, the list of activities consists in executing a variety of tasks including recommendations for e-commerce websites (i.e. the “you may also like this...” feature), detecting objectionable materials online (from hate speech to pornography), providing customer assistance via chats and forums. Moderation of user-generated content on websites is another widespread application⁶⁶⁵. With regard to crowdsourcing, legal implications could be even more critical (i.e. child labour hidden behind avatars, the risk of forced labour and “click farming” in developing countries’ sweatshops⁶⁶⁶), in addition to concerns regarding health and safety measures⁶⁶⁷. Hence, crowdsourcing is supposed to have two different upshots. On the one hand, it provides the possibility to perform jobs that were not previously accessible locally or to specific groups of workers⁶⁶⁸, on the other, it leads to a global mobility of existing freelancing jobs.

⁶⁶³ See KUEK S. C., PARADI-GUILFORD C., FAYOMI T., IMAIZUMI S., IPEIROTIS P. G., PINA P. and SINGH M. (2015), *The global opportunity in online outsourcing*, Washington, DC, p. 3 (explaining how “[i]ndustry experts suggest that these firms currently have combined annual global gross services revenue of about \$120 million; together they form about 80 per cent of the microwork market”). For an overview of the economic incidence of the overall platform sector, see the Introduction.

⁶⁶⁴ MILLAND K. (2017), *Slave to the keyboard: the broken promises of the gig economy in Transfer: European Review of Labour and Research*, 23(2), p. 229. See also CEFKIN M., ANYA O. and MOORE R. (2014), *A perfect storm? Reimagining work in the era of the end of the job*, op. cit., p. 4.

⁶⁶⁵ “These workers are in the business of making humanity’s darkest images invisible – and in so doing, render themselves invisible as well”, according to CHERRY M. A. (2016), *Virtual work and invisible labor*, op. cit., p. 71.

⁶⁶⁶ CHERRY M. A. (2016), *Virtual work and invisible labor*, op. cit., p. 83 (arguing that “ensuring non-coerced or non-child sources of labor are just as salient here as they are in other forms of labor”). See also CASILLI A. (2016), *Is There a Global Digital Labor Culture? Marginalization of Work, Global Inequalities, and Coloniality*, Paper presented at the 2nd symposium of the Project for Advanced Research in Global Communication (PARGC), Philadelphia. See also ID. (2016, November 20), *Never mind the algorithms: the role of click farms and exploited digital labor in Trump’s election*, retrieved from <https://goo.gl/QA2ZKA> (discussing the case of a Singapore teenager who was hired on *Fiverr*, a platform allowing to recruit creative copywriters, graphic designers or coders: she helped create a *Prezi* presentation for Trump’s campaign, unaware of the identity of her client).

⁶⁶⁷ See EU-OSHA (2015), *A review on the future of work: online labour exchanges, or ‘crowdsourcing’: implications for occupational safety and health* (analysing physical risks attributable to online work).

⁶⁶⁸ Platforms might offer new opportunities to students, retirees and many people belonging to concessionary or marginalised groups, including, in some cases, those impaired or bound to stay at home. Moreover, these newly emerging forms of work may have the potential to help vulnerable communities, by breaking down the boundaries of their local labour markets. As a result, bargaining power of employers could be rebalanced and workers might gain a higher price for their labour. See also HUNT A., SAMMAN E. and MANSOUR-ILLE D. (2017), *Syrian women refugees in Jordan: Opportunity in*

Coming now to the second model, the expression “on-demand work via platform or app” refers to services executed locally (mostly at the customer’s premises), such as delivery (*Foodora*), maintenance (*Etece.es*), handyman (*TaskRunner*), cleaning services (*Helpling*), and baby-sitting, to mention only the most significant ones⁶⁶⁹. Transportation services, although not precisely delivered at the customer’s premises, belong to this category⁶⁷⁰. Anyway, literature has focused mostly on the ride-hailing sector, as this one represents the most blatant manifestation of risk and opportunities, and exemplifies the dominant double narrative concerning platform-based economy. Needless to say, *Uber* – a very metonym for the sector⁶⁷¹ – has inveigled its way into popular culture with shocking speed, giving the birth even to a new verb⁶⁷².

Alongside the opportunities that the system presents, it would be fair to say that most of these workers are excluded by some, or even the entirety, of the essential workplace protections due to employees, such as sick or holiday leave, full insurance, pension, superannuation or similar scheme, or minimum rates of pay and

the gig economy?, *Overseas Development Institute Report*, p. 6 (arguing that “the gig economy in Jordan offers some promise to provide work to Syrian women refugees, especially by providing wider markets to women who are already economically active on a small scale”. In particular, authors found that “localised ‘on-demand’ work may be more relevant than online ‘crowdwork’”, due to uneven rates of connectivity and a skills mismatch with available opportunities).

⁶⁶⁹ The distinction is not clear-cut, as other platforms, such as *Freelancer*, allow selecting workers for both virtual and real world services. From coding and design to “help with my garden maintenance” and “clean my house or business”. See <https://www.freelancer.com/freelancers/>.

⁶⁷⁰ ADAM D., BREMERMAN M., DURAN J., FONTANAROSA F., KRAEMER B., WESTPHAL H., KUNERT A. and TÖNNES LÖNNROOS L. (2016), *Digitalisation and working life: lessons from the Uber cases around Europe*, EurWORK, European Observatory of Working Life.

⁶⁷¹ *Uber’s* impressive success further inspired other platform-based companies. It very often happens to come across passionate entrepreneurs launching the “*Uber* but for X”. It is indeed useful as an expository example, due to the “replicability” of its business model. Nevertheless, caution has to be exercised towards the ride-hailing company. It certainly represents a tech giant, but its parable of success could be an exception rather than the rule. See MANJOO F. (2016, March 23), *The Uber model, it turns out, doesn’t translate*, retrieved from <https://nyti.ms/25ID8fY> (arguing that the “*Uber’s* success was in many ways unique” due to the specific vulnerability of the urban mobility market). See also SMITH Y. (2016, December 5), *Can Uber ever deliver? Understanding that unregulated monopoly was always Uber’s central objective*, retrieved from <https://goo.gl/1Rqajb>.

⁶⁷² It was argued, and quite rightly too, how “[f]ew companies offer something so popular that their name becomes a verb”, see *Uberworld* (2016, September 3), retrieved from <https://econ.st/2bKeQVA>. Indeed, the company has become a common metonym for the decline of labour-intensive industries, and hence for “reinventing” jobs. In France the word *Ubérisation* has become a synonym of casualisation. See BELLONI A. (2017), *Uberization*, Milano, p. 21 (describing the proliferation of this trend in several sectors such as finance, management, knowledge, news, science and politics).

working time regulations. In addition to this, costs associated with equipment, maintenance and repairs are at the provider's own expense: no reimbursements for these expenses are due. More often than not, the participation or user agreement (i.e. non-negotiable contract) specifies that the worker is performing his duty as an independent contractor: the most popular clause points out that providers use the platform at their own risk⁶⁷³. Therefore, this apparently new pattern has to be on the radar for several reasons. Firstly, the platformisation of labour relations may reshape and revive traditional outsourcing practices or rather redesign the way people work. Secondly, it should contribute to a formalisation of informal economy, "replacing word-of-mouth methods of finding work, and unrecorded cash-in-hand payments by traceable online payments"⁶⁷⁴. Thirdly, it might speed up the erosion process of both traditional categories and protections – allowing companies to gain a regulatory arbitrage over traditional competitors complying with labour law provisions⁶⁷⁵.

2. Investigating working conditions in the platform economy: a multi-stage analysis.

The following paragraphs further detail the particular nature of work in the collaborative economy. A very careful understanding of the specific conditions relevant to this economic segment will be important in determining whether existing legal categories are viable options. Moreover, scrutinising the way the performance is carried out is pivotal, as – in the light of the principle of the "primacy of facts" explicitly enshrined in many national legal systems – substance has to be preferred over form⁶⁷⁶, when courts engage in a fact-based inquiry. To explore working conditions on labour platforms, secondary data from academic sources, non-structured interviews, journalistic accounts and independent investigations will be combined with publicly available information (mainly terms of service and

⁶⁷³ See, AMT's Participation Agreement: <https://www.mturk.com/mturk/conditionsofuse>.

⁶⁷⁴ HUWS U. (2016, June 1), *Logged In*, retrieved from <https://goo.gl/ik6BWL>.

⁶⁷⁵ See GRANDI M. (1997), "Il lavoro non è una merce": una formula da rimeditare in *Lav. dir.*, 4, pp. 557-580.

⁶⁷⁶ See, for the Italian context, Cass., 11 September 2003, No. 13375, FI, 2003, I, 3321; Cass., 10 April 2000, No. 4533, FI, 2000, I, 2196. This principle has to be interpreted in accordance with the "principle of impossibility to choose the contractual pattern", according to which neither the legislator nor the contractual parties to the specific contract are allowed to use a specific contractual pattern (self-employment or employment) with a view to stripping workers of a minimum set of protection in conflict with the factual conditions. See D'ANTONA M. (1995), *Limiti costituzionali alla disponibilità del tipo contrattuale nel diritto del lavoro* in *Arg. dir. lav.*, 1, p. 63 ff.

individual contracts signed by workers)⁶⁷⁷. In addition, it should be clear by now that the methodological approach of the present investigation is one that is predominantly rooted in legal scholarship, and also encompasses sociological, demographic studies and even other neighbouring disciplines. The aim is to generate insights into a representative portion of the growing multitudes of platform-facilitated arrangements by accumulating disaggregated information about a range of different variables that help to differentiate these working formats along five various dimensions. Several elements embedded in the research question will be considered, focusing on their direct legal implications. To emphasise five key phases of a platform-based performance, a sort of chronological order will be followed in unfolding this multi-stage process, starting with the registration and ending with the payment.

2.1. Access to the platform and registration.

To gain access to the “fleet” providing services through the platform, a potential candidate needs at least a smartphone equipped with a high-speed connection. When registering, a prospective worker has to provide biographical data (including age, location, highest degree, title, language skills, hobbies and know-how⁶⁷⁸) and a bank account where the money will be conveyed. In order to access a platform and stay on it, the weaker contracting party has only two options or, even better, a “take-it-or-leave-it offer”: he or she may adhere to the terms as drafted *en bloc* or reject the clauses entirely. The worker cannot negotiate terms and conditions, as electronic standard forms contracting – a kind of adhesion-styled agreement⁶⁷⁹ – allows only to

⁶⁷⁷ Scrutinising workers’ conditions, by mapping information exchanged on closed-membership groups and dedicated online forums, is one of the best ways to collect information. Increasingly during the past years, platform economy companies have become the targets of a journalistic genre that, in certain respects, “used to be called muckraking: admirable and assiduous investigative work that digs up hypocrisies, deceptions, and malpractices in an effort to cast doubt on a broader project”. See HELLER N. (2017, May 15), *Is the Gig Economy Working?*, retrieved from <http://nyer.cm/256mlYx>.

⁶⁷⁸ Taking the German *Clickworker* as an example, workers can also upload and display “work samples”, including the sort of information that would have been considered outside the purview of the traditional employer.

⁶⁷⁹ Moreover, there are realistic reasons for arguing that both worker and costumers do not authentically agree on anything when pushing the “I Agree” button, provided that these kinds of contracts require no explicit manifestation of assent. See DAVIS N. J. (2007), *Presumed assent: The judicial acceptance of clickwrap in Berkeley Tech. L. J.*, 22(1), p. 577. For the Italian context, see generally GORLA G. (1962), *Standard Conditions and Form Contracts in Italian Law in The American Journal of Comparative Law*, pp. 1-20 (analysing Arts. 1341 and 1342 of the Italian Civil Code laying down a framework for

click on “I Agree”. These long and complex forms (so-called “General Contractual Conditions” or “End-User License Agreements”) contain a variety of clauses encompassing several aspects of the relevant relationship, from forum selection to dispute resolution, from worker classification to limitations of liability. Nondisclosure and non-compete agreements can be included in this kind of forms⁶⁸⁰. Moreover, workers are often tricked into agreeing on a great number of obligations in contradiction with the status of a self-employed provider.

Amidst such form that many users might have not even read, workers can make inquiries and usually receive template responses. These difficulties are likely to be worsened by the fact that workers may lack direct channels of communication and are deprived of a collective voice, thus leading to the impossibility to have an impact on the decision-making that shapes labour processes. As far as *Uber* is concerned, its “Terms of Service” impose a quick practical test and a background check administered by an outside company in order to work as a driver. This procedure includes a driver’s licence check – the vehicle needs to be of a certain category and less than 10 years old – and control of the car registration number and insurance. According to special rules, drivers may be subject to a city knowledge test⁶⁸¹.

As already noted⁶⁸², a certain uniformity between platforms can be identified. For instance, the unilateral standard-setting activity may prove to be an effective way in which platforms auto-regulate the relationship. Noticeably, the wording seems to be conceived in order to remain ambiguous and prevent a negative outcome in case of a lawsuit⁶⁸³. For instance, food delivery platforms usually require: being 18 or older, a latest generation mobile-phone with a tariff scheme including a data connection, willingness to work on the weekend or until late in the evening, a work permit, and “sense of responsibility” (*sic!*)⁶⁸⁴. After logging in, the worker is faced with a

contracts unilaterally prepared by a party in the form of general terms/form contracts or through uniform documentation and entered into through a mere acceptance by the other party of such terms).

⁶⁸⁰ On the contrary, *Deliveroo* riders are allowed to work for other on-demand economy businesses simultaneously.

⁶⁸¹ For a detailed description of the *Uber* application, see ALOISI A. (2016), *Commoditized Workers. Case Study Research on Labour Law Issues Arising from a Set of ‘On-Demand/Gig Economy’ Platforms in Comp. Lab. L. & Pol’y J.*, 37(3), p. 670. Relevant case law, which may have cascading effects for *Uber*, will be analysed in depth in Section 4.

⁶⁸² IPEIROTIS P. G. and HORTON J. J. (2011), *The need for standardization in crowdsourcing in Proceedings of the workshop on crowdsourcing and human computation at CHI*, p. 1.

⁶⁸³ In some European legal system, this private standard-setting may also affect the assessment of the employment status of workers.

⁶⁸⁴ See <https://rider.foodora.it/>.

dashboard containing several elements (i.e. jobs completed, assessment, profile or account, invoices).

Speaking of requirements in the peer-to-peer transport sector⁶⁸⁵, in most Member States the business model adopted by ridesharing platforms is based on licenced drivers⁶⁸⁶. This move became essential in reaction to a number of lawsuits alleging unfair competition brought by platform firms in a traditionally regulated market, such as urban mobility⁶⁸⁷. In most of the cases, workers are defined “partners” or customers, as they rely on the company’s service to be matched with... final customers. Moreover, workers renounce the possibility of challenging their status and covenant to indemnify the platform in case of litigation (such clauses seem far from enforceable). What is more, conscious as they are that litigation over employee status is around the corner, in the U.S. companies now include arbitration agreements containing class action waivers in their terms of service, thus narrowing the opportunity for employee classification lawsuits⁶⁸⁸, in formal terms at least. This

⁶⁸⁵ Considering for-hire license, *Uber* demands a list of documents including vehicle registration, certification of commercial automobile liability, insurance policy.

⁶⁸⁶ Some commentators have suggested that ridesharing services are flourishing in the UK due to the fact that licensing requirements are typically minimal.

⁶⁸⁷ Some member States (Ireland, France, and Spain) explicitly impose that only licenced taxi or private hire car drivers can make profits beyond the sharing of the expenses for a ride. For instance, when the application *UberPop*, allowing non-licensed drivers (i.e. private citizens) to offer riders, was banned in Brussels, *Uber* restricted it offer to *UberX* and *UberBlack*, only rely on licensed drivers (see below).

⁶⁸⁸ The issue relating to potential conflicts of laws, particularly when transnational contractual parties are operating in different jurisdictions, will be not addressed in this work. For details, see ORLANDINI G. (2012), *Il rapporto di lavoro con elementi di internazionalità*, WP C.S.D.L.E. “Massimo D’Antona”.IT, 137. Broadly speaking, Rome I Regulation (Reg. 593/2008) set as a general rule the freedom of the parties to choose the applicable law (Art. 3). However, it explicitly restricts this freedom through provisions laid down by Article 8 introducing the notion of “objectively applicable labour law”. That is, the law that best suits to the relationship would be applicable if no choice exists, in the event that platform workers can be deemed employees. The objectively applicable labour law has priority against the chosen law but only regarding “provisions that cannot be derogated”, namely the hard part of labour law (*ius cogens*) and not its flexible provisions that could be legally avoided by the parties (*ius dispositivum*). The Regulation offers a set of criteria aimed at determining the objectively applicable law. These criteria are hierarchical and the foremost criterion is the habitual place of work (*lex loci laboris* – Art. 8(2)). The level of protection cannot fall below that which would be provided in the absence of choice. Additional criteria are the place of work engagement (Art. 8(3)) and, ultimately, the place where work is more closely connected (rule of Art. 8(4)). As it has been rightly pointed out, the legal construction of the “objectively applicable labour law” concept is the element that should be kept and applied at a platform-mediated labour regulation at an international level. Therefore, the proper classification of workers is particularly relevant from this point of view. See BREGIANNIS F., BRUURMIJN W. J., CALON E. and ORTEGA M. A. D. (2017), *Workers in the Gig Economy*,

might result in the fact that crucial question issues related to legal classification are “decided secretly and lack precedential value”⁶⁸⁹.

2.2. Selection process and hiring.

Work is allocated through open-calls rather than by direct assignment or sharp job role requirements. The selection mechanism varies from platform to platform⁶⁹⁰. At least three principal models can be described. The “hiring procedure” may be organised (i) as a bid in response to a public auction⁶⁹¹ – each worker must specify how fast and for what price he or she could do the job and the final requester can choose from multiple deliverable (this occurs mostly when the task to be completed is a creative one), (ii) as an automatic matching operated by the internal algorithm on the basis of the specification of the service required and the worker’s profile, or (iii) in a different approach, the worker may spontaneously apply for the fulfilment of the task offering a long-term availability. In the first case, providers submit bids and requesters carry out due diligence, while assessing proposals, online resumes or standardised skill scores – sometimes supported by remote interviews⁶⁹². Some “cognitive work” platforms assist clients in launching a competition for the services required. While many proposals may be submitted, only the “winner(s)” are paid when clients select the solution they prefer⁶⁹³. More commonly, the client indicates the project, workers submit their proposals and, if the solution is selected, they can arrange the details, by negotiating privately in few cases. A sense of freedom and flexibility is put forth by assertions like the following: “[as] a Contributor, you and only you decide which and how many tasks to complete, and when and where you

Identification of Practical Problems and Possible Solutions, Tilburg University WP. Most alarmingly, other authors argue that “until [this issue] is solved, online platforms will remain beyond the scope of many of the regulatory requirements that apply to other employers in the territories in which their workers are based”. See HUWS U. and JOYCE S. (2016), *The economic and social situation of crowd workers and their legal status in Europe*, op. cit., p. 6.

⁶⁸⁹ BISOM-RAPP S. and COIQUAUD U. (2017), *The Role of the State towards the Grey Zone of Employment: Eyes on Canada and the United States*, op. cit., p. 11.

⁶⁹⁰ For a preliminary analysis on online recruiting, see CAPPELLI P. (2001) *On-line recruiting in Harvard Business Review*, 79(3), pp. 139-146.

⁶⁹¹ Some platforms (such as *Boblr*) charge a publishing fee for the launch of each competition.

⁶⁹² KAGANER E., CARMEL E., HIRSCHHEIM R. and OLSEN T. (2013), *Managing the human cloud*, op. cit., p. 25.

⁶⁹³ This system has been described as a potential “downward bidding war”.

complete them. You are free to spend as much or as little time completing tasks as you choose. At no time are you under any obligation to complete a task”⁶⁹⁴.

Before getting a request, samples of work (together with a relevant portfolio, if any) can be offered and assessed by experts. This preliminary stage is necessary to obtain the possibility to participate in activities on many crowdsourcing platforms (on *Upwork* or *Clickworker*⁶⁹⁵, to name but a few). Similarly, workers aiming to use the German platform *Clickworker* have to submit samples of their work or to undergo a test. They are rated and subsequently offered tasks matching their score. This platform prevents “unqualified clickworkers” from accessing a set of tasks in the case they have “not yet taken the respective assessments” or because the score falls below the fixed threshold, justifiably or otherwise. Reasons for exclusion pertain language requirements or skill-specific needs.

From a different point of view, it may prove to be hard to engage with a reliable client due to the lack of information. It should also be recalled that workers on challenge-based platforms like *Zooppa* as well as those on non-competitive ones like *Amazon Mechanical Turk*⁶⁹⁶ suffer the key risk of investing time, coupled with the unlikelihood of winning and the harshness of jumping from a task to another, sometimes even with little or no effectiveness. This arrangement might be awkward when a reliable protection of intellectual property rights is not guaranteed as a client could copy and use workers’ ideas with no compensation. At the same time, platforms like *AMT* do not provide “any metrics on the hourly rate of the work

⁶⁹⁴ See “*CrowdFlower Master Terms of Service*” available at: <https://www.crowdfunder.com/legal/>.

⁶⁹⁵ In this case, worker must submit mock-up of their work or pass a test. The appraisal attributes a score according to which a worker will be provided with certain types of tasks.

⁶⁹⁶ According to Casilli, *AMT* is “the most prominent and high-profile example of a platform for micro-tasks”. CASILLI A. (2016), *Is There a Global Digital Labor Culture? Marginalization of Work, Global Inequalities, and Coloniality*, op. cit., p. 8. The first “Mechanical Turk” was designed and implemented by the Hungarian nobleman Wolfgang von Kempelen in the late 1760s. The platform’s name pays homage to the eighteenth century mechanical wooden cabinet containing a chessboard, life-sized, adorned with a turbaned mannequin that could compete against human players at the game of chess. A small-bodied chess player was hidden and moved pawns from inside – so no technology at all, aside from mock cogs and clockwork machinery. The allegorical name represents a telling metaphor for a hoax, i.e. a piece of technology that relies on human energies and intelligence in the “black box”. See SCHWARTZ O. (2016, February 29), *Humans pretending to be computers pretending to be humans*, retrieved from <https://goo.gl/MCbNFE>. See also MARVIT M. Z. (2014, February 5), *How Crowdworkers Became the Ghosts in the Digital Machine*, retrieved from <https://goo.gl/rJRXmA>.

posted”⁶⁹⁷, therefore workers have one choice only, to complete some and calculate the rate in order to understand whether the task is worth doing or not.

It is worth noting that *Uber* does not disclose the customer’s destination until the request is accepted. This “blind” mechanism prevents drivers from competing with one another for passengers.

2.3. Performance execution and command power.

To its advocates, the platform economy is “a brave new world allowing people to be masters of their own fate: to choose the work they do and for how much they do it”⁶⁹⁸. In some cases, this description might prove far removed from reality. As already explained, the managerial powers potentially or concretely exerted by a platform may vary according to the type of the performance. In general, the overriding evidence confirms that peer-to-peer transport services and delivery platforms exercise remarkable supervision, invasive direction, and far-reaching control over how the task is completed⁶⁹⁹. For example, cycle couriers – who accomplish their duty personally⁷⁰⁰ – are strongly recommended to wear a commercial uniform, use their own vehicle⁷⁰¹, bring a branded backpack, show up in a defined hotspot, then log onto the app from their smartphone and wait for the first order⁷⁰². While delivering fresh meals from a restaurant to the customer’s address,

⁶⁹⁷ MILLAND K. (2017), *Slave to the keyboard: the broken promises of the gig economy*, op. cit., p. 230 (explaining how “even poorly paying work gets done just through this process”).

⁶⁹⁸ COMMONWEALTH OF AUSTRALIA (2017), *Corporate avoidance of the Fair Work Act 2009*, Education and Employment References Committee Report, Canberra, p. 85.

⁶⁹⁹ See KENNEDY E. J. (2016), *Employed by an Algorithm: Labor Rights in the On-Demand Economy* in *Seattle UL Rev.*, 40(3), p. 993 (arguing that “the profitability for entrepreneurs of smartphone applications, such as *Uber*, depends almost entirely upon the efficiency with which such applications extract labor from the workers who provide the goods or services promised).

⁷⁰⁰ More recently, a new contract has been introduced allowing riders in specific areas to provide the service through a third party. In the light of a “substitution clause”, couriers may appoint a third person to complete the task in their behalf, representing a barrier to the recognition of the employment status. In fact, in a potential lawsuit, the burden of prove that those rights did not exist or were not exercised would be on the worker. However, in day-to-day practice, it truly is very difficult to select a replacement.

⁷⁰¹ As for *TaskRabbit*, “some clients provide tools and closely supervise the work, whereas others will expect taskers to bring their own cleaning products or use their vehicles for transport-related tasks”, see PRASSL J. and RISAK M. (2016), *Uber, Taskrabbit, and Co.: Platforms as Employers – Rethinking the Legal Analysis of Crowdwork*, op. cit., p. 645 (using the platform to show “how different employer functions are exercised by more than one entity”).

⁷⁰² Workers own the necessary equipment or rent it from the platform itself with a monetary deposit. They prefer bicycles rather than motorcycles or moped, as riders could hardly cover expenses

they have to follow the “suggested route” and check the timer, in order to carry out their duty as quickly as possible⁷⁰³. Anyway, they are required to interact with the company’s middle management through internal channels of communication (chat or apps such as “*Staffomatic*”)⁷⁰⁴. Moreover, selected shifts may be proposed for the rider to choose the most suitable arrangement. Workers have to pay for all running expenses (petrol, insurance, taxes) and assume all responsibility should an accident occur. This “faceless”, and sometimes “nameless”, employer may sanction behaviours that are not considered compliant with standards or, even worse, are merely valued as lagging behind customer expectations⁷⁰⁵. Moreover, organised opposition to management or preliminary attempts of collective claims are reduced on the basis of the “individualisation of conflict” methods and the decentralised management procedures envisaged.

To this extent, both the (human or algorithmic) management and the final costumers are responsible for ensuring and assessing the adherence to the instructions given. In the on-demand household services subsector, instead, performances such as cleaning, home or electronics repair, furniture assembling or refurbishing, gardening, painting apartments, hauling clothes to the laundry, handyman-like tasks can be commonly executed with a certain degree of autonomy, although workers have to conform to guidelines and instructions. Conversely, it is undeniable that workers using platforms such as *GoPillar* or the globally widespread *InnoCentive*⁷⁰⁶ enjoy a higher degree of autonomy. On the contrary, generic human cloud platforms such as *Amazon Mechanical Turk*, the popular Amazon sister site, and *Crowdfunder* deliver a highly standardised service.

for gas, maintenance, insurance and parking, where applicable. Not to mention the risk of being fined for road traffic offences. *Uber*, unlike the other platforms, provides the driver with a smartphone that is compatible with its app.

⁷⁰³ To give just one example, should passengers leave an item behind in drivers’ cars, drivers are not remunerated for the time spent returning lost properties.

⁷⁰⁴ INVERSI C., DUNDON T. and BUCKLEY L.-A. (2017), ‘*I Don’t Work For, I Work With...*’ *Disposable workers and working time regulation in the gig-economy*, Paper prepared for presentation at the “5th Conference of the Regulating for Decent Work Network” at the International Labour Office, Geneva, Switzerland, 3-5 July 2017.

⁷⁰⁵ “[T]he use of information technology and algorithmic management have the outcome of obscuring the specific decisions which management have made about how the system should function, and who it should prioritise for work”. See WARIN R. (2017), *Dinner For One? A Report on Deliveroo Work in Brighton* in *Autonomy*, 1, p. 6. See also GILLESPIE T. (2014), *The Relevance of Algorithms* in GILLESPIE T., BOCZKOWSKI P. and FOOT K. (Eds.), *Media Technologies*, Cambridge, MA, pp. 167-199.

⁷⁰⁶ It enables research labs “broadcast scientific problems” with contests for solutions in several scientific fields.

Without doing more than engaging in anecdotal empiricism, some examples must be outlined. In some cases, a minimal training phase may be carried out either before starting to work or should the rating fall below the critical threshold. Video-tutorials are commonly used to promote certain “best practices”. As far as *Uber* is concerned, the driver’s booklet (also referred to as “Community Guidelines”⁷⁰⁷) invites the driver to wear formal attire, it suggests keeping the radio volume low or to play classy music and recommends offering chewing gums or beverages⁷⁰⁸. Drivers are invited to text the passenger one to two minutes prior to pick-up and open the door for the client. Interestingly enough, some platforms prevent crowdworkers from subcontracting the relevant task (or a fraction of it) to other workers. This factor may be used to prove the lack of autonomy of the contractual relationship. The irony is that *Amazon Mechanical Turk*, the biggest “human cloud” platform, imposes not to “use robots, scripts or other automated methods to complete the Services”. Similarly, *Crowdfunder* does not allow to employ “Internet bots, web robots, bots, scripts, or any other form of artificial intelligence”⁷⁰⁹ while *Clickworker* prohibits outsourcing (“*Clickworkers* are expressly prohibited from subcontracting or outsourcing projects to third parties unless this is expressly permitted by the terms of a project description”)⁷¹⁰.

Following a spontaneous protest in different European metropolitan areas, it turned out that some platforms are organising their workforce in rigid shifts, in a way contradicting the message about the extreme schedule flexibility. Worse still, schedules are stable from week to week thus hampering workers’ elasticity, ignoring their needs in terms of work-life balance, and entailing the loss of the chance of having access to future shifts or the reduction of hours, if they decline⁷¹¹. The narrative on the freedom of arranging one’s own timetable (“The more you drive, the more you make”) has to be firmly demystified for two main reasons. Firstly, while it is correct to argue that workers are free to be online whenever they want (and there is no general obligation to accept any tasks), the number of hours they spend online

⁷⁰⁷ See also “Best Practices for Contractor Success – *TaskRabbit* Support”, available at <https://goo.gl/6nFpCo>.

⁷⁰⁸ See *O’Connor v. Uber Technologies, Inc.*, No. C-13-3826 EMC, 2015. Moreover *Uber* imposes “not to shout, swear or slam the car door”.

⁷⁰⁹ See <https://www.crowdfunder.com/legal/>.

⁷¹⁰ See <https://workplace.clickworker.com/en/agreements/10123>.

⁷¹¹ Riders argue that their flexibility declined dramatically since the company has adopted a model based on weekly shifts. A leaflet containing *Deliveroo* workers’ complaints and claims can be found at <https://goo.gl/Y1jPjt> (in Italian).

and task completed is decisive when it comes to new assignment and compensation⁷¹². Lastly, when a system of rotation is applied, the unpredictability of working hours is very “brutal” and frustrating as it determines long periods of inactivity, sometimes due to miscalculations of the potential demand and to arbitrary, dysfunctional day-to-day scheduling practices⁷¹³.

Moreover, ample evidence of the far-reaching negative impact of the “permanent reachability” definitely holds true for crowdworkers. Not surprisingly, their constant “stand-by modus” is boosted by platforms using incentives to compel them to be “logged-in” when needed, regardless their actual availability. In survey after survey, this disadvantage has emerged as one of the biggest employee complaints regarding the “tyranny of the clock”. Despite the differences in the intensity of “temporal sovereignty” (i.e. autonomy) and performance pressure, it is evident that, in each of the reviewed sectors, workers must deliver a standardised service⁷¹⁴. Perhaps most important, this reality contradicts the claim according to which gig-workers should be considered entrepreneurs, enjoying freedom from formal constraints such as mandatory working hours⁷¹⁵.

⁷¹² In addition to this, many workers have revealed that, when they returned from holidays, have been assigned a fewer number of hours, as a major disincentive for the discontinuity.

⁷¹³ To make things worse, the “open availability” pattern makes it almost impossible to take on second jobs or enrolling in training programs, and thereby contradicts the idea that these schemes may be used to supplement income as a second job. The result may be a “trap”. See STONE K. V. W. (2017), *Gigs, On-Demand, and Just-in-Time Workers: What Can Unions Do?*, Paper presented at the LLRN 3rd Conference, Labour Law Research Network, Toronto 25-27 June 2017 (discussing just-in-time work).

⁷¹⁴ LEHDONVIRTA V. (2018), *Flexibility in the gig economy: managing time on three online piecework platforms in New Technology, Work & Employment*, 33(1), pp. 13-29. Not to mention the fact that workers may be unable to understand and judge the content of the wider final product their labour forms part of.

⁷¹⁵ The argument that a sizeable share of individuals undertakes work mediated by platforms only as a secondary activity, very often raised before courts, is clearly not in accordance with the facts. For a brilliant commentary, see ZATZ N. (2016, February 1), *Is Uber Wagging the Dog With Its Moonlighting Drivers?*, retrieved from <https://onlabor.org/is-uber-wagging-the-dog-with-its-moonlighting-drivers/> (arguing that the framework of the “typical driver” can be deeply misleading when it comes to hours of work, because 20% of *Uber* drivers work 50 hours per week covering over 70% of the work (1000 out of 1400 hours), while 80% work 5 hours per week doing only 20% of the work). Equally weak is the argument that workers in the on-demand economy are “capitalising already possessed assets (material means, time, skills)”, as argued by DAGNINO E. (2016), *Labour and Labour Law in the time of the On-Demand Economy in Revista Derecho Social y Empresa*, 6, p. 10.

2.4. Rating and ranking, monitoring and disciplinary power.

Thanks to new techniques, immersive social design, and software analysis, traceability of data is extremely relevant when it comes to vetting workers and profiling customers⁷¹⁶ (their needs, their locations and – more importantly – their willingness to pay⁷¹⁷). This issue has nevertheless been particularly salient in the preliminary stage of on-demand economy's development: platforms had been greeted as an enhanced system based on "evaluation by reputation" allowing trust and loyalty between strangers⁷¹⁸. These values, in turn, are based on a sort of "digital market value", whose very building block is the rating assigned to workers⁷¹⁹.

There can be little doubt that in general platforms monitor, admonish and terminate workers for failing to meet internally set standards, "in [a] form [...] that far exceeds the level of supervision experienced by most traditional employees"⁷²⁰, while providers build careers and reputation on past achievements. Therefore, it can be said that customers trust the fact that the worker's experience (or professionalism) has been regularly traced and he or she can be considered accountable. Several are

⁷¹⁶ For a complete overview, see ZUBOFF S. (2015), *Big Other: Surveillance Capitalism and the Prospects of an Information Civilization* in *Journal of Information Technology*, 30(1), pp. 75-89.

⁷¹⁷ See EZRACHI A. and STUCKE M. E. (2016), *Virtual Competition*, Cambridge, MA (explaining how platforms engage in behavioural techniques tailoring offers to different customers); MAGGIOLINO M. (2017), *Personalized Prices in European Competition Law*, Bocconi Legal Studies Research Paper. Available at SSRN: <https://ssrn.com/abstract=2984840>.

⁷¹⁸ Data consists of two parts: firstly, data owned by the platform (e.g. the route determined through digital maps) and, secondly, "data processed in the form of inferred information" (e.g. the locations of their passengers' work places and homes can be extracted from historical data). *Uber* has added a clause in privacy agreements that ask passengers for permission to use their data. Data are being collected from drivers and not from passengers and therefore can be mined even without the consent of passengers. See YARAGHI N. and RAVI S. (2017), *The Current and Future State of the Sharing Economy*, *Brookings Impact Series*, No. 03. See also COHEN J. E. (2017), *Law for the Platform Economy*, op. cit., p. 138.

⁷¹⁹ GHOSE A., IPEIROTIS P. G. and SUNDARARAJAN A. (2009), *The Dimensions of Reputation in Electronic Markets*, *2nd Statistical Challenges in E-Commerce Research Symposium, Working Paper* (highlighting the importance of textual reputation feedback). See also VAN DOORN N. (2017), *Platform labor: on the gendered and racialized exploitation of low income service work in the 'on-demand' economy* in *Information, Communication & Society*, 20(6), p. 903 (noting that "customer ratings serve as another crucial metric with which to control service providers. Such ratings have become a major decentralized and scalable management technique that outsources quality control to consumers of on-demand platforms, creating a generalized audit culture in which service providers are continually pushed to self-optimize and cater to the customer's every whim").

⁷²⁰ See KENNEDY E. J. (2016), *Employed by an Algorithm: Labor Rights in the On-Demand Economy*, op. cit., p. 1007 (explaining how "Uber driver is in many ways more closely monitored than any traditional line worker could have possibly been observed by any foreman").

the tools used to supervise the worker: GPS features on smartphones allow delivery companies to constantly monitor the performance of their couriers, the five-star system (with one being “terrible” and five being “terrific”) guarantees a vigilant watchfulness and constant appraisal of driver’s conducts, the internal software used to complete click task is inherently meant to track actions, the conflation of real-time and predictive analysis makes the business significantly more flexible. Platforms have essentially deputised their customers to administer the workforce and make meticulous reports on how service is rendered⁷²¹, by devolving parts of their managerial prerogatives. Many workers are being appraised every single day, or even multiple times an hour. Yet the metrics by which the platform assesses performance are never made transparent⁷²².

Any provider’s act is therefore transparent to the “God-like view” of the platform⁷²³, not to mention the possibility of privacy violation, since the workers are pushed “by design” to disclose personal information without a guarantee of confidentiality⁷²⁴. The same can be said for the client: sensitive information can be shared with no clarity on their use. To put it bluntly, it can be concluded that technology-mediated channels allow penetrating quality control, sometimes more effective than the one exercised by a traditional employer. By using five-star ratings systems, “ratings over time” thresholds and “time-to-respond” metrics, platforms can easily differentiate between low, average, and high-performing workers⁷²⁵.

⁷²¹ ROSENBLAT A. and STARK L. (2016), *Uber’s Drivers: Information Asymmetries and Control* in *International Journal of Communication*, 10(27), pp. 3758-3784. See also PACELLA G. (2017), *Il lavoro nella gig economy e le recensioni on line: come si ripercuote sui e sulle dipendenti il gradimento dell’utenza?* in *Labour & Law Issues*, 3(1), p. 17 (arguing that the monitoring power has been entrusted to third parties).

⁷²² See WATERS F. and WOODCOCK J. (2017, September 20), *Far From Seamless: a Workers’ Inquiry at Deliveroo*, retrieved from <https://goo.gl/XdURbX>. See also DONINI A. (2015), *Il lavoro digitale su piattaforma* in *Labour & Law Issues*, 1(1), p. 66 (arguing that the concrete assessment of the performance is highly simplified as the worker has no choice but to follow instructions, by design).

⁷²³ The expression comes from a mode in the *Uber* app available to the company according to SCHILLER B. (2017, August 4), *You are being exploited by the opaque, algorithm-driven economy*, retrieved from <https://buff.ly/2huYtnG>.

⁷²⁴ At the European level, a new General Regulation No. 2016/679 – commonly referred to as the General Data Protection Regulation (“GDPR”) – will replace the Data Protection Directive No. 95/46/EC. It will come into force only on 25 May 2018 and, after repealing various previous acts, it is expected to help clarify and harmonise data laws across Member States and economic sectors.

⁷²⁵ See TIPPETT E. C. (forthcoming), *Employee Classification in the Sharing Economy*, op. cit. (presenting “The Rating System Explained”, a guide to translate the employment consequences of customer ratings).

Moreover, well performing workers have the opportunity to receive a better chance of being recruited for jobs and the ability to apply for better-rated tasks⁷²⁶. *Uber* and its rival *Lyft* admitted to having terminated drivers in the past based on customer ratings falling below a certain threshold.

As far as on-demand professional services are conceived, providers may take screenshots of the provider's monitor or track their keyboard strokes thanks to software specialised in real-time surveillance, also assigning "control" tasks to double check the quality of the service⁷²⁷, leaving nothing invisible. Even the amount of time spent to complete each task can be set and monitored by sophisticated systems of remote management: "[a] countdown timer displays the 'Remaining Time' on each work page. You must complete the job before the time runs out, i.e. reaches zero. If this happens the job will be cancelled and will be lost for you[;] skipping a job ensures that you will not be offered this individual job again, at least not within the next few minutes. As a result, if a few jobs only are available for you, you might not be offered any other jobs". Ride-hailing apps, for instance, relay rides to another driver, if it is not accepted within 15 seconds. Platforms exchanging high-skill activities have developed a two-stage control system. Before submitting the job to the client, a corrector checks, amends and evaluates the proposal. In this case, the "current rating is an average of the last 25 evaluations [the worker] received for the jobs you submitted. When the corrector decides whether the job goes back to [the worker] for reworking he has to include this evaluation and a comment listing the improvements that need to be made"⁷²⁸. Changes in the rating based on the comments can be monitored in the "work history", a sort of personal scoreboard.

⁷²⁶ It is worth emphasising that the European Parliament resolution of 15 June 2017 on a European Agenda for the collaborative economy (2017/2003(INI)) "[u]nderlines the importance of collaborative platform workers being able to benefit from the portability of ratings and reviews, which constitute their digital market value, and the importance of facilitating the transferability and accumulation of ratings and reviews across different platforms while respecting rules on data protection and the privacy of all parties involved". In addition to this, the International Transport Forum, an intergovernmental organisation at the OECD, has proposed that data collected from ridesharing platforms on the service performance of individual drivers might be used by regulators, possibly as a partial substitute for licensing. See DARBÉRA R. (2015), *Principles for the regulation of for-hire road passenger transportation services*, OECD International Transport Forum.

⁷²⁷ Software such as *Worksnap*, *Worksmart* or *Interguard* sends regular screenshots from contractors' computers so that clients can check and monitor the workflow or measure the time taken to complete a task.

⁷²⁸ See <https://www.clickworker.com/faq/>.

On top of that, electronic ratings, reviews and feedbacks from prior engagements (defining the individual position in the internal ranking) can grow up or fall down on the basis of capricious customer satisfaction systems⁷²⁹, affecting the likelihood to be selected and hired in the future or to be assigned the best paid tasks. Worryingly, the worker's account can be deactivated (without cause) determining, in the most serious cases, the exclusion from the platform, which seriously impairs his "career". Platforms like *Uber* recommend drivers to take class and apply to be re-activated⁷³⁰. In addition, this situation squeezes workers' autonomy, especially when individuals have little choice over which platform they work for or "with" (due to skills, locations or prior platform-specific investments in equipment).

Unofficial sources refer that *Uber* driver's account can be suspended when his or her rating falls below 4,6 out of 5, though this cut-off point varies according to how other local drivers perform. Ratings are averaged to mirror their last 500 trips. In particular, the platform places drivers on notice of the kinds of conducts that may result in a negative consequence, namely low ratings, high cancellations rates, low acceptance rates (below 90% of offers received while the driver is online). As already mentioned, the exclusion from the platform can be brutal or improvement courses can be offered. In this case, a worker has to "provide proofs of the steps [he has] taken to improve". Understandably, the rating system may determine an indirect lock-in effect. As this portfolio cannot be checked by potential employers or transferred to another platform, crowdworkers are *de facto* tied to a specific platform and constrained by the platform-specificity of their profile. Switching to a rival company is costly as it would mean losing "the advantage of having good ratings"⁷³¹, thus entailing further concerns on ownership, portability and inter-adaptability of such amount of data.

⁷²⁹ Platform-based workers are constantly faced with the volatility of customers' preferences. This system leads to frenetic self-marketing campaigning: the inexhaustible effort to please customers in order to stay above a certain rating threshold. "Hearts and minds" are thus involved according to THOMPSON P. and WARHURST C. (1998), *Hands, hearts and minds: changing work and workers at the end of the century* in ID. (Eds.), *Workplaces of the Future*, London, pp. 1-24.

⁷³⁰ ROSENBLAT A. (2015, September 10), *The Future of Work: for Uber drivers, data is the boss*, retrieved from <https://goo.gl/QfYKek>. See also BHUIYAN J. (2015, March 29) *Why Is Uber New York Funneling Thousands of Drivers to This Training Class?*, retrieved from <https://goo.gl/jmyEKF>.

⁷³¹ WAAS B. (2017), *Crowdwork in Germany*, op. cit., p. 154.

A completed task may be retained by the requester, judged modest or unsatisfactory and the output may be rejected with no compensation⁷³². At the same time, should amendments be needed, the worker must edit the work within a certain deadline, past which he or she loses the right to be paid. Albeit silent as regards consequences, the *AMT* clause is more than revealing: “[i]f a Requester is not reasonably satisfied with the Services, the Requester may reject the Services”⁷³³. Currently, many online crowdworking operators’ terms of service allow unsatisfied customers to retain a product without compensating the worker, with no explanation⁷³⁴. This could potentially lead to opportunistic or biased behaviours or to an even more condescending approach by workers⁷³⁵, justified by the fact that they need to keep their evaluation above the threshold⁷³⁶.

Ratings from clients, as previously clarified, impact on the personal career and can determine whether or not the worker receives further tasks. There is no appeal: *Uber*, for instance, can terminate drivers for any or no reason⁷³⁷. Workers are rarely allowed to challenge rejections they believe are groundless, unfair, or fraudulent. While it is true that the evaluation is made *after* the execution of the performance, thus conflicting with the idea of the constant provision of managerial power, it could be said that the implicit threat of receiving a bad rating compresses the autonomy of the worker and governs his conduct. Needless to say, rating systems can be abused or

⁷³² Perhaps not surprisingly, ownership rights, including intellectual property, are expected to remain with the client.

⁷³³ See 3.A and 3.B.

⁷³⁴ FELSTINER A. (2011), *Working the Crowd: Employment and Labor Law in the Crowdsourcing Industry* in *Berkeley J. Emp. & Lab. L.*, 32(1), p. 153.

⁷³⁵ See SILBERMAN M. S. and IRANI L. (2016), *Operating an Employer Reputation System: Lessons from Turkopticon, 2008-2015* in *Comp. Lab. L. & Pol’y J.*, 37(3), pp. 505-542.

⁷³⁶ The problem lies in the fact that algorithms might end up perpetuating human biases. See CHERRY M. A. (2016), *People Analytics and Invisible Labor* in *St. Louis U. L. J.*, 61. Available at SSRN: <https://ssrn.com/abstract=3004797>, p. 12 (explaining how “if customer ratings are as vulnerable to bias as research suggests, it is likely that minority drivers will be more likely than white drivers to be deactivated, but the deactivation itself looks like an automatic event, divorced from a person with bias”). For a comprehensive review on “workforce analytics”, see KIM P. T. (2017), *Data-driven discrimination at work* in *Wm. & Mary L. Rev.*, 58(3), pp. 857-936.

⁷³⁷ “An email from Amazon’s Customer Service Team offered no explanation beyond: ‘I am sorry but your *Amazon Mechanical Turk* account was closed due to a violation of our Participation Agreement and cannot be reopened. Any funds that were remaining on the account are forfeited, and we will not be able to provide any additional insight or action. You may review the Participation Agreement/Conditions of Use at this URL: <http://www.mturk.com/mturk/conditionsofuse>. Thank you for trying Amazon Mechanical Turk. Best regards, Laverne P. We value your feedback, please rate my response using the link below.’”

suffer from low response rates⁷³⁸. To conclude, it has to be said that the amount and the frequency of review that customers decide to bestow to any service eventually determine the platforms' ability to obtain the benefits of the network effect. In sum, all these "tyrannical" features reflect the purposive aim of intensifying workers' effort and self-denial⁷³⁹.

2.5. Payment rewards for completed tasks.

As shown by research recently carried out in this field, jobs created are insecure and extremely low-paid⁷⁴⁰. In many cases, fares constantly fluctuate or are altered without workers having any say or control, thus making the overall remuneration hardly predictable⁷⁴¹. Special attention merits the severe income precariousness (defined as "the one attached to output-related income arrangements"⁷⁴²). Little and erratic incomes are justified by the fact that there is a pronounced oversupply of labour, pushing some workers to cut their rates below what they consider reasonable⁷⁴³. For most workers this might be part of a piecemeal existence.

Two are the main models when it comes to putting a price on a web-enabled work performance: either the client or the worker can set the payment rate, while – in

⁷³⁸ Empirical studies have revealed that clients tend to give their feedback if they want to report very positive or very negative facts; contrariwise, they are less motivated when their "experience" falls within the average. See DELLAROCAS C. and NARAYAN R. (2006), *A statistical measure of a population's propensity to engage in post-purchase online word-of-mouth* in *Statistical Science*, 21(2), pp. 277-285.

⁷³⁹ STONE K. V. W. (2017, February 21), *Unions in the Precarious Economy*, retrieved from <http://prospect.org/article/unions-precarious-economy>.

⁷⁴⁰ Many platform companies exploit the oversupply of workers, "offering new recruits attractive starting pay rates and then reducing them as more people join the app", see HEALY J., PEKAREK A. and NICHOLSON D. (2017, July 3), *Gig economy businesses like Uber and Airtasker need to evolve to survive*, retrieved from <https://goo.gl/cREnAn>.

⁷⁴¹ One of the latest examples is an application introduced by *UberEats*, which has cut the "trip reward" from initially £5 to £4 for weekday lunch and weekend dinner times, and to £3 for weekday dinner and weekend lunchtimes. See O'CONNOR S. (2016, September 8), *When your boss is an algorithm*, retrieved from <https://on.ft.com/2cJHEUA>.

⁷⁴² COUNTOURIS N. (2012), *The legal determinants of precariousness in personal work relations: A European perspective*, op. cit., p. 33.

⁷⁴³ It has been noted that, provided that platforms need a "constant surplus supply of workers available" around the clock, low pay is one of the best ways to ensure that workers spend as much time as possible on the platform as they have to collect many gainful gigs to make a discrete living. See HUWS U. (2016), *New forms of platform employment* in FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS), *The Digital Economy and the Single Market*, Brussels, Belgium, p. 65. See also HUWS U. (2014), *Labor in the global digital economy: The cybertariat comes of age*, op. cit., p. 31 (arguing that platforms rely on a more cheaply and more compliantly "reserve army").

almost all cases – the platform handles the payments. It could be said that platform workers are mostly remunerated not on an hourly, but on a piece rate or “per-drop” basis (by the job or even by the task, from cent amounts to two-digit euro sums)⁷⁴⁴. What is worse, the risk of variable compensation week to week is borne by the employee, not the platform: one of the common grievances of low-wage workers. More rarely, performances are remunerated on an hourly basis (for example, on *Upwork*), or very seldom with a “minimum rate”⁷⁴⁵. When work is charged by the hour, the monitoring activity is even more invasive. Accordingly, a relationship can be established between the nature of the work and the payment scheme for each deliverable⁷⁴⁶.

When prices are set by the platform, monotonous tasks have a fixed or variable fee and the fare is calculated on current market factors⁷⁴⁷. The platform can sometimes use specific estimators. On the contrary, creative activities are organised as a contest or a “lottery” where “even those who don’t become ‘winners’ have to transfer all their intellectual property rights to the platform”⁷⁴⁸. Moreover, when tasks are assigned in a competitive way, workers could “gamble with their time, forgoing modest but certain rewards for a chance to earn bigger rewards”. In very few cases,

⁷⁴⁴ Certain reports indicate that many crowdworkers are economically dependent on one or few platform companies they are simultaneously active on. For example, for approximately 40% of crowdworkers their work on *Amazon Mechanical Turk* is a full-time occupation. See MILLAND K. (2016), *Crowd Work: the Fury and the Fear* in FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS), *The Digital Economy and the Single Market*, Brussels, Belgium, p. 84. See also EUROFOUND (2015), *New forms of employment*, op. cit., p. 115 (describing poor conditions of crowd workers: “[...] 25% of the tasks offered at Amazon Mechanical Turk are valued at €0.007, 70% offer €0.04 or less, and 90% pay less than €0.07. This is equals an hourly rate of around €1.44”).

⁷⁴⁵ In a most unusual way, the global free-lancing platform *Upwork* imposed a sort of “minimum rate” of 3 dollars per hour for all jobs, irrespective of the location of the performance. See <https://support.upwork.com/hc/en-us/articles/211062988-Minimum-Hourly-Rates>. *Adtriboo*, a Spanish platform, applies a minimum or even fixed price for specific tasks on the basis of market prices and assumed number of hours spent for completing such a task.

⁷⁴⁶ Remuneration models may vary from country to country and from town to town.

⁷⁴⁷ HORTON J. J. and CHILTON L. B. (2010), *The labor economics of paid crowdsourcing* in *Proceedings of the 11th ACM conference on Electronic commerce*, p. 209 (explaining that “the median rate on *Amazon Mechanical Turk* could be about \$1.38 per hour”).

⁷⁴⁸ DÄUBLER W. (2017), *Challenges to Labour Law* in PERULLI A. (Ed.), *L’idea di diritto del lavoro, oggi: In ricordo di Giorgio Ghezzi*, Padova, p. 485. In a different work, the author uses the expression “greyhound”, see DÄUBLER W. and KLEBE T. (2016), *Crowdwork: datore di lavoro in fuga?*, op. cit., p. 479 ff. (arguing that crowdwork represents the dawn of an unprecedented form of compensating subordinate work: contest with prizes).

either rates of pay are negotiated between the individual workers and the client or workers can freely set and advertise a charge for specific activities.

With regard to food-delivery apps⁷⁴⁹, two different payment structures can be found: a piece-based remuneration or an hourly based one. In the first case, understandably, workers are pushed to complete as many deliveries as possible within an hour. These facets, in concert with the occasional, instantaneous and outcome-based nature of platform labour, often place workers in direct competition with each other in a way diminishing the sense of solidarity among colleagues⁷⁵⁰. In general, the per-delivery rate is understood as a dramatic pay drop and, as one might expect, this kind of remuneration policies are particularly distressing. In the second case, on top of a fixed hourly compensation, bonuses related to the number of completed deliveries can be assigned. Moreover, platforms such as *Uber*, which pays on a per trip basis, cut their transaction fee after passing a certain number of rides. This incentive-based promotional system is aimed at encouraging drivers to stay online and available. Worse still, platform-coordinated workers are usually not allowed to solicit or accept tips: acceptance of gratuities cultural practices is inflexibly discouraged⁷⁵¹.

Interestingly enough, *AMT* pays out cash only to American and Indian bank accounts, being these two main national communities of workers using such platform. To have an idea of how these forms of work are cheap, on *AMT*, approximately 90% of tasks are estimated for less than \$0.10, while an hourly wage for work at this platform is valued \$2. More than ten years after it was started, if workers are based in a different country, they get paid in the form of credits or *Amazon.com* gift cards to be used on the e-commerce section of the same website⁷⁵².

⁷⁴⁹ For an update on reactions against the new payment scheme, see KÖRFER A. and RÖTHIG O. (2017), *Decent crowdwork—the fight for labour law in the digital age* in *Transfer: European Review of Labour and Research*, 23(2), p. 233.

⁷⁵⁰ According to first-hand information, the online meal ordering and delivery platform *UberEats* allows local restaurants to pay couriers directly. Hence, at the end of the month, a rider receives as many checks as final payments, which depend on the number of orders conveyed.

⁷⁵¹ In order to circumvent such obstacles, workers and customers have started gaming the platforms: after a preliminary contact, they tend to interact directly, bypassing the intermediary. Recently, the ban has been removed in some jurisdictions in an attempt to to repair relations over pay and benefits. See also WEINBERGER M. (2017, June 20), *Uber will finally let its drivers accept tips*, retrieved from <https://read.bi/2rRAaQU>.

⁷⁵² “Providers may disburse funds from their Payment Account by the following methods, at their option: (i) to an ACH-Enabled Bank Account in U.S. dollars; (ii) or by converting such funds to a credit that is held for the benefit of Provider in an Amazon.com gift certificate account”. See *Amazon Mechanical Turk Participation Agreement*, 4. B. See <https://www.mturk.com/mturk/conditionsofuse>.

As a consequence, workers may only buy physical items and have to pay delivery charges – a win-win situation for the platform. On *Clickworker*, instead, when a certain amount is reached, money goes to the bank or to a personal *Paypal* account. Most workers work from 10 to 20 hours a week, earning about \$80 a month. Some workers using the platform “full time” can reach 20-40 hours a week, amounting to a salary of \$200-750 a month. The average hourly pay is \$1.5 per task. “Highly ranked” workers can get up to \$7.5 per hour. As a result, stress and unpaid waiting time are the norm⁷⁵³ (this becomes very odd when one considers that, in theory at least, “platforms attempt to increase flexibility for the employer or customer and to reduce the cost of ‘empty’ or unproductive moments”⁷⁵⁴).

Notwithstanding the above considerations, the levels of remuneration for virtual unskilled tasks appear particularly low when converted into hourly rates and compared with national averages for standard employment involving similar tasks. They also appear insufficient to serve as a primary source of income. The scale of employment associated with this type of work is currently limited. Apart from the risk of rejection, according to HUWS, one of the main causes of complaint is the delay in receiving payments (yet “Freedom pays weekly” was one of the slogans commonly used). Other grievances underlying dissatisfaction mention the fact that payments are often lower than expected. Although the final fee is calculated according to the estimated average processing time as well as to the level of difficulty, or – for creative tasks – to the special skills required to fulfil the job, hidden extras may cause a significant reduction in the amount due. So, just in conclusion, several negative aspects need to be stressed: firstly, the total lack of transparency of criteria applied to payments⁷⁵⁵, secondly, the very common absence of the minimum levels of payment (either hourly or per task) and, thirdly, the worrisome unpredictability of how much a worker may earn using a given platform.

⁷⁵³ *Uber* drivers get paid only if they comply with the “10-minute wait-time” and the rider does not appear. As for *AMT*, “the time spent looking at the email costs more than what you paid them” according to IRANI L. C. and SILBERMAN M. S. (2013), *Turkopticon: Interrupting worker invisibility in Amazon Mechanical Turk in Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, p. 611. According to an ILO survey, workers may spend up to 18 minutes of unpaid work for every hour worked and paid. BERG J. (2016), *Income Security in the On-Demand Economy: Findings and Policy Lessons from a Survey of Crowdworkers*, op. cit., p. 557.

⁷⁵⁴ PRASSL J. and RISAK M. (2016), *Uber, Taskrabbit, and Co.: Platforms as Employers – Rethinking the Legal Analysis of Crowdwork*, op. cit., p. 625.

⁷⁵⁵ See DE GROEN W. P. and MASELLI I. (2016), *The Impact of the Collaborative Economy on the Labour Market*, op. cit., p. 10 (explaining that “the system of remuneration and charging commissions often lacks clarity”).

3. Understanding the legal frameworks applying to platform-mediated labour. An introduction to European and national requirements to comply with.

From a regulatory perspective, platform labour represents a “moving target”⁷⁵⁶. Building on the results of the wide-ranging investigation into concrete working conditions in three selected subsectors, the crucial question that now needs answering is whether the existing legal frameworks provide adequate responses to the current (digital) challenges. This dilemma encapsulates very well tensions underlying any discussion on working in the platform economy: is it sufficient that common statutory rules and standards are correctly applied or is there a need for new legislation? On this matter, boosters and naysayers have re-ignited a heated debate on the relationship between law and technological progress or, even better, on the ability of regulation to keep pace with various forms of innovation. Yet until very recently “little systematic effort has been made to establish how existing regulations should apply”⁷⁵⁷. Without taking position on the unnecessary dispute, the following paragraphs will map and highlight national requirements to comply with, using the already defined tripartite sectoral scheme to present platform-facilitated services (passenger transport services, crowdsourcing and on-demand household services). One thing is sure: the claim that existing laws should be disapplied and new ones adopted to better support digital matching firms interests is weak⁷⁵⁸.

Standard methods of social science research and legal analysis will be implemented to outline existing regulatory schemes which can be easily used to regulate labour platforms, by examining relevant legal sources such as regulation both at the European and national level, and interpretations in case law and doctrine⁷⁵⁹. Moreover, recent legislative initiatives targeting platform-facilitated labour will certainly not be neglected⁷⁶⁰. The research approach is also based on a far-

⁷⁵⁶ GARBEN S. (2017), *Protecting Workers in the Online Platform Economy: An overview of regulatory and policy developments in the EU*, op. cit., p. 14.

⁷⁵⁷ HUWS U. and JOYCE S. (2016), *The economic and social situation of crowd workers and their legal status in Europe*, op. cit., p. 4.

⁷⁵⁸ DEAKIN S. and MARKOU C. (2017, September 25), *London Uber ban: regulators are finally catching up with technology*, retrieved from <https://theconversation.com/london-uber-ban-regulators-are-finally-catching-up-with-technology-84551>.

⁷⁵⁹ It is important to clarify that there has been a little number of national court cases around Europe providing insights on different topics yet.

⁷⁶⁰ In France, for instance, an act was passed defining a “social liability” of platforms towards (professional) self-employed workers. Since August 2016, unprecedented provisions have been introduced by the new Labour Code regarding “workers obtaining work through digital platforms”.

reaching review of the current literature, including academic as well as policy reports, various official positions and soft law measures adopted by governments, litigations, and actions by labour or social affairs inspectorates. Numerous references will be also made to the law of the European Union, as the platform economy spans national borders. This effort also lays the foundation for gaining a comprehensive understanding of the employment status of platform workers and the formal and substantial relationships that exist with clients and platforms, which will be addressed in the following section of this work.

To begin with, in the fragmented European landscape, several indicators help to define the dimension of work associated with the platform-based labour. The stable proportion of self-employment in the EU (14.9% in 2015⁷⁶¹) may serve as a proxy to determine the potential size of a contingent of workers ready to engage in this economic segment (a possible “surplus population” of underemployed gig workers”, according to VAN DOORN’s definition⁷⁶²). At the same time, both temporary contracts

The Code extends to this group of freelancers individual and collective rights, including to strike, carry out other concerted activities protected by the law and form or join a union. “Lorsque la plateforme détermine les caractéristiques de la prestation de service fournie ou du bien vendu et fixe son prix, elle a, à l’égard des travailleurs concernés, une responsabilité sociale qui s’exerce dans les conditions prévues au présent chapitre”, Loi n° 2016-1088 du 8 août 2016 relative au travail, à la modernisation du dialogue social et à la sécurisation des parcours professionnels”. Due to this regulation, platforms are obliged to pay insurance against industrial accidents at the workplace and contributions to vocational training. In particular, a worker working for a certain amount of time acquires rights in the field of lifelong training and the platform must pay the contributions provided for by legislation. In addition to this, prior experience has to be validated in order to be portable. An Decree of 4 May 2017 specifies the conditions of application of such principles, and most specifically as of which amount of turnover made on one or several combined platforms, the contribution of the platform is compulsory (13% of yearly social security ceiling). The legislator has chosen to extend minimum social rights to a specific group of workers certain under certain conditions instead of creating a new status. See also ESCANDE VARNIOL M.-C. (2018), *The Legal Framework for Digital Platform Work: The French Experience* in MCKEE D., MAKELA F. and SCASSA T. (Eds.), *Law and the “Sharing Economy”*: Regulating Online Market Platforms, Ottawa.

⁷⁶¹ Defined as “the employment of employers, workers who work for themselves, members of producers’ co-operatives, and unpaid family workers. Employed people are those aged 15 or over who report that they have worked in gainful employment for at least one hour in the previous week or who had a job but were absent from work during the reference week”. See <https://data.oecd.org/emp/self-employment-rate.htm#indicator-chart>. According to Eurostat, in 2016, 30.6 million people aged between 15 and 64 were self-employed in the EU. They accounted for 14% of total employment, see <https://goo.gl/yc7jCK>. See also EUROFOUND (2017), *Exploring self-employment in the European Union*, Publications Office of the European Union, Luxembourg (warning that the figure may seem “to be in contrast with the current discourse on the rise of non-standard employment and selfemployment”).

⁷⁶² Experts wonder whether the model could survive “when labour market conditions improve and workers have alternatives to the gig economy”. See HEALY J., NICHOLSON D. and PEKAREK A. (2017),

and self-employment grew, quite strongly in some Member States, between the mid-1990s and 2007. There is more. Despite the relatively tiny proportion of this class of workers, there was an increase in the share of self-employed people without employees (solo self-employed workers) between 2002 and 2015, while the composition of this group is changing – service sectors account for the largest portion of self-employed labour force⁷⁶³. Moreover, the percentage of workers taking up second jobs has augmented gradually thus expanding the same pool of workers: the majority of freelancers in OECD countries are “slashers” (workers with a portfolio of multiple activities to earn a living), as their contract work supplements another part-time or full-time position⁷⁶⁴. In spite of the differences among States, all these trends appear to pre-date slightly the advent of the collaborative economy; it is indeed a well-known fact that most digitally enabled companies were founded only in the last five to ten years⁷⁶⁵.

In addition to this, as has been said here on a number of occasions, the phenomenon is still in its infancy. While the (provisional) wide-ranging analysis of shortcomings and merits of working arrangements in the “app economy” is becoming consistent and unambiguous – at least in academic research – there is no consensus on the recipe for addressing these issues from a policy point of view. Scholars, commentators and lawmakers have conflicting views on the applicability of existing legal frameworks to digitally enabled companies. On the one hand, those

Should we take the gig economy seriously?, op. cit., p. 238 (describing potential adjustments to address pitfalls created by next upswing in the business cycle).

⁷⁶³ In addition to this, it is important to note that most of these self-employed workers have no employees. Own-account workers (self-employed people without employees) amount to 10% of all employed, while employers (self-employed persons with at least one employee) take a share of 4.5% of total employment in Europe. Among the self-employed, one out of five could be classified as “dependent” in the light of their self-perceived and objective economic situation. For a complete picture, see EUROFOUND (2017), *Non-standard forms of employment: Recent trends and future prospects*, Dublin, p. 1.

⁷⁶⁴ HUSSENOT A. (2017, August 21), *Why the future of work could lie in freelancing*, retrieved from <http://wef.ch/2vWWHPR>.

⁷⁶⁵ Whether these dynamics may have an effect on job creation or rather destruction is still not evident, at least at this stage. Due to the lack of comprehensive and reliable data, it is difficult to verify the causal link that ties the collaborative economy on the above-mentioned macro-trends. Further empirical research is therefore desirable to fully understand the quantitative impact of digitally-facilitated work on the labour market as a whole.

who think that new realities of work have outgrown old-fashioned legal concepts⁷⁶⁶, on the other, those who insist in making clear that the newness of platforms does not deserve or justify a special treatment.

In the meantime, platforms have grown pretending not to be covered by already existing regulations⁷⁶⁷, “their preferred tactic being that of the *fait accompli*”⁷⁶⁸. Instead of first asking official permission to operate, platform companies tend to simply roll out their activities thus gaining market share on the basis of a *de facto* situation that proves much more difficult to change⁷⁶⁹. In the lack of a specific framework regulating work in the platform economy as such, that inter alia does not always appear to be the most appropriate solution to adopt, national governments must rely on more general legislation, with substantial differences between the EU countries⁷⁷⁰. Accordingly, conventional regulatory frameworks apply based on employment status and the type of work performed.

At first glance, it might seem that policymakers have adopted a “wait-and-see” attitude so far, at least from a labour law perspective: this approach is to be welcomed as a wise choice, given the embryonic phase of this phenomenon. Very broadly speaking, while labour platforms should be subject to the general legal frameworks of commercial codes, civil codes, consumer protection acts and data protection legislation, “no legal or collectively agreed framework specifically

⁷⁶⁶ SUNDARARAJAN A. (2017), *The Collaborative Economy: Socioeconomic, Regulatory and Policy Issues*, op. cit., p. 7 (arguing that “it is important to think beyond simply trying to retrofit old regulatory regimes onto the new models”).

⁷⁶⁷ A *Uber* manager once admitted that the company, today in the seventh year of operation, didn’t “have the time to marinate on some of the basics as the focus has been on launching in more cities”. See *Uber drivers confront challenges working for a ‘faceless boss’* (2017, June 9), retrieved from <https://goo.gl/WUFjK4>.

⁷⁶⁸ DEGRYSE C. (2016), *Digitalisation of the economy and its impact on labour markets*, WP ETUI, No. 2, pp. 15 and 35 (claiming that “these [...] strategies are likely to have a major impact on the traditional payment and regulation models directly affecting workers”).

⁷⁶⁹ GARBEN S. (2017), *Protecting Workers in the Online Platform Economy: An overview of regulatory and policy developments in the EU*, op. cit., p. 14.

⁷⁷⁰ At the moment, government preliminary responses to platform labour are quite discrepant across the EU member states, reflecting the heterogeneity in the existing national frameworks. Similarly, these frameworks might not be “necessarily adequate to deal with the challenges of the platform economy”. LENAERTS K., BEBLAVY M. and KILHOFFER Z. (2017), *Government Responses to the Platform Economy: Where do we stand?*, op. cit., p. 8 (arguing this issue has been brought to the attention of policy-makers, social partners and other stakeholders and several options have been considered across the countries studied: “there have been a number of parliamentary questions and court cases on the platform economy”, mostly in Germany, France, Belgium and Denmark, “though not all of these cases have specifically addressed working conditions”).

addressing crowd employment in Europe could be identified”⁷⁷¹. Few episodic initiatives may be traced mostly concerning work on demand and transport services⁷⁷². Conversely, much more has been said (and done) in the field of competition, tax and administrative law, particularly as regarding ride-hailing services such as *Uber* or, more in general, occasional services exchanged directly or through various intermediaries, including digital platforms⁷⁷³. To summarise, then, the very questions to be answered are: does an authentic loophole exist? How can this space of indecision be reduced to the benefit of the parties involved? Solving this impasse is no minor matter, especially when it comes to ensuring legal certainty.

It should be made clear that, from a purely legal point of view, “digital platform-enabled labour” does not even exist, in the sense that it is not “a sort of watertight dimension of the economy and the labour market”⁷⁷⁴. First of all, as explained in the previous chapters, digitally enabled work patterns differ much from one another. What is more, such intrinsic heterogeneity makes generalisation hazardous. Accordingly, regulating platform- or app-mediated work as an entirely unique category deserving new notions, new concepts, and new regulation should be

⁷⁷¹ MANDL I. and CURTARELLI M. (2017), *Crowd Employment and ICT-Based Mobile Work—New Employment Forms in Europe* in MEIL P. and KIROV V. (Eds.), *Policy Implications of Virtual Work*, London, p. 59.

⁷⁷² LENAERTS K., BEBLAVÝ M. and KILHOFFER Z. (2017), *Government Responses to the Platform Economy: Where do we stand?*, op. cit., p. 5 (claiming that “[i]n Europe, the most common approach taken by governments involves applying the legal, regulatory and policy frameworks that are already in place to the platform economy. In none of the countries studied is there a specific framework or guidelines covering the platform economy as such”).

⁷⁷³ Some countries such as Finland have published guidance on the application of the national tax regime to the collaborative economy. In France, the “*autoentrepreneur*” status, created in 2008, has promoted autonomous arrangements by making tax payment easier (a strong presumption of non-employee status applies). In this new fiscal regime a unique proportional tax replaces all taxes and non-wage labour costs. Moreover, the Italian “Sharing Economy (Tax) Act” – which was simply brushed aside when it came to the actual discussion – introduced a “discounted” tax rate, with lower or no tax charged on income up to €10,000. See VAUGHAN R. and DAVERIO R. (2016), *Assessing the size and presence of the collaborative economy in Europe*, op. cit., p. 27. Two other significant experiences can be mentioned. For instance, in Belgium an act adds a new type of income related labour activities delivered via “registered platforms” (i.e. recognised by the Belgian federal government) below € 5,000 of annual income. A beneficial fiscal regime of 10% applies. Below this cut-off, no VAT or social contributions are charged. For income gained through accommodation, there are different rules (and then generally municipal taxes apply). In France, instead, in its 2014 annual digital report, the *Conseil d’Etat* proposed the creation of a platform-specific status requiring the renegotiation of Directive 2000/31/EC. See: <https://goo.gl/V6CvY1>.

⁷⁷⁴ DE STEFANO V. (2016), *The rise of the “just-in-time workforce”: On-demand work, crowdwork, and labor protection in the “gig economy”* in *Comp. Lab. L. & Pol’y J.*, 37(3), p. 472.

avoided, unless it is indispensable for explicit reasons. To reiterate, the design of specific legislation only targeting platform-based labour makes little sense, especially in the field of labour law where this approach may result in negative consequences such as uncertainty and potential circumvention of mandatory regulation, legal arbitrage and even social dumping.

In addition to this, before going into the analysis of the regulatory framework covering the three subsectors mentioned above, it could be useful to explore the scope of a set of wider European directives and their applicability to platform labour: a preliminary overview will follow. In the view of many scholars, while employment governing institutions are typically national and historically rooted in country-specific contexts, “[m]ethods need to be found of applying existing European directives and national legislation to work of this kind”⁷⁷⁵. Taking note of the current state of play, which kind of legal schemes could be applied to digital labour platforms? As already mentioned, it might be acknowledged that these arrangements often fall within the “extended family” of non-standard forms of employment which are even more frequently used to “enable a firm to adjust to fluctuations in demand” as well as for cost-saving reasons⁷⁷⁶, as clarified in the previous section. Typically, these forms imply a discontinuous and multilateral nature of the relationship and the concrete risk of work intensification. Conceived as a balanced instrument combining flexibility and security, they have largely been employed for unintended purposes, thus resulting in an escalation of precariousness leading to a detrimental race to the bottom⁷⁷⁷.

If, for instance, platform-based labour is understood as a peculiar form of atypical (yet subordinate) work, then the feasibility of the application of the three directives regulating “atypical employment” to platform workers (namely, Part-Time Work⁷⁷⁸,

⁷⁷⁵ VALENDUC G. and VENDRAMIN P. (2016), *Work in the digital economy: sorting the old from the new*, op. cit., p. 42.

⁷⁷⁶ INTERNATIONAL LABOUR OFFICE (2016), *Non-standard employment around the world: Understanding challenges, shaping prospects*, op. cit., p. 159.

⁷⁷⁷ For an interesting point of view on this topic, see LEE E. (1996), *Globalization and employment: Is anxiety justified?* in *Int'l Lab. Rev.*, 135(5), pp. 485-497.

⁷⁷⁸ Council Directive 97/81/EC of 15 December 1997 concerning the Framework Agreement on Part-time work concluded by UNICE, CEEP and the ETUC, OJ [1999] L14/9 (pursuing quality alongside the non-discrimination aims, the directive imposes comparable working conditions for full-time and part-time workers unless there is an objective justification for dissimilar treatment). For a comprehensive assessment, see BELL M. (2011), *Achieving the Objectives of the Part-Time Work Directive? Revisiting the PartTime Workers Regulations* in *Industrial Law Journal*, 40(3), pp. 254-279.

Fixed-Term Contract⁷⁷⁹, Temporary Agency Work⁷⁸⁰) should be assessed⁷⁸¹. Broadly speaking, “each Directive reflects a trade-off between flexibility for employers to have recourse to these forms of contract, coupled with standards on the treatment of such workers”⁷⁸². They were underpinned by the assumption workers engaged in non-standard employment should not see their working conditions limited by barriers erected on the basis of the form of employment⁷⁸³. Interestingly enough, the aforementioned directives impose a prohibition of discrimination but also contain limits and provisions aimed at preventing the abuse of such forms⁷⁸⁴.

⁷⁷⁹ Council Directive 1999/70/EC of 28 June 1999 concerning the Framework Agreement on Fixed-term work concluded by ETUC, UNICE and CEEP, OJ [1999] L175/43 (the directive establishes a framework for the prevention of both abuse arising from the use of successive fixed-term contracts and discrimination against those working under fixed-term contracts). For a comparative analysis of the origins and evolution of legal regulations on fixed-term employment contract, see LUDERA-RUSZEL A. (2015), *Typical or Atypical: Reflections on the Atypical Forms of Employment Illustrated with the Example of a Fixed-Term Employment Contract-A Comparative Study of Selected European Countries* in *Comp. Lab. L. & Pol’y J.*, 37(2), pp. 407-445.

⁷⁸⁰ Directive 2008/14/EC of the European Parliament and the Council of 19 November 2008 on temporary agency work OJ [2008] L327/9 (allowing workers to fall under the scope of domestic definitions of “employees” or “workers” and qualify for stronger employment rights). See also EUROPEAN COMMISSION (2014), Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the application of directive 2008/104/EC on temporary agency work. COM(2014) 176 final, p. 19 (stating that the use of derogations to the principle of equal treatment could, in specific cases, “have led to a situation where the application of the Directive has no real effects upon the improvement of the protection of temporary agency workers”).

⁷⁸¹ The resolution of European Parliament urges the Commission to reinforce the implementation of already existing directives devoted to precarious employment in order to “the spread of socio-economic uncertainty and the deterioration of working conditions for many workers”.

⁷⁸² BELL M. (2012), *Between flexicurity and fundamental social rights: the EU directives on atypical work in European Law Review*, 37(1), p. 36 (wondering whether there is a fundamental social right to equal treatment for atypical workers). The principle of equal treatment is contained in directive on Part-Time Work, Fixed-Term Contract, and Temporary Agency Work.

⁷⁸³ VOSKO L. F. (210), *The Partial Eclipse of the SER and the Dynamics of SER-Centrism in International Labour Regulations* op. cit., p. 87. “The idea that economic efficiency and ‘rights’ are mutually reinforcing and can be developed together is central to the ethos of the EU”, according to RODGERS L. (2012), *Vulnerable Workers, Precarious Work and Justifications for Labour Law: a Comparative Study in E-Journal of International and Comparative Labour Studies*, 1(3-4), p. 93. See also ZAPPALÀ L. (2009), *I lavori flessibili* in CARUSO B. and SCIARRA S. (Eds.), *Il lavoro subordinato, Trattato di diritto privato dell’Unione Europea*, Torino, pp. 309-389.

⁷⁸⁴ See Paragraph 5 of the Framework Agreement on Fixed-Term Work; art. 4(1) of Directive 2008/104/EC.

Furthermore, one could claim the significance of standards regarding Undeclared Work⁷⁸⁵, Equal Pay⁷⁸⁶ and Equal Treatment⁷⁸⁷. It can be said that the rationales behind these guidelines are now challenged by the increasing prevalence of ITC-enabled arrangements, thus needing to be updated and reviewed.

Another question to be addressed is whether, and to what extent, the Directive on Working Time⁷⁸⁸ – offering a lot of flexibility in exchange for certain limits – may be used as regards the workers concerned. However, it has to be noted that who can determine the organisation of their own working time are not necessarily excluded from being in an employed relationship. Against this background, it has to be pointed out that the notion of working time is defined as an interval “during which the person gives up autonomy and is not free to determine its behaviour”⁷⁸⁹, a concept that somehow diverges from the basic structure of some of these alternative arrangements. At the same time, in most of the cases, the substantial conduct and the concrete situation of this group of workers approximates the one of employees, it might therefore be argued that the provisions of the directive shall apply by analogy. Nevertheless, the extension of the scope of the abovementioned regulation may be considered questionable, since “working time restrictions in the sense to forbid [workers] to work beyond a certain number of hours” may prove to be to the detriment

⁷⁸⁵ See Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Stepping up the fight against undeclared work, COM/2007/0628 final. A type of undeclared work is “own account” or “self-employed work”, where self-employed persons provide services either to a formal enterprise or to other clients, such as households.

⁷⁸⁶ Council Directive 75/117/EEC of 10 February 1975 on the approximation of the laws of the Member States relating to the application of the principle of equal pay for men and women.

⁷⁸⁷ Council Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation.

⁷⁸⁸ See RISAK M. (2017), *The scope of working time directive: perspective and challenges, A Thematic Working Paper for The Annual Conference of the European Centre of Expertise (ECE): The Personal Scope of Labour Law in Times of Atypical Employment and Digitalisation* (arguing that “[those persons active in the virtual realms of the gig economy] are formally free to work what and when they choose – but this freedom may often be no more than formal due to an economic situation which does not leave them a lot of alternatives to selling their labour in a certain way to certain contractual partners”). It has been claimed that the Working Time Directive (2003/88/EC) has been written “from the perspective of a standard worker is expected to work excessively long hours”. For a comprehensive analysis, see DAVIES A. C. L. (2013), *Regulating Atypical Work: Beyond Equality* op. cit., pp. 247.

⁷⁸⁹ See RISAK M. (2017), *The scope of working time directive: perspective and challenges*, op. cit. see also VERHULP E. (2017), *The Notion of ‘Employee’ in EU-Law and National Laws, A Thematic Working Paper for The Annual Conference of the European Centre of Expertise (ECE): The Personal Scope of Labour Law in Times of Atypical Employment and Digitalisation*.

of this group, infringing the possibility to earn a decent wage, stay above the ranking thresholds, then be paid enough or be appointed in the future⁷⁹⁰. Indeed, tracking all activities in order to enforce a regulation as such “would lead to a complete supervision of the individual and it would be incomplete because the time spent, e.g., in preparing work with electronic media, will be not included”⁷⁹¹. As shown above, an extensive interpretation of the Directive may cause difficulties. In nearly all scenarios, its application is not entirely satisfactory, unless prompt action is taken to ensure scrupulous revision and reasonable enforcement.

3.1. The Communication on the European agenda for the collaborative economy.

By rebutting the charge of ill-adapting out-dated legal arsenal and national regulations to this new mode of doing business⁷⁹², the European institutions have developed a framework for (collaborative) online platforms, starting from 2015. This journey’s milestones are several: after the adoption of the Single Market Strategy in October 2015, the Commission focused its attention on carrying out a public consultation, with the aim to gather the observations of various stakeholders including public authorities, scholars, entrepreneurs and individuals, and a valuable Eurobarometer survey⁷⁹³. Finally, two Communications on Online Platforms and on the Collaborative Economy were released between May and June 2016. Since the first is rather wide-ranging (it contains principles such as a level playing field for comparable digital services, responsible behaviour of online platforms, transparency, openness and non-discrimination)⁷⁹⁴, a hands-on analysis of the Agenda for the Collaborative Economy will be provided⁷⁹⁵.

⁷⁹⁰ See RISAK M. (2017), *The scope of working time directive: perspective and challenges*, op. cit.

⁷⁹¹ DÄUBLER W (2017), *Challenges To Labour Law*, op. cit., p. 497.

⁷⁹² HATZOPOULOS V. and ROMA S. (2017), *Caring for Sharing? The Collaborative Economy under EU Law*, op. cit., p. 126.

⁷⁹³ Flash Eurobarometer 438: *The use of collaborative platforms*, retrieved from <https://goo.gl/fs1fCm>.

⁷⁹⁴ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, “A Digital Single Market Strategy for Europe” {SWD(2015) 100 final}. Brussels, 6.5.2015. COM(2015) 192 final. For a critical point of view, see also BRONZINI G. (2016), *Le linee guida della Commissione europea sulla collaborative economy: much ado for nothing?* in *Riv. it. dir. lav.*, 4, pp. 259-271. See also BUSCH C., SCHULTE-NÖLKE H., WIEWIÓROWSKA-DOMAGALSKA A. and ZOLL F. (2016), *The Rise of the Platform Economy: A New Challenge for EU Consumer Law?* in *Journal of European Consumer and Market Law*, 5(1), p. 4 (soliciting the drafting of a Platform Directive since “EU consumer law does not adequately cover the growing number of three-party situations”).

⁷⁹⁵ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, “A European agenda for the

Although programmatic⁷⁹⁶, the non-binding guidance on how existing EU law should be applied to the collaborative economy is pretty clear and rather specific, revealing a deep knowledge of the values and concerns at stake. The Commission emphasises that platforms are already subject to existing EU rules in areas such as competition, consumer protection, protection of personal data and single market freedoms. Compliance with and enforcement of these rules is then crucial in order to restore a level playing field⁷⁹⁷. Similarly, the European Commission proves to be aware that “regulatory grey zones are exploited to circumvent rules designed to preserve the public interest”⁷⁹⁸.

The Communication, built on several “impulse papers”, admits the importance of the collaborative economy from a socio-economic perspective, by taking into consideration its growing dimension and its potential contribution in fostering competitiveness and growth, whilst ensuring adequate protections for consumers and workers. The document deals with five key issues: (a) market access requirements and the underlying services; (b) liability regimes; (c) protection of users; (d) labour law and worker classification; (e) taxation.

According to the Commission, the emergence of the collaborative economy is a powerful “test-board” to assess the validity of objectives pursued in existing legislations both towards new and traditional service providers. As for the point (a), it needs to be stressed that, under EU law, barriers such as business authorisation, licensing obligations or minimum standard requirements must be justified by a public interest objective, proportionate to achieve such public goal pursued and non-discriminatory, according to the fundamental freedom of the Treaty and the Services Directive⁷⁹⁹. Moreover, whereas barriers to entry cannot be eliminated for traditional service providers, the Commission recommends making things easier for

collaborative economy” {SWD(2016) 184 final} (hereinafter referred to as “Communication”). This paragraph draws from ALOISI A. (forthcoming), *The role of European institutions in promoting decent work in the collaborative economy* in BRUGLIERI M. (Ed.), *Multi-disciplinary design of sharing services*, Milano.

⁷⁹⁶ For critical observations, see CAUFFMAN C. (2016), *The Commission’s European Agenda for the Collaborative Economy – (Too) Platform and Service Provider Friendly?* in *Journal of European Consumer and Market Law*, 5(6), pp. 235-243.

⁷⁹⁷ WIEWIÓROWSKA-DOMAGALSKA A. (2017), *Online Platforms: How to Adapt Regulatory Framework to the Digital Age?*, Internal Market and Consumer Protection Brief.

⁷⁹⁸ See Introduction, COM(2016) 356 final, p. 2.

⁷⁹⁹ Directive 2006/123/EC on services in the internal market, O.J. 2006, L. 376/36. This Directive excludes from its scope of application: transportation services, financial services, healthcare services, temporary work agencies, and social services.

participants in the collaborative economy, provided that many activities such as customer reviews are, at least in part, already “sourced out” and may be used to address specific public policy concerns regarding access, quality or safety⁸⁰⁰. Nevertheless, total bans and quantitative restrictions have to be handled as a measure of last resort. At the same time, administrative procedures, when required, have to be clear, transparent and simple⁸⁰¹.

Another cornerstone of the Communication resides in the classification of activities. If the distinction between true and commercial sharing can easily be rooted in the switch between “compensation costs vs. remuneration”, regulators are constantly asked to distinguish between professionals and individuals who turn to the collaborative economy platforms on an occasional basis, when services are provided for free or at a price that barely covers costs. Experts suggest establishing a narrow set of criteria such as the frequency with which a service is rendered, the provider’s profit-seeking motive and the relevant payment⁸⁰². Yet, the issue is far from being unravelled. Lines between categories are now increasingly tangled, and sometimes this uncertainty seems to be sought deliberately in order to avoid due legal compliance.

Delving deeper, in the 2016 Communication, the supply of the “underlying service” is considered the decisive criterion to establish which regulatory *corpus* should be applied to a given platform. In particular, this paragraph will focus on the multilayer analysis designed by the Commission and aimed at establishing whether a platform is operating in a “real world” sector, rather than as an ICT matchmaker⁸⁰³. According to the document, if the platform results in the provision of a different

⁸⁰⁰ The presence of specific features such as reputational reviews and ratings (when they do not determine a pernicious lock-in effect) may help in addressing public policy concerns. This aspiration is questionable in relation to this type of activity and has not even been given the chance to prove itself in practice. See VITKOVIĆ D. (2016), *The Sharing Economy: Regulation and the EU Competition Law in Global Antitrust Review*, 9, p. 88 ff. (using this fairly naïve example to claim that “businesses may respond to market failures by offering creative market-based solutions to resolving these market failures”).

⁸⁰¹ See SMORTO G. (forthcoming), *Regulating (and self-regulating) the sharing economy in Europe: an overview* in BRUGLIERI M. (Ed.), *Multi-disciplinary design of sharing services*, Milano.

⁸⁰² PETROPOULOS G. (2017), *An economic review of the collaborative economy*, *Bruegel Policy Contribution*, No. 5.

⁸⁰³ See Art. 4(1) of the e-Commerce Directive (if this were the case, platform companies should not be subject to prior authorisations or any similar requirements for the underlying services, and they would benefit from a limited liability regime).

service, in addition to an information society one⁸⁰⁴, it should be subject to “relevant sector-specific regulation, including business authorization and licensing requirements generally applied to service providers”⁸⁰⁵. Difficulties derive from the circumstance that the service(s) provided may form a hybrid *unicum*. To this extent, the provision of the “underlying service” has to be evaluated in concrete by considering three key concurring elements, which in turn are “effective proxies for the degree of control exerted by the platform”⁸⁰⁶: (i) the price-fixing activity, (ii) the setting of other contractual terms, and (iii) the ownership of assets used to supply the service itself. Other criteria may be taken into account: for example, the fact that the platform incurs the cost and assumes all the risks related to the service or whether an employment relationship exists with the worker. The conditions are not extremely stringent since, for instance, merely assisting the ultimate provider of the underlying service or arranging a ranking mechanism does not “constitute proof of influence and control”⁸⁰⁷. When most criteria are met, there are vigorous indicators that the collaborative platform exercises a notable influence or control over the ultimate provider. As a consequence, the platform cannot be considered as the neutral facilitator of the mere “intermediation service”⁸⁰⁸.

To move on to a different subject, it is important to examine the analysis carried out by the Commission and aimed at ascertaining whether a worker is employed by the platform. Equally noteworthy, the Communication refers to the (broad) notion of worker settled by the Court of Justice (“...a person [who] for a certain period of time performs services for and under the direction of another person in return for which he receives remuneration”)⁸⁰⁹. Here too, three cumulative criteria need to be met in

⁸⁰⁴ See Article 1(2) of Directive 98/34/EC as amended by Directive 98/48/EC.

⁸⁰⁵ See COM(2016) 356 final, p. 6.

⁸⁰⁶ SMORTO G. (forthcoming), *Regulating (and self-regulating) the sharing economy in Europe: an overview*, op. cit.

⁸⁰⁷ See COM(2016) 356 final, p. 7.

⁸⁰⁸ Moreover, if the platform does not just act as a broker (even as a “notice board” or a “virtual display”), but offers ancillary services, this cannot be read as a decisive index of influence or control over the underlying service. In Smorto’s words, as a first rule of thumb, when platforms exert a high level of control and influence over workers, “they should be regarded as service providers; conversely, when platforms limit their activity to the matching of demand and supply, enabling peers to deliver the underlying services, they should be deemed as intermediaries”. SMORTO G. (forthcoming), *Regulating (and self-regulating) the sharing economy in Europe: an overview*, op. cit.

⁸⁰⁹ Case C-85/96 María Martínez Sala v. Freistaat Bayern [1998] ECR I-2691 at para 32.

order to prove the employment relationship⁸¹⁰: (i) the existence of a subordinate relationship to another person, (ii) the performance of effective duties, and (iii) the presence of remuneration⁸¹¹.

It goes without saying, the clarification of the Commission is relevant to the extent of this analysis: a subordinate relationship can be described as the provision of the managerial power by the platform, which determines the content of the activity (i.e. the scope of the performance), how the task has to be accomplished, and the form and level of remuneration. It has to be stressed that management and control on a continuous basis are not decisive, just as limited working hours or a low rate of productivity are not enough to exclude the existence of an employment relationship. What is relevant is that an employment relationship can be identified when platform workers have no choice but to follow detailed instructions given by the operator, or when the latter utilises customer-input based ratings to uniform the performances or even discipline providers⁸¹².

Taking a closer look, it is possible to connect this examination with the previous one on the nature of the underlying service. If so, the existence of an employment

⁸¹⁰ See TULLINI P. (2016), *Digitalizzazione dell'economia e frammentazione dell'occupazione. Il lavoro instabile discontinuo informale: tendenze in atto* in *Riv. giur. lav.*, 4, p. 753 (at the same time, the author is somewhat sceptical about the effective applicability of such criteria).

⁸¹¹ As regards the nature of the work and the presence of remuneration, the debate on how to set a threshold for distinguishing between peers (or amateur/occasional providers) and professional service providers is still intense. The provider of the underlying service must pursue an activity of economic value that is "effective and genuine, excluding services on such a small scale as to be regarded as purely marginal and accessory" (pp. 12-13). If there is no compensation or only a compensation of costs, the remuneration criterion is not met. See CAUFFMAN C. (2016), *The Commission's European Agenda for the Collaborative Economy – (Too) Platform and Service Provider Friendly?* op. cit., p. 242. The European Commission support analysis considers different elements: annual turnover for transport services and the frequency of the activity. The Parliamentary resolution corroborates this view by invoking "further guidelines on laying down effective criteria for distinguishing between peers and professionals" (see below). In the absence of "an adequate and credible response to the concerns of incumbent business interests and the unions", governmental institutions are adopting a "cap logic" approach that can be applied to different kind of operators. "The typical response of regulators has been to create institutional boundaries between the sharing economy and the regular economy by putting a cap on a sharing activity. For example, an increasing number of cities allow home sharing for a fixed number of days (e.g., 30, 60 or 90 days). (...) This logic of containment is sustainable as long as the caps can be effectively monitored. Currently, however, governments struggle to enforce such rules, since the platforms do not give them access to user data as they are protected under current privacy laws, while alternative ways of monitoring do not outweigh the costs involved. The government, thus, follows a cap logic which may turn out to hard to enforce in practice". See FRENKEN K. and SCHOR, J. (2017), *Putting the sharing economy into perspective*, op. cit., p. 8.

⁸¹² Other arguments rely on the "economic dependence" criterion, applicable to some providers.

relationship could be sufficient to consider the platform as a provider of the off-line equivalent service, thus imposing compliance with sector-specific requirements, in a circular way⁸¹³. Understandably, this two-stage analysis might give rise to a “chicken & egg” problem. Will it be necessary to obtain a ruling stating the existence of an employment relationship to prove that the platform is providing the underlying service in addition to the ICT one? Or shall “the setting of other contractual terms” of the off-line service be considered evidence attesting the high level of control, thus pointing to the existence of an employer-employee relationship? In the current state of the debate, this process of unwinding is particularly unclear.

The Communication concludes by advocating an intervention of Member States aimed at “assessing the adequacy of national employment legislation” in relation “to the different needs of workers and self-employed individuals in the digital world as the innovative nature of collaborative business model” and to “provide guidance on the applicability of their national employment rules in light of labor patterns in the collaborative economy”⁸¹⁴.

3.2. The European Pillar of Social Rights, the parliamentary resolution on the collaborative economy and other institutional initiatives.

Last April, the European Commission presented its proposal on the European Pillar of Social Rights (hereinafter “EPSR”) in two legal forms with identical content: a Commission Recommendation⁸¹⁵, adopted on the basis of Article 292 TFEU and effective as of that date, and a proposal for an interinstitutional proclamation by the

⁸¹³ For instance, in the light of this two-phase scrutiny – which can appear to be circular – “Uber is the one most likely to qualify as being based on an employment relationship”. See HATZOPOULOS V. and ROMA S. (2017), *Caring for Sharing? The Collaborative Economy under EU Law*, op. cit., p. 118.

⁸¹⁴ CAUFFMAN C. and SMITS J. (2016), *The sharing economy and the law: food for European lawyers in Maastricht Journal of European and Comparative Law*, 23(6), pp. 903-907. See also TREU T. (2017), *Rimedi, tutele e fattispecie: riflessioni a partire dai lavori della Gig economy in Lav. dir.*, 3-4, pp. 367-406.

⁸¹⁵ Commission Recommendation of 26.4.2017 on the European Pillar of Social Rights, Brussels, C(2017)2600final (<http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2017:0250:FIN>).

Parliament, the Council and the Commission⁸¹⁶. To this must be added a Communication⁸¹⁷, two “staff working documents”⁸¹⁸ and many other papers.

Commentators welcomed the initiative as a timely and necessary measure against the rising anti-EU sentiment and the retreat of the populist waves⁸¹⁹. The institutional effort is aimed at building an EPSR achieving the goal of “upward convergence” towards better working and living conditions across the EU thanks to pre-existing initiatives, new legislation and soft law measures⁸²⁰. It consists of 20 “rights and principles” grouped under three broad groups of recommendations: (i) equal opportunities and access to the labour market, (ii) fair working conditions, and (iii) social protection and inclusion. The second section of the Pillars is more pragmatic and presents four concrete propositions encompassing contracts, wages, information

⁸¹⁶ Text of the Interinstitutional Proclamation on the European Pillar of Social Rights as agreed in Coreper on 20 October with a view to the Council (EPSCO) on 23 October 2017, COM(2017) - 251 final (https://ec.europa.eu/commission/sites/beta-political/files/proposal_for_an_interinstitutional_proclamation_endorsing_the_european_pillar_of_social_rights.pdf). The proclamation, an expression of political commitment, was endorsed by the European Commission, the European Parliament and the Council on 17 November 2017.

⁸¹⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Establishing a European Pillar of Social Rights, Brussels, 26.4.2017, COM(2017) 250 final (<http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2017:0250:FIN>).

⁸¹⁸ Commission Staff Working Document Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Establishing a European Pillar of Social Rights, Brussels, 26.4.2017, SWD(2017) 201 final (<http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017SC0201&from=EN>); Commission Staff Working Document. Report of the public consultation, Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Establishing a European Pillar of Social Rights, Brussels, 26.4.2017, SWD(2017) 206 final (<http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017SC0206&from=EN>).

⁸¹⁹ See BROOKS E. (2017, May 22), *The ‘Last Chance for Social Europe’: The European Pillar of Social Rights can only work if integrated into the EU’s existing policies*, retrieved from <https://goo.gl/m6dFMe>. See also POCHET P. (2017, October 17), *The European Pillar of Social Rights in historical perspective*, retrieved from <https://goo.gl/yRFDgy>.

⁸²⁰ CRESPI A. (2017, May 16), *European Pillar of Social Rights mirrors EU good intentions and contradictions*, retrieved from <https://goo.gl/5t7xj3>. See also LÖRCHER K. and SCHÖMANN I. (2016), *The European Pillar of Social Rights: critical legal analysis and proposals*, ETUI Report, No. 139. See GARBEN S., KILPATRICK C. and MUIR E. (2017), *Towards a European Pillar of Social Rights: upgrading the EU social acquis*, *College of Europe Policy Brief, 1* (arguing that “*lacunae* can be addressed and the EU social *acquis* strengthened to enhance the ability to live up to citizens’ expectations that the Union indeed aims at the ‘well-being of its people’”).

about employment conditions and protection in case of dismissals, and social dialogue and involvement of workers.

The document advocates the prevention of “employment relationships that lead to precarious working conditions”: abuse of atypical contracts should be prohibited. Moreover, in order to extend social protection to workers with an atypical contract (or status) as a result of more flexible forms of work in an increasingly digitalised economy, the EPSR is launching a consultation with social partners. It remains to be seen whether the Commission will take decisive and long-awaited action in this area or turn the Pillar into another soft law initiative that will fall short⁸²¹. According to GARBEN, the ambition of the initiative is “to provide new and tangible minimum protection and security for workers in atypical employment and for the (dependent) self-employed”⁸²². From a social convergence perspective, the “Pillar package” could contribute to expand the personal scope and increase the level of protection afforded for certain groups of people (workers, unemployed, self-employed and others) who still find themselves on the margins of the job market⁸²³.

The EPSR, indeed, will require further legislative initiatives in order to raise the pan-European social standards, as both the recommendation and the proclamation are soft law instruments without legally binding force⁸²⁴. It could be said that, in spite of its intrinsic legal weakness, “there is a good chance that sooner or later its principles will be invoked before the national and EU courts”, thus enhancing the Pillar’s actual judicial importance⁸²⁵.

⁸²¹ For a very comprehensive overview of content, legal form and addressees, see RASNAČA Z. (2017), *Bridging the gaps or falling short? The European Pillar of Social Rights and what it can bring to EU-level policymaking*, ETUI Working Paper, No. 05. Drawing up a first assessment, it could be said that “[t]he EPSR definitely brings something new to the EU social dimension, and it can and should be seen as a positive development”, although “it is still too early to say whether it will take a shape that can fulfil [the] promise” of changing the current paradigm.

⁸²² GARBEN S. (2017), *Protecting Workers in the Online Platform Economy: An overview of regulatory and policy developments in the EU*, op. cit., p. 78.

⁸²³ RASNAČA Z. (2017, November 17), *(Any) Relevance of the European Pillar of Social Rights for EU Law?*, retrieved from <https://goo.gl/icbDcs>. See also Proposal for a Council Recommendation on access to social protection for workers and the self-employed, COM/2018/0132 final - 2018/059.

⁸²⁴ Legal rights are more likely to be formulated in a programmatic way. See HENDRICKX F. (2017), *European labour law and the millennium shift: from post to Pillar*, Draft presented at the Roger Blanpain Commemoration Conference, Leuven, 3-4 November 2017, p. 13 (arguing that “[a]lthough the Pillar formulates a broad series of rights, their legal nature and status of remains very uncertain”).

⁸²⁵ RASNAČA Z. (2017, November 17), *(Any) Relevance Of The European Pillar Of Social Rights For EU Law?*, op. cit.

After publishing an in-depth analysis on the situation of workers in the collaborative economy⁸²⁶, the European Parliament adopted a Resolution on a European Pillar of Social Rights⁸²⁷, including a methodical and progressive reflection on a set of pressing issues that are closely related to the social and economic risks faced by workers in the platform economy⁸²⁸. The document calls on an update of existing labour and social standards, demanding a proposal for “a framework directive on decent working conditions in *all forms* of employments, extending existing minimum standards to new kinds of employment relationship”, in the light of “insufficient protection of working conditions of a growing number of workers, including those in new and nonstandard forms of employment”⁸²⁹. Albeit the text does not explicitly refer to the collaborative economy, formulas such as “regardless of the type of contract or employment relationship” seem to be a restrained technicality aimed at including alternative working arrangements within the scope of the EPSR. It must be said that, at least, the European Parliament explicitly bars the way to possible detrimental exemptions for workers in this sector.

A list of rights to be guaranteed to employees and all workers in non-standard forms of employment is provided including equal treatment, health and safety protection, protection during maternity leave, provisions on working time and rest time, work-life balance, access to training, and in-work support for people with disabilities. This initiative could be quite rightly considered to be a significant step forward, aimed at earning Europe a “social triple A”⁸³⁰, especially if read in

⁸²⁶ SCHMID-DRÜNER M. (2016), *The situation of workers in the collaborative economy*, *European Parliament: In-Depth Analysis*.

⁸²⁷ European Parliament resolution of 19 January 2017 on a Pillar of Social Rights (2016/2095(INI)), available at: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2017-0010+0+DOC+XML+V0//EN>.

⁸²⁸ Concomitantly, the European Social Policy Network (ESPN) has conducted an “exploratory description and analysis” of how protective legislation currently cover non-standard work and self-employment in Europe. See SPASOVA S., BOUGET D., GHAILANI D. and VANHERCKE B. (2017), *Access to social protection for people working on non-standard contracts and as self-employed in Europe: A study of national policies*, op. cit.

⁸²⁹ See also Commission Staff Working Document accompanying the Document Consultation Document Second phase consultation of Social Partners under Article 154 TFEU on a possible revision of the Written Statement Directive (Directive 91/533/EEC) in the framework of the European Pillar of Social Rights, p. 10 (providing an overview of the results of the first phase consultation and an analytical background to a second phase consultation of the European social partners on possible legislative action).

⁸³⁰ LECERF M. (2016), *What is ‘Social Triple A’?*, At a glance, EPRS, European Parliamentary Research Service.

connection with the unequivocal reference to the right to adequate information, consultation and information, freedom of associations and representations, collective bargain and collective action. Future enforcement of these provisions may result in an extension of security and social coverage for under-protected workers.

At the same time, when it comes to addressing the issue of “work intermediated by digital platform”, the document calls for a decisive action aimed at clearly distinguishing workers who are “genuinely self-employed and those in an employment relationship”. A particularly striking feature is the reference to “symptomatic” indexes for determining the status, as well as the level of social protection and the identity of the employer. Particular concern has been aroused by the fact that platforms may abuse their dominant positions through improper terms and conditions. Likewise, as stated above, in order to tackle – in the European Parliament’s words – “the spread of socio-economic uncertainty and the deterioration of working conditions for many workers”, the resolution urges the Commission to reinforce the implementation of already existing directives devoted to atypical employment.

At the current stage of the legislative procedure, it is easier to “expect an indirect impact of the Pillar in the (revision of the) existing legal ‘*acquis*’” in the EU social dimension rather than “looking for direct legal consequences arising from the Pillar document(s) itself”⁸³¹. It is still unclear whether “this project is compatible with or brings any added value to existing social rights (in the EU Charter, secondary EU law, and also international instruments like ILO Conventions)”⁸³². As rightly pointed out, the Pillar process has just been launched, therefore the current question as to whether the EPSR truly will represent “a solution to the undermined and under-developed social dimension at the EU level” cannot be fully solved⁸³³.

Moving on to other issues, it would be interesting to expound on the draft report on a European Agenda for the Collaborative Economy prepared by the Committee on the Internal Market and Consumer Protection, then approved as a Parliamentary Resolution⁸³⁴. The relevant aspect, in this case, is the attention paid to the

⁸³¹ HENDRICKX F. (2017), *The European Pillar of Social Rights: Interesting times ahead in European Labour Law Journal*, 8(3), p. 191.

⁸³² RASNAČA Z. (2017, January 23), *The European Pillar of Social Rights: What is being proposed and the challenges ahead*, retrieved from <https://goo.gl/j6ecyk>.

⁸³³ RASNAČA Z. (2017), *Bridging the gaps or falling short? The European Pillar of Social Rights and what it can bring to EU-level policymaking*, op. cit., pp. 38-39.

⁸³⁴ European Parliament Resolution of 15 June 2017 on a European Agenda for the collaborative economy (2017/2003(INI)).

safeguarding of workers' rights, conditions and protections, avoiding social dumping and combatting illegal practices. The Committee also adopts a clear and balanced position on this issue, tackling "the risk that on demand workers might not enjoy genuine legal protection" (this original version has been amended) but recognising that the collaborative economy "generates new and interesting entrepreneurial opportunities, jobs and growth, and frequently plays an important role in making the economic system not only more efficient"⁸³⁵.

The European Parliament has called on the Commission "to publish guidelines on how Union law applies to the various types of platform business models in order, where necessary, to fill regulatory gaps in the area of employment and social security". Despite the fact that "the scope of application and enforcement of the social *acquis* more generally leaves room for improvement"⁸³⁶, many rules from *acquis communautaire* can be immediately applied to the platform economy arrangements. According to the European Parliament, in fact, "certain parts of the collaborative economy are covered by regulation at local and national level"⁸³⁷, therefore member States are encouraged to "step up enforcement of existing legislation" by recurring to all available tools⁸³⁸. Its main demand is to "to ensure fair working conditions and adequate legal and social protection for all workers in the collaborative economy, regardless of their status". The resolution is not binding and, at the time of writing, is still subject to public debate⁸³⁹.

⁸³⁵ Additionally, it is worth noting the efforts made by the European Economic and Social Committee (EESC) in calling for "an investigation into the contractual status of crowd workers and other new forms of work and employment relationships" as well as a clarification of "possible grey zones linked to employment status in relation to taxation and social insurance". See Opinion of the European Economic and Social Committee on the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions launching a consultation on a European Pillar of Social Rights (COM(2016) 127 final).

⁸³⁶ See GARBEN S., KILPATRICK C. and MUIR E. (2017), *Towards a European Pillar of Social Rights: upgrading the EU social acquis*, *College of Europe Policy Brief*, p. 2 (arguing that "the planned revision of the Written Statement Directive may constitute an appropriate occasion" for updating the EU *acquis*).

⁸³⁷ Para. 14. Yet, it must be acknowledged that, in the section "Impact on labour market and workers' right", the Parliament demands, "in a proactive way", the modernisation of existing legislation and the reduction in regulatory gaps.

⁸³⁸ European Parliament resolution of 15 June 2017 on a European Agenda for the collaborative economy (2017/2003(INI)), para 15.

⁸³⁹ The Parliament has urged "the Commission to work together with the Member States to provide further guidelines on laying down effective criteria for distinguishing between peers and professionals, which is crucial for the fair development of the collaborative economy". European Parliament resolution of 15 June 2017 on a European Agenda for the collaborative economy (2017/2003(INI)), para 18.

In the meantime, in October 2017, the European Commission issued a proposal to reinforce social standards for workers with ultra-flexible working hours and no regular salary. The first step could be a possible revision of the Written Statement Directive⁸⁴⁰ in order to make sure that all EU workers in need of information receive a written and timely confirmation of their working conditions⁸⁴¹. Underlining that effective improvements are possible, the REFIT evaluation demonstrates how the notification of a written statement to employees is not an excessive burden compared to the benefits it brings, e.g. legal certainty for both parties and fewer litigations⁸⁴². More recently, in an effort to bring more transparency and predictability to workers, the European Commission has adopted a proposal for a new Directive setting minimum standards for all workers across the EU and proposed a new labour authority to fight questionable employment schemes⁸⁴³.

Hailed as a landmark opportunity for Europe⁸⁴⁴, these initiatives might create an “important political momentum” that must be seized, by “contributing to a renewed consensus on the relationship between economic development and social policies”⁸⁴⁵ in times of political disenchantment and distrust. Despite its more exhortatory than mandatory nature, the Pillar deserves a great deal of praise since it marks a new ambitious stage in the process of strengthening the EU social dimension, neglected for a long time. European institutions, designed to focus on economic integration,

⁸⁴⁰ Directive 91/533/EEC gives employees the right to be notified in writing of the key aspects of their employment relationship when it begins or shortly after. See TOUMIEUX C. (2014), *Implications of Council Directive 91/533/EEC for new forms of employment*, Keynote Paper presented at the 7th Annual Legal Seminar European Labour Law Network (explaining that relationships not based on employee status “are not included within the scope of the Directive or their inclusion is uncertain”).

⁸⁴¹ As the Commission reports, during the consultation one of the main points raised has been the lack of protection for workers in all forms of employment. See European Commission (2017: 2) C(2017) 2610 final.

⁸⁴² See Inception Impact Assessment, Revision of The Written Statement Directive.

⁸⁴³ Proposal for a Directive on transparent and predictable working conditions in the EU, COM (2017) 797 final, 7, available at <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=9028&furtherNews=yes>. As detailed in recital 7, “[p]rovided that they fulfil those criteria (of subordination and personal dependency), domestic workers, on-demand workers, intermittent workers, voucher based-workers, platform workers, trainees and apprentices could come within scope of this Directive”. See also EUROPEAN COMMISSION (2018), *Commission adopts proposals for a European Labour Authority and for access to social protection*, retrieved from http://europa.eu/rapid/press-release_IP-18-1624_en.htm.

⁸⁴⁴ See EUROPEAN COMMISSION (2017), *Statement of President Juncker on the Proclamation of the European Pillar of Social Rights*, retrieved from http://europa.eu/rapid/press-release_STATEMENT-17-4706_en.htm.

⁸⁴⁵ HENDRICKX F. (2017), *European labour law and the millennium shift: from post to Pillar*, op. cit., p. 15.

might inform future efforts towards addressing the vulnerabilities experienced by platform workers. In order to restore the level playing field, the “integrationist logic” could be applied to avoid a downward spiral of reductions in labour standards⁸⁴⁶, thus preventing unfair business competition and delivering new and more effective rights for workers⁸⁴⁷.

3.3. Sectoral analysis: peer-to-peer transport services.

At first glance, this sector seems to have been caught up in the eye of the storm raging on the platform economy. Although outside of the scope of this research, issues related to competition law will be briefly scrutinised. There are substantially three reasons for such interest. First and foremost, peer-to-peer transport service companies (also referred to as “transportation network companies” (TNC)) are considered the flagships of the whole “at-the-touch-of-a-button economy”, therefore regulations and decisions regarding this segment attract lot of attention and gain a significant media impact. Secondly, this economic sector is (“heavily”) regulated at the national level – basically through a system of prior authorisations and licenses⁸⁴⁸. All complaints by incumbents aside, when *Uber* enters a (national) market, it faces a broad array of requirements to be met⁸⁴⁹. Thirdly, the only cases pending before the

⁸⁴⁶ GARBEN S. (2017), *The Constitutional (Im)balance between ‘the Market’ and ‘the Social’ in the European Union* in *European Constitutional Law Review*, 13(1), pp. 23-61. See also BELL M. (2012), *Between flexicurity and fundamental social rights: the EU directives on atypical work*, op. cit., p. 31. See also BLANPAIN R. (2011), *Decent Work in the European Union: Hard Goals, Soft Results* in *Emp. Rts. & Emp. Pol’y J.*, 15(1), p. 29 ff. (advocating more EU legal competences in the area of labour law in view of the fact that “economic and social progress must go hand in hand”).

⁸⁴⁷ As argued by Davies, “modern labour law is not only a social system aimed at protecting workers from the market, but also an important tool which can contribute to increasing the competitiveness and productivity of enterprises”. See DAVIES P. L. (2000), *Lavoro subordinato e lavoro autonomo*, op. cit., p. 208.

⁸⁴⁸ See CORTE COSTITUZIONALE (2016), *Il servizio di trasporto di passeggeri non di linea fornito attraverso applicazioni software – materiali per una ricerca*, Servizio Studi – Area di diritto comparati (in Italian). The ILO Tripartite Sectorial Meeting on Safety and Health in the Road Transport Sector, held in Geneva in October 2015, adopted a resolution on transport network companies (TNC). The Resolution stressed “the need for a level playing field which ensures that all transport network companies are covered by the same legal and regulatory framework as established for transport companies, in order to avoid a negative impact on job security, working conditions and road safety and to avoid an informalisation of the formal economy” and “the importance of decisions taken by competent authorities or judiciary in relation to self-proclaimed ‘ride-sharing’ for-reward transport platforms, to be fully implemented and enforced”.

⁸⁴⁹ Suffice here to observe that in Belgium, France, and Italy, *UberPop* – the service that allows private individuals without any requirements to become “drivers partners” – has been banned and therefore blocked. In these countries *Uber* can provide its *UberX* or *UberBlack* versions, by meeting a

European Court of Justice concern the legal regime applicable to the much-reviled ride-hailing service⁸⁵⁰.

Looking at the requirements, in France, following the reform of the Transport Code, only taxicabs can inform users about the availability and location of cars in real time⁸⁵¹. It has to be recalled that, in Spain, the Transport Code distinguishes between remunerated transport services and non-profit transport services⁸⁵². In order not to be subject to authorisations, private transport must (i) be carried out for personal or domestic needs of the car owner and his or her relatives and (ii) not

set of obligations including registration, insurance policies, training or a clean criminal background. In Spain, *Uber* was banned nationally in December 2014. See VAUGHAN R. and DAVERIO R. (2016), *Assessing the size and presence of the collaborative economy in Europe*, op. cit., p. 23 ff.

⁸⁵⁰ For an updated and comprehensive review of national case-law, see POLLICINO O. and LUBELLO V. (2017), *Un monito complesso ed una apertura al dibattito europeo rilevante: Uber tra giudici e legislatori* in *AIC*, 2, p. 9.

⁸⁵¹ A clear-cut approach has been used. *Uber's* top management was accused of "deceptive commercial practices" and complicity in promoting an illegal taxi service. In 2016 the company had to pay a 1.2m fine on the grounds of unfair trade practices. In the attempt to regulate ride-hailing services, the *Loi Thévenoud* was passed in 2014 (*Loi n° 2014-1104 du 1er octobre 2014 relative aux taxis et aux voitures de transport avec chauffeur*, *JORF* No. 0228, 2 Oct 2014, p. 15938). Whilst establishing some common principles for the all-sector operators, it contained some specific assisting taxis. Other judgements followed, mainly on the *UberPop* service, culminating in the governmental ban on it and the submission of priority issues of constitutionality of the *Loi Thévenoud*. Then, the Conseil constitutionnel, among the various issues submitted, upheld the ban on *UberPop* (*Conseil constitutionnel, decision* No. 2015-468/469/472, 22 May 2015, *Société UBER France SAS et autre; Id., decision* No. 2015-484, 22 Sep 2015, *Société UBER France SAS et autre; Id., decision* No. 2016-516, 15 Jan 2016, *M. Robert M. et autres*). Then on December 2016 a new legislation was adopted (*Loi Grandguillaume, Loi n° 2016-1920 du 29 décembre 2016 relative à la régulation, à la responsabilisation et à la simplification dans le secteur du transport public particulier de personnes*, *JORF* No. 0303, 30 Dec 2016). See COLANGELO M. and MAGGIOLINO M. (forthcoming), *Uber: A New Challenge for Regulation and Competition Law?* in *Market and Competition Law Review*.

⁸⁵² In Spain, for example, transportation services carried out through online platforms are only allowed if the driver holds a VTC license. Collective agreements, royal decrees and laws rigidly regulate this system. In addition, drivers must either be registered as self-employed or be employed by the owner of the license to operate a VTC. In June 2015, the Labour Inspectorate of Catalonia decided *Uber's* drivers were employees, ruling that there was a labour relationship between *Uber* and its drivers since the company provided drivers with smartphones, established incentive schemes aimed at boosting productivity and "gave assurances to drivers that it would intervene if they experienced any issues with courts or police". See GOZZER F. (2015, June 13), *Trabajo dice que los chóferes de Uber son empleados de la firma*, retrieved from <https://goo.gl/BeWPhB> (in Spanish). In addition, in France a definition for ridesharing ("*co-voiturage*") has been introduced referring to the use of a vehicle by a driver and one or several passengers, for non-profit ("*à titre non onéreux*") except for cost compensation, in the context of a ride that the driver performs for its own account. The same article states that the matching of drivers and passengers (and thus intermediation services for ridesharing) may be done "*à titre onéreux*" (for remuneration) without the intermediary falling under the transport professions laid down in Article L. 1411-1 of the French Transport Code.

result in direct or indirect monetary remuneration. Likewise, in Germany, passenger transportation for commercial purposes is regulated but, in the event that the “payment only covers the running costs of operating the vehicle”, the law does not apply, as specified in the general provisions.

It is fundamental to acknowledge that national courts in France⁸⁵³, Belgium⁸⁵⁴, Italy⁸⁵⁵ and Germany have banned the peer-to-peer passenger transport service in the light of the rules on unfair competition. In particular, several German courts stated that the technological platform (i.e. the software application) had to be considered “as an integral part of an overall service which involves a transport service”. Therefore, *Uber* was judged an illegal provider of transport service directly affecting competition in that sector. Similarly, the Commercial Court of Brussels outlawed *UberPop*, which allowed non-licensed drivers to offer rides. Shortly after, *Uber* restricted its offer to the other versions, by only relying on professional drivers, though this kind of license is very easy to obtain in the Belgian capital. In Denmark, instead, all the transportation services of persons for remuneration, which goes beyond the direct cost coverage, are to be considered a commercial activity.

⁸⁵³ *Conseil constitutionnel*, No. 2015-484 QPC 22-9-2015, *Société Uber France SAS et autre III*.

⁸⁵⁴ *Tribunal de commerce* of Brussels, 31-3-2014, *Taxi Radio Bruxellois*.

⁸⁵⁵ For a preliminary note, see DE FRANCESCHI A. (2016), *The Adequacy of Italian Law for the Platform Economy* in *Journal of European Consumer and Market Law*, 5(1), pp. 56–61. *Tribunale di Milano* banned the *UberPop* app across Italy for unfair competition practices in May 2015 (especially by Art. 2598 of the Italian Civil Code: breach of duty of correct conduct and of the prohibition of injuring another business). According to the court the service was a direct competitor of traditional taxi cooperatives. Although *Uber* claims to be a mere digital service, it has the same features as a taxi service. The service should not be treated as a mere car-sharing or car-pooling (since car owners do not share the costs of the drive to reach their personal destination). The matching service was, therefore, deemed comparable with that provided by an old-fashioned call centre while its pricing system was not subject to the rules governing the public taxi service, “*Uber* fares are lower because its drivers do not have to bear the expenses incurred by the holders of a transport licence (such as the cost of installing meters, insurance and maintenance checks)”, the lack of authorisation and the non-regulated behaviour of *UberPop* drivers give them an unfair competitive advantage. A second decision by the Court of Milan stated that *UberBlack* service (licensed drivers) may also constitute “unfair competition” against PHV drivers who have to return to a garage in between rides. See DONINI A. (2016), *Regole della concorrenza e attività di lavoro nella on demand economy: brevi riflessioni sulla vicenda Uber, nota a Trib. Milano, sez. spec. impresa, ord. 9 luglio 2015* in *Riv. it. dir. lav.*, 2, p. 46. Similar observations were made in *Tribunale di Torino, Sez. spec. impresa, sentenza 24/3/2017, n. 1553* and *Tribunale di Roma, S. spec. impresa, ordinanza 7/4/2017* (then reversed). For a complete review, including a focus on *Uber*’s liability towards passengers and third parties, see DI AMATO A. (2016), *Uber and the Sharing Economy* in *Italian Law Journal*, 2, p. 177. Moreover, *UberBlack* was banned, and then readmitted by the *Tribunale di Roma* in May 2017 (*Tribunale di Roma, sez. IX civile, 7 April 2017; Id.*, 26 May 2017, No. 25857).

3.3.1. *The Court of Justice and the legal nature of Uber's "underlying service".*

In December 2017, the Court of Justice of the European Union (CJEU) ruled that an intermediation service such as that *UberPop* must be regarded as “a service in the field of transport” rather than an information society service. In particular, the Court took the view that the service provided by the platform is more than a matching activity connecting, by means of a digital app, a nonprofessional driver with a private individual wishing to make “urban journeys”. Indeed, the provider of that lucrative intermediation service simultaneously organises and offers urban transport services. In C-434/15 *Asociación Profesional Elite Taxi v Uber Systems Spain* (2014) ECLI:EU:C:2017:981 the Court observed that “*Uber* determines at least the maximum fare by means of the eponymous application, that the company receives that amount from the client before paying part of it to the non-professional driver of the vehicle, and that it exercises a certain control over the quality of the vehicles, the drivers and their conduct, which can, in some circumstances, result in their exclusion”⁸⁵⁶.

In the words of the Advocate General, “[the] request for a preliminary ruling (...) presents the Court with a highly politicised issue that has received a great deal of media attention”⁸⁵⁷. Accordingly, the issue is really worth going into even though it must be handled with due caution. The decision by the Luxembourg court defines the nature of the services provided by *Uber* and, consequently, the applicable regulation. Such a service must be excluded from the scope of the freedom to provide services in general as well as the directive on services in the internal market and the directive on electronic commerce⁸⁵⁸. Thus, the ride-hailing company must comply with rules governing traditional taxi association at the national level. Concomitantly,

⁸⁵⁶ It is worth mentioning that these argumentations echo a similar finding in the Californian case of *O'Connor v. Uber Technologies Inc.* “Like passengers, [...] drivers are customers who receive a service from [*Uber*]”, from Summary Judgment Motion at 33, *O'Connor*, 82 F. Supp. 3d 1133 (No. 13-03826-EMC). “*Uber* is no more a ‘technology company’ than *Yellow Cab* is a ‘technology company’ because it uses CB radios to dispatch taxi cabs, *John Deere* is a ‘technology company’ because it uses computers and robots to manufacture lawn mowers, or *Domino Sugar* is a ‘technology company’ because it uses modern irrigation techniques to grow its sugar cane”. See PERRITT H. H. Jr. (2016), *Uber, Federal Express and the test for independent contractors status* in ID. (Ed.), *Employment Law Update*, New York, pp. 1-24.

⁸⁵⁷ Opinion of Advocate General Szpunar of 11 May 2017, Case C-434/15, *Asociación Profesional Elite Taxi v Uber Systems Spain SL*, ECLI:EU:C:2017:364, Para. 1.

⁸⁵⁸ Case C-434/15 *Asociación Profesional Elite Taxi v. Uber Systems Spain SL* (Request for a preliminary ruling from the *Juzgado de lo Mercantil No. 3 de Barcelona* (Commercial Court No. 3 of Barcelona, Spain)). Questions 3 and 4 refer to the services provided by *Uber Systems Spain*, even though *UberPop* is provided by *Uber BV*, while *Uber Systems Spain's* activities being limited to marketing and support. Nevertheless, it is clear that the court refers to *Uber BV* (based in the Netherlands) rather than *Uber Systems Spain*.

Member States might use this window of opportunity to update obsolete rules on urban public transport.

A Catalan trade association named *Asociación Profesional Élite* filed a lawsuit against *Uber System Spain* alleging unfair practices within the meaning of Law No. 3/1991 “*de Competencia Desleal*” (since neither the platform nor the non-professional drivers have obtained the licenses and authorisations required under the Barcelona Taxi Regulation) and asking the court to order that *Uber Spain’s* activity in the form of *UberPop* cease its conduct. The core issue of the questions referred by the national court is whether *Uber’s* activity falls within the scope of Directives 2006/123 and 2000/31 as well as if the provisions of the TFEU on the freedom to provide services apply. Representatives of the incumbent taxi companies wondered why *Uber* supplies its services without authorisation from the Spanish Transport Authorities⁸⁵⁹. Conversely, the ride-hailing platform maintained to be a mere matchmaker (like an “*eBay* for gigs”, according to its supporters or a “digital middleman”, according to its detractors⁸⁶⁰), providing a technological intermediation service connecting riders to drivers, through its application⁸⁶¹.

Based on this viewpoint, the service should be covered by law provisions designed to ensure the free movement of services in the EU (in particular, by the E-commerce Directive, *lex specialis* in relation to the Service Directive). In this case, pursuant to Article 4, no prior authorisations or similar requirements are due and the “internal market clause” applies (Art. 3[2]). A State may impose an authorisation regime, diverging from the liberalised system, only if public policy, public health, public security and consumer protection make this a necessity. The national commercial court asked the ECJ: (i) should the services *Uber* provides be qualified as merely a transport service or rather an information society service one or an information society service, as defined by Article 1(2) of Directive 98/34? (ii) In the event that *Uber’s* services can be qualified as “information society services”, should

⁸⁵⁹ Traditional taxi companies had no interest in justifying an exemption from licensing requirements. More in detail, the trade association asked the Commercial Court to declare that *Uber Spain* had violated articles 5 and 15(2) of Act 3/1991 (“Unfair Competition Act”). Non-scheduled public transport (taxi) is regulated at the national and local level through imposed quotas in order to correct market failures. This original burden ended up being a barrier to entry.

⁸⁶⁰ See ISAAC E. (2014), *Disruptive innovation: Risk-shifting and precarity in the age of Uber*, Paper presented at the Berkeley Roundtable on the International Economy, p. 16.

⁸⁶¹ “[A]ny service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services”, as defined in Article 1(2) of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations, O.J. L 204.

they fall under the scope of art. 56 (freedom to provide services)⁸⁶²? Put differently, is *Uber* under the scope of the Service⁸⁶³ and/or E-Commerce Directive?⁸⁶⁴ Presumably, if that is the case, the service shall be subject to no prior authorisation in the provider's home State, and other Member states shall be prevented from raising any obstacles⁸⁶⁵. Moreover the Spanish court asked: (iii) is *Uber*'s alleged breach of the national unfair competition law contrary to Article 9 of the Services Directive, which governs "authorisation schemes" and states that an authorisation, licensing or permits regime cannot be restrictive or disproportionate, and cannot unreasonably hamper the principle of freedom of establishment, (iv) if *Uber* is to be considered as an information society service, are the restrictions Spain is currently imposing on the ride-hailing company allowed, taking into account the freedom to provide information society services expressed by Article 3 of the E-Commerce Directive in accordance with Article 3(4)?

Taking the time to step back, it must be said that the response of the Court of Justice is based on an assessment of the relationship between the platforms and its drivers⁸⁶⁶. In May 2017, the Advocate General Szpunar released a non-binding opinion⁸⁶⁷ stating that the service offered by *Uber* is a "composite" one since it comprises two main components: the one provided by electronic means and the other part essentially consisting in urban transport. It is worth emphasising Szpunar's comprehensive analysis, too: two requirements are to be met for a composite service to be classified as falling within the concept of "information and society service", thus benefiting from liberalisation. Firstly, the "material" activity has to be economically independent of the service rendered by electronic means and independently of the physical services (such as platforms for airline tickets or hotel reservations), secondly, the provider has to supply the service as a unique entity or

⁸⁶² Moreover, *Uber* has recently filed complaints with the European Commission against four Member States alleging the violation of the same articles of the TFUE.

⁸⁶³ Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services, in the Internal Market, O.J. 2006 L 376.

⁸⁶⁴ Directive 2000/31/EC on legal aspects of information society services, in particular electronic commerce, in the Internal Market, O.J. 2000, L 178/1.

⁸⁶⁵ See GERADIN D. (2016), *Online Intermediation Platforms and Free Trade Principles – Some Reflections on the Uber Preliminary Ruling Case*. Available at SSRN: <https://ssrn.com/abstract=2759379>.

⁸⁶⁶ POLLICINO O. and LUBELLO V. (2017), *Un monito complesso ed una apertura al dibattito europeo rilevante: Uber tra giudici e legislatori*, op. cit., p. 12.

⁸⁶⁷ However, statistics show that in 80% of the cases the court substantially confirms the legal solution suggested by the Advocate General. See also SCOTT M. (2017, May 11), *Uber Suffers Bloody Nose in Its Fight to Conquer Europe*, retrieved from <https://nyti.ms/2pAaM0U>.

to exert a significant influence over the conditions of the electronic service (the prevailing part). The latter conditions would seem rather remote in such case. Indeed, the digital infrastructure would not exist without the singular rides. Accordingly, *Uber* is not considered a mere matchmaking intermediary (comparable to a “broker”) between drivers and passengers, but rather “a genuine organiser and operator of urban transport”⁸⁶⁸.

It follows therefore that the firm cannot be regarded as a mere technological business since its revenues do not depend on the distribution of its interface or software, but on the number of rides made by drivers. In fact, the Advocate General comes to the conclusion that the service is unique and the main activity offered by *Uber* is the underlying service, precisely because the platform (i) exerts a high level of control over the drivers, and (ii) acts as an organiser of that transport service⁸⁶⁹. Accordingly, the service does not fall under the scope of the principle of the freedom to provide services in the context of the information society services, in the sense of the Directive on electronic commerce. In support of this argument, it should be noted that many scholars suggest a similar interpretation, according to which platforms like *Uber* “are directly involved in the provision of the transportation service and are unlikely to qualify as mere providers of online services”⁸⁷⁰. Indeed, “such conditions

⁸⁶⁸ “The moment we shift our analytical focus to *Uber*’s exercise of employer functions, on the other hand, it becomes clear that the platform does in fact exercise all relevant employer functions usually involved in the provision of transportation or logistics services”. See PRASSL J. and RISAK M. (2016), *Uber, Taskrabbit, and Co.: Platforms as Employers – Rethinking the Legal Analysis of Crowdwork*, op. cit., p. 637.

⁸⁶⁹ “Through tools such as dynamic, algorithmic pricing and a number of other elements of the *Uber* application’s design, *Uber* is empowered via information and power asymmetries to effect conditions of soft control, affective labor, and gamified patterns of worker engagement on its drivers” according to ROSENBLAT A. and STARK L. (2016), *Algorithmic Labor and Information Asymmetries: A Case Study of Uber’s Drivers*, op. cit., p. 3759. Nevertheless, according to some authors, this model is not very representative as it differs significantly from many other forms of collaborative work, as the platform demonstrates a higher degree of managerial control over the hiring and firing, direction, supervision and payment of workers than is true of most labour platforms. See STEWART A. and STANFORD J. (2017), *Regulating work in the gig economy: What are the options?*, op. cit., p. 425 (arguing that “conclusions based on the experience of *Uber* (including precedent-setting regulatory and legal actions aimed at the firm) should be applied only very cautiously to other instances of gig work”).

⁸⁷⁰ It is also undeniable that this allegation is sufficiently substantiated by the fact that *Uber* creates added value by providing rides and exerting significant indirect control over how drivers perform their jobs. HATZOPOULOS V. and ROMA S. (2017), *Caring for Sharing? The Collaborative Economy under EU Law*, op. cit., p. 97. See also DI AMATO A. (2016), *Uber and the Sharing Economy*, op. cit., p. 187 (arguing that “despite *Uber*’s position and its Terms and Conditions, many courts, including the courts of Milan, have affirmed that *Uber* cannot be considered extraneous to the agreement signed between the drivers and the passengers”).

[on cars, facilities and prices] suggest a level of control that goes beyond the mere provision of an introduction between two independent parties, and which resemble closely a traditional employment relationship”⁸⁷¹.

Looking for labour law implications, the ECJ’s reasoning may be used to prove the intense command power for the purposes of the proper classification. Although this very issue is extraneous to the subject of the opinion, many of the arguments used could be read in the sense of considering workers as employees rather than contractors before a national court. As a consequence, such conduct potentially infringes both competition and employment legislations. Apart from this consideration, it can be said that the opinion reflects the arguments used by the British Tribunal in 2016⁸⁷² and by several American courts before⁸⁷³. It sheds a light on the concrete relationship between the platform and drivers using the app, or better the application programming interfaces (APIs), as their “main professional activity”. The mechanism is brilliantly presented: “*Uber* informs drivers of where and when they can rely on there being a high volume of trips and/or preferential fares. Thus, without exerting any formal constraints over drivers, *Uber* is able to tailor its supply to fluctuations in demand”⁸⁷⁴.

In keeping with these claims, the overall takeaway here is twofold. Again, it is important to stress the fact that the opinion is not aimed at investigating working conditions, and distances itself from dealing with the (mis)classification issue,

⁸⁷¹ EU-OSHA (2015), *A review on the future of work: online labour exchanges, or ‘crowdsourcing’: implications for occupational safety and health*, p. 17.

⁸⁷² Employment Tribunal, *Mr. Y. Aslam, Mr. J. Farrar and Others v Uber*, Case Numbers: 2202551/2015 & Others, 28 October 2016. At the time of writing, the ruling is undergoing scrutiny by a higher court.

⁸⁷³ United States District Court, Northern District of California, *O’Connor et al. v. Uber Technologies, Inc., et al.*, Order Denying Cross-Motion for Summary Judgement, 11 March 2015; United States District Court, Northern District of California, *Cotter et al. v. Lyft Inc.*, Order Denying Cross-Motion for Summary Judgement, 11 March 2015. As to the case, it should be noted that it was “filed in northern California – a jurisdiction with both an expansive legal definition of employee¹² and potentially sympathetic judges and jurors”. See DUBAL V. B. (2017), *Winning the Battle, Losing the War?: Assessing the Impact of Misclassification Litigation on Workers in the Gig Economy in Wisconsin Law Review*, p. 743. See also *Berwick v. Uber Techs. Inc.*, 11-46739 EK (Cal. Mar. 10, 2015).

⁸⁷⁴ The Advocate couldn’t have been clearer describing the rating system: “*Uber* therefore exerts control, albeit indirect, over the quality of the services provided by drivers”. See also STANFORD J. (2017), *The resurgence of gig work: Historical and theoretical perspectives*, op. cit., p. 4. (arguing that “centralised control over its proprietary dispatch application, which drivers need to find customers, is the basis for its claim to this revenue – just as the merchant’s centralised capacity to connect home-made goods with final purchasers was the basis for its claim to a margin of total revenues under the putting-out system”).

denying that the intrusive control is “exercised in the context of a traditional employer-employee relationship”. Nevertheless the same arguments – used before a labour court – may prove the existence of a relation of subordination (“indirect control such as that exercised by *Uber*, based on financial incentives and decentralised passenger-led ratings, with a scale effect, makes it possible to manage in a way that is just as – if not more – effective than management based on formal orders given by an employer to his employees and direct control over the carrying out of such orders”)⁸⁷⁵. Interestingly enough, the ruling “points in the direction that *Uber* drivers would be considered ‘workers’ for the purposes of EU labour law, with all the connected benefits for drivers in terms of social and employment protection that this entails”⁸⁷⁶. This is why such comment is much more significant than the mere legal situation at hand: European Union’s highest court judgement in Case C-434/15 might lead authorities to better understand what is the reality of the work in the platform economy⁸⁷⁷.

3.4. Sectoral analysis: online crowdsourcing.

In short, these contractual schemes allow the engagement of “a large, distributed, global labor pool of remote workers” to whom tasks can be commissioned⁸⁷⁸, due to “an increasing erosion of corporate boundaries as well as the resulting closer linkage of internal and external business processes”⁸⁷⁹. As a matter of fact, organisations might obtain quality gains thanks to a “flexible, scalable and fast access to remote

⁸⁷⁵ Yet “[t]he above finding does not, however, mean that *Uber*’s drivers must necessarily be regarded as its employees. The company may very well provide its services through independent traders who act on its behalf as subcontractors” (no. 54).

⁸⁷⁶ See GARBEN S. (2017), *Protecting Workers in the Online Platform Economy: An overview of regulatory and policy developments in the EU*, op. cit., p. 86.

⁸⁷⁷ More recently, the AG Szpunar has reiterated this point in the Opinion in *Uber France SAS* C-320/16, confirming that “the *UberPop* service falls within the field of transport and, consequently, does not constitute an information society service within the meaning of the directive”. See <https://curia.europa.eu/jcms/upload/docs/application/pdf/2017-07/cp170072en.pdf>. There is a third case concerning *Uber*, C-371/17, pending at the CJEU. The application comes from the *Bundesgerichtshof* (Federal Supreme Court) Germany. No further information is available to date.

⁸⁷⁸ According to Wexler, the process can be divided into different main stages: the client (i) identifies a challenge or an opportunity, (ii) launches a call specifying instructions, rules and expectations, (iii) collects proposals from the crowd, (iv) selects the proposal deemed most suitable for the intended purpose, (iv) understands “how to best to use the loyalty of those drawn to a competition once it is over”. See WEXLER M. N. (2011), *Reconfiguring the sociology of the crowd: Exploring crowdsourcing*, op. cit., pp. 6-20.

⁸⁷⁹ DURWARD D., BLOHM I. and LEIMEISTER J. M. (2016), *Crowd work*, op. cit., p. 282.

employees, resources and skills”⁸⁸⁰. At the same time, the location- and time-independent distribution and the parcellisation of tasks allow firms benefiting from large reductions in the time needed to complete a project, thus significantly increasing productivity gains. At the outset, crowdworkers’ compensation is output- or commission-based, “paying them a fraction of net sales to the clients”⁸⁸¹.

Perhaps not surprisingly, to date, there cannot be mentioned tailored regulations governing these groups of workers. Being the perhaps most genuinely unprecedented fraction of this phenomenon, it has not been captured by the legislator yet. In the future, the online labour market for professional activities could be more sensitive to the intervention of the lawmaker – particularly in those areas where specific licensing and accreditation barriers set by professional bodies and associations apply. More in general, and in addition to those enumerated in the previous sections, one can list several concerns regarding remotely provided services including the need to safely use ergonomic office tools and display screens or taking a break during long shifts⁸⁸², in order to avoid postural disorders and stress. As is well known, prolonged use of laptops or smartphones or the fact that a worker has to work in unconformable, overcrowded or dangerous working environments, whether domestic or “shared” co-working spaces, may determine severe consequences⁸⁸³. Yet, the European Framework Agreement on Telework, signed by the peak social partners in July 2002, cannot be applied to these performances, in theory at least, as it has been designed “in the context of an employment contract/relationship” (Art. 2)⁸⁸⁴.

⁸⁸⁰ DURWARD D., BLOHM I. and LEIMEISTER J. M. (2016), *Crowd work*, op. cit., p. 282.

⁸⁸¹ See BUTSCHEK S., KAMPKÖTTER P. and SLIWKA D. (2017), *Paying Gig Workers*, Paper presented at the IZA Workshop: Labor Productivity and the Digital Economy, 30-31 October 2017 (designing an optimal compensation policy for gig workers).

⁸⁸² EC Directive 90/270/EEC refers, among others, to “computer systems on board a means of transport”, “portable systems [...] at a workstation, typewriters. In this case, the Directive states that *employers* (emphasis added) are obliged “to perform an analysis of workstations in order to evaluate the safety and health conditions to which they give rise for their workers, particularly as regards possible risks to eyesight, physical problems and problems of mental stress”. As a consequence, they are obliged to “take appropriate measures to remedy the risks found”. See also CHESLEY N. (2014), *Information and communication technology use, work intensification and employee strain and distress in Work, Employment & Society*, 13(4), pp. 485-514.

⁸⁸³ For a comprehensive analysis of direct and indirect effects on OSH of platform labour, see GARBEN S. (2017), *Protecting Workers in the Online Platform Economy: An overview of regulatory and policy developments in the EU*, op. cit., p. 24 ff.

⁸⁸⁴ See: <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=LEGISSUM:c10131&from=EN>.

Much the same goes for the Directive on Health and Safety in Fixed-Term and Temporary Employment (91/383/EEC)⁸⁸⁵.

A point of contention with respect to including platform workers under the scope of the aforementioned regulations is likely to revolve around the interpretation of the legal status of the worker, since these relationships might not qualify as either an employment contract or a contract that creates an employment relationship. Moreover, anti-discrimination law comes with a wider scope and the possibility to hold others than direct employers responsible⁸⁸⁶. In Spain, in the Netherlands and in the United Kingdom, collaborative workers need to register with the tax authorities/social security funds. Also, workers need to keep records regarding their earnings made through platforms and track their expenses. In France, the same registration is compulsory and expenses are deductible. In other countries, such as Germany and Italy, workers are not required to register when providing services through collaborative platforms⁸⁸⁷.

3.4.1. *Platforms as temporary work agencies, an “indirect” approach.*

The Parliamentary Resolution recommends to “examine how far the Directive on Temporary Agency Work (2008/104/EC) is applicable to specific online platforms”⁸⁸⁸. It is not clear whether the document refers to the whole collaborative ecosystem, as the expression “online platform” can be interpreted in different ways. The Parliament explains that “many intermediating online platforms [are] structurally similar to temporary work agencies (triangular contractual relationship between: temporary agency worker/platform worker; temporary work agency/online platform; user undertaking/client)”. Scholars have proposed an analogous intervention as regards workers in multilateral relationships, mostly focusing on knowledge-based

⁸⁸⁵ The directive ensures the same level of protection to fixed-term and agency workers as to other employees, moreover it imposes an adequate procedure of information and training as well as appropriate medical surveillance to protect workers’ safety and health. See <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:01991L0383-20070628>

⁸⁸⁶ CENTAMORE G. and RATTI L. (2017), *Oltre il dilemma qualificatorio: potenzialità e limiti del diritto antidiscriminatorio nella protezione del lavoratore on-demand*, paper presented at “Impresa, lavoro e non lavoro nell’economia digitale”, Brescia, 12-13 October 2017.

⁸⁸⁷ For an update on the Italian initiatives such as Act No. 81/2017 regulating ICT-based mobile work, see EUROFOUND (2017), *Italy: New rules to protect self-employed workers and regulate ICT-based mobile work*.

⁸⁸⁸ According to Eurofound, in 2016, temporary agency work accounted for 1.7% of all employment in Europe.

work exchanged via digital platform⁸⁸⁹. If it is undeniable, as rightly pointed out, that the relationship between players can be described as tripartite – and the role of the

⁸⁸⁹ A Discussion Draft of a Directive on Online Intermediary Platforms has been proposed by a European network of scholars and published in April 2016 taking the triangle-relation as the qualifying element to distinguish a platform. See BUSCH C., DANNEMANN G., SCHULTE-NÖLKE H., WIEWIÓROWSKA-DOMAGALSKA A. and ZOLL F. (2016), *Discussion Draft of a Directive on Online Intermediary Platforms* in *Journal of European Consumer and Market Law*, 5(4), p. 164-169. The text of the Discussion Draft is available at: <https://goo.gl/Tsxke9>. For a similar proposal, see RATTI L. (2016), *Precarious Digital Work and the Role of Online Platforms – The Inefficacy of Traditional Tests and the Need for an Indirect Approach*, paper presented at the ReMarkLab Conference, Stockholm, 19-20 May 2016 (arguing that two schemes can be used to describe the triangular relationship: “platform facilitators” and “temporary work agencies”). See also KINGSLEY S. C., GRAY M. L. and SURI S. (2014), *Monopsony and the crowd: Labor for lemons in Internet, Politics, & Policy 2014 Conference*, Oxford, UK, pp. 18-19. According to Kezuka, the online freelancing platform *Upwork* represents “a prototype of a platform that competes with the traditional staffing agency (or direct employment) model by matching individuals with contingent or freelance projects”. See KEZUKA K. (2017), *Crowdwork and the Law in Japan* in WAAS B., LIEBMAN W. B., LYUBARSKY A. and KEZUKA K. (Eds.), *Crowdwork—A Comparative Law Perspective*, Frankfurt, p. 79. See also FAIOLI M. (2018), *Gig Economy and Market Design. Why to Regulate the Market of Jobs carried out through Digital Platforms*, available at SSRN: available at SSRN: <https://ssrn.com/abstract=3095403> (arguing that “working activities performed for gig economy companies delivering goods (e.g. *Deliveroo*, *Foodora*, *Just Eat*, etc.) or providing services to individuals and households (e.g. *Vicker*, *Task Rabbit*, etc.) – fall under temporary agency work as per the Italian Laws nos. 81 dated 15 June 2015 and 276 dated 10 September 2003”). In order to ensure the protection of crowdworkers and to improve the quality of crowdwork, Temporary Agency Work Directive 2008/104/ EC and its transposition have been used as a model for the creation of a special legislative act dealing with platform labour: “a core provision might thus be – as in the case of artwork (Art. 5 of Directive 2008/104/EC) – a principle of equal treatment with a corporate customers’ existing workforce, to ensure that jobs are not crowdsourced just for the sake of contravening minimum wage and other employment provisions. The basic working and employment conditions of crowdworkers shall therefore be for the duration of working on tasks or – if the general availability is part of the business model like in the case of *Uber* in the United Kingdom – at least those that would apply if they had been recruited directly by the crowdsourcer to occupy the same job. This would also establish the equal treatment of temporary agency workers and avoid the circumvention of the laws protecting them by switching over to crowdsourcing. It should be noted, however, that this equal-treatment-approach very likely only works in cases where the crowdworker is actually working for a business that would otherwise employ an employee and that actually crowdsourced labor”. See PRASSL J. and RISAK M. (2017), *The Legal Protection of Crowdworkers: Four Avenues for Workers’ Rights in the Virtual Realm*, op. cit., pp. 290-291. At the same time, it should be noted that many commentators have assigned the responsibility for the “expansion and segmentation of contingent labor” to temporary staffing agencies. See VAN DOORN N. (2017), *Platform labor: on the gendered and racialized exploitation of low-income service work in the ‘on-demand’ economy* in *Information*, op. cit., p. 901.

platform can be likened to that played by a “broker”⁸⁹⁰ – the fully-fledged or automatic application of the European Directive raises more problems⁸⁹¹.

As a matter of fact, it has to be noted that the power to control, supervise and discipline the individuals’ performance execution is sometimes shared between the final user (private citizens, families or firms) and the platforms matching professional or amateur freelancers with clients. This argument is not convincing as, in the service sector, workers normally execute their performance to the benefit of a final user, irrespective of the differing degrees of (operational) involvement of the latter⁸⁹². However, it is worth noting that this legal template postulates the existence of two different contracts: a commercial one binding the agency and the final user and an employment contract between the agency and the worker⁸⁹³. Having said this, it should be recalled that the concept of “temporary agency worker” can be “applie[d] not only to workers who have concluded a contract of employment with a temporary-work agency, but also to those who have an ‘employment relationship’ with such an undertaking”⁸⁹⁴. The abovementioned employment relationship is characterised by the fact that a person performs services for, and under the direction of, another person for a certain period of time in exchange for remuneration. In particular, the CJEU has somewhat enlarged the scope of the Directive by establishing that, while member states have the competence to define the notion of “worker” under national law, the same cannot be said of that concept for the purposes of the Directive that would be otherwise undermined. Building on this interpretation, other scholars have proposed the application of the temporary work agency scheme also to work on demand, when the requester (i.e. the client) is a

⁸⁹⁰ KENNEDY E. J. (2016), *Employed by an Algorithm: Labor Rights in the On-Demand Economy*, op. cit., p. 994 (arguing that “[t]hese companies deliver to their customers not technology, but cheapened labor, making them closer to *Manpower* than to *Microsoft*”).

⁸⁹¹ An opinion issued by the Italian Ministry of Labour on March 27, 2013 clarifies that a digital platform intermediating labour does not require authorisation pursuant to Article 4, legislative decree No. 276/2003 due to the commercial nature of contractual arrangements. See D’ASCENZO A. and GROSSI T. (2017), *Piattaforme digitali e legittimità nell’attività di intermediazione tra domanda ed offerta di lavoro: il caso JustKnock* in *Bollettino Adapt*. See also DONINI A. (2015), *Mercato del lavoro sul web: regole e opportunità* in *Dir. rel. ind.*, 2, p. 453 ff.

⁸⁹² See also ALCHIAN A. A. and DEMSETZ H. (1972), *Production, Information Costs, and Economic Organization*, op. cit., pp. 777-795.

⁸⁹³ See FAIOLI M. (2017), *Jobs “App”, Gig-Economy e sindacato* in *Riv. giur. lav.*, 2, p. 297 (presenting the “isolated” case of *Vicker*, an Italian platform serving as a temp agency for self-employed workers).

⁸⁹⁴ *Betriebsrat de Ruhrländklinik gGmbH v Ruhrländklinik gGmbH* (C-216/15) <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:62015CJ0216&from=EN>

commercial business⁸⁹⁵. Although this working hypothesis does not reflect current market conditions, it should be taken into consideration despite its difficult and controversial feasibility⁸⁹⁶. However, this solution might not “resolve the questions as to who the contractual partners are or under what contract the work is performed. Furthermore, it does not facilitate enforcement of the rights of platform workers”⁸⁹⁷.

3.5. Sectoral analysis: work on demand via platform (household services).

To begin with, it is worth emphasising that the vast majority of tasks exchanged through platform or app has nothing “disruptive” in their concrete execution (one needs to think only of, for example, assembling furniture, cleaning an apartment or caring for the elders)⁸⁹⁸. Therefore, platforms might represent an “outlet for pre-existing abilities” and tasks which are carried out locally, with the service purchaser and provider based in the same physical area. Much of the work in the sectors of household chores (think of nannies, cleaners and caregivers, consisting mostly of immigrant women) has changed little over decades⁸⁹⁹. Paradoxically, ITC-enabled arrangements are suspiciously reminiscent of what the labour market has

⁸⁹⁵ It is still controversial how to handle instantaneous, discontinuous and occasional performances, *de jure condendo* one can imagine the meshing of several employers together through the joint employer doctrines (i.e. accounts across different requesters could be pooled). In this case, the platform-agency and the business-final user should be jointly and severally liable for rights and obligations arising towards the worker.

⁸⁹⁶ For an updated comparative analysis of the regulation of temporary agency work at a supranational European level, see COUNTOURIS N., DEAKIN S., FREEDLAND M., KOUKIADAKI A. and PRASSL J. (2016), *Report on temporary employment agencies and temporary agency work: A comparative analysis of the law on temporary work agencies and the social and economic implications of temporary work in 13 European countries*, Geneva, Switzerland (clarifying how “temporary agency work can constitute a potential stepping stone for so-called labour market entrants, as well as [...] a ‘trap’ in the sense of leading to an overall downgrading of working conditions”). See also COUNTOURIS N. and HORTON R. (2009), *The Temporary Agency Work Directive: Another broken promise?* in *Industrial Law Journal*, 38(3), pp. 329-338.

⁸⁹⁷ RISAK M. (2018), *Fair Working Conditions for Platform Workers: Possible Regulatory Approaches at the EU level*, Berlin, p. 10 (concluding that “other solutions need to be found”).

⁸⁹⁸ A dissonance between narratives and reality is worth mentioning. And, while cell phone apps and online markets for work may be new, the roles of driver, cleaner, and errand runner are well-established. These tasks are by no means new jobs, even if these jobs are enabled, enhanced, or made more efficient by technology. See CHERRY M. A. (2016), *Beyond Misclassification: The Digital Transformation of Work*, op. cit., p. 587.

⁸⁹⁹ FARVAQUE N. (2015), *Thematic review on personal and household services*, EEPO, Brussels, p. 9 (mapping the variety of employment models). See also Commission Staff Working Document on exploiting the employment potential of the personal and household services, SWD (2012) 95 final.

experimented in bygone times⁹⁰⁰. Consequently, on-demand household services (as defined in the first paragraph of this research) can be simply considered as “twenty-first century casual work rebranded” in a boundaryless workplace⁹⁰¹.

Nonetheless, there is a positive side to this. Platforms have the potential to reduce the informal sector by offering formal schemes for low-productivity jobs in sectors particularly prone to undeclared work (often been paid in cash, off the books) such as domestic housework services, personal services, private security, industrial cleaning, agriculture and hotel or food industry. Legal implications of this model should not be neglected since the combination between the displacement of work in many sectors of the economy and the increase in the need for home-based care and services due to demographic reasons could make jobs such as home help “the single largest occupation in the economy by 2030”⁹⁰². In the following subparagraph, without analysing all categories in full, an attempt will be made to enumerate a series of legal schemes governing casual work that can be used to regulate the collaborative economy in the (low-wage) service sector.

3.5.1. *On-call work, voucher-based or zero-hours contracts?*

Despite the growth of interest in this topic, scholars are still struggling to decipher the wide range of legal schemes regulating casual working arrangements. Alternative templates should be seen as part of the broader trend of “over-flexibilisation” of the labour market to the disadvantage of workers occurring since

⁹⁰⁰ See also TOMASSETTI J. (2016), *Does Uber redefine the firm? The postindustrial corporation and advanced information technology*, op. cit., p. 31 (explaining how, “despite their seductiveness, the self-definition as a mere tech firm is correct if referred to the ‘mechanics’ of the operation rather than on the substance”).

⁹⁰¹ At the same time, studies have revealed that, in certain sectors such as home repair, workers may earn on average more than they would have had otherwise. For instance, Belgian workers in the home repair sector earn on average €12.70 per hour, whereas workers in the same sector recruited via *Listminut* earn on average €17.50 per hour. See DE GROEN W. P. and MASELLI I. (2016), *The Impact of the Collaborative Economy on the Labour Market*, op. cit., p. 15.

⁹⁰² POO A. (2017), *Out from the shadows: domestic workers speak in the United States* in GAROFALO GEYMONAT G., MARCHETTI S. and KYRITSIS P. (Eds.), *Domestic workers speak a global fight for rights and recognition*, London, p. 21. According to many commentators, “the existing evidence base suggests growth in these services has been exponential within and across countries”. For a comprehensive analysis of how on-demand domestic work platforms operate in different developing country contexts, and the experiences of domestic workers and services purchasers who have engaged with them, see HUNT A. and MACHINGURA F. (2016), *A good gig? The rise of on-demand domestic work*, Overseas Development Institute Working Paper No. 7, p. 20 (suggesting that “the engagement of domestic workers as independent contractors could undo progress in the formalisation of domestic work by diminishing legal rights and protections where they currently exist”).

the onset of the economic and financial crisis in 2008, or maybe since well before that event. According to Eurofound, while “contribut[ing] to labour market innovation”, most of these new forms carry a danger “if the result is a widespread acceptance of fragmented jobs that are inherently linked to low income and limited social protection”⁹⁰³. By investigating the heterogeneous contracts with a non-specified number of hours, this brief paragraph will try to present work on demand as a *species* of the *genus* of casual work⁹⁰⁴. These simplified work arrangements are regulated in different ways throughout Europe.

That being said, many platform-mediated forms of work can be labelled under the umbrella definition of app-driven casual arrangements, a subgroup of non-standard forms of work where, in the words of the EUROFOUND, “the employment is not stable and continuous and the employer is not obliged to regularly provide the worker with work, but has the flexibility of calling them in on demand”⁹⁰⁵. As described in the previous section, the precarity that originates from these arrangements is manifold. First, the very low guaranteed hours mean that the worker can hardly earn sufficient income under the contract. Second, while the intermittent (and unpredictable) nature of the hours provides a flexible tool to the employer/client⁹⁰⁶, workers suffer from insecurity and instability. Since the employer only agrees to pay for work completed, and is not bound not to make work available in the future, workers may have to wait for the next work order to materialise (what is called “spot labour market”), and are therefore prevented from organising their schedule ahead. Third, the fact that the employer can “adjust” the hours to the contractual minimum, without any constrain, closely resembles “a situation where the worker can be dismissed without notice”⁹⁰⁷.

⁹⁰³ EUROFOUND (2015), *New forms of employment*, op. cit., p. 2.

⁹⁰⁴ Eurostat shows that the percentage of the workforce in part-time employment within the EU-28 has grown from 14.9 per cent in 2002 to 18.9 per cent in 2016.

⁹⁰⁵ The pattern is the same as for so-called “zero-hours contracts” that imply no minimum number of working hours. It has to be admitted that the same report classifies a portion of digital labour platforms under the label of ICT-enabled work. See EUROFOUND (2015), *New forms of employment*, op. cit., p. 46. For a broader picture see, for instance, BROUGHTON A., GREEN M., RICKARD C., SWIFT S., EICHHORST W., TOBSCH V. and TROS F. (2016), *Precarious Employment in Europe: Patterns, Trends and Policy Strategies* in *Studies for the European Parliament’s Committee on Employment and Social Affairs* (confirming that so-called atypical contracts bear a higher risk of precariousness).

⁹⁰⁶ EICHHORST W. and MARX P. (2015), *Introduction: an occupational perspective on non-standard employment* in ID. (Eds.), *Non-standard employment in post-industrial labour markets: an occupational perspective*, Cheltenham, UK and Northampton, MA, p. 5.

⁹⁰⁷ GARBEN S., KILPATRICK C. and MUIR E. (2017), *Towards a European Pillar of Social Rights: upgrading the EU social acquis*, op. cit., pp. 4-5.

The combination of these vulnerabilities makes it “exceedingly difficult for workers to enforce the few rights that do apply to them, as any challenge or inconvenience to the employer may lead to *ad hoc* termination”⁹⁰⁸.

The common feature is the fact that in this arrangement employers can determine “location and allocation of working time” and the scope of the work to be done. In many cases, the performance is characterised by “continuous employment relationship without continuous work”⁹⁰⁹. Another shared trait is that employers, who are supposed to bear the economic risk, end up shifting business risk onto workers⁹¹⁰. According to legal scholarship, the main difference between being a platform worker and a zero-hours contract worker is that in principle the former has a greater right to refuse work offered at such short notice⁹¹¹. In particular, taking into account the final users and the industries where these arrangements are widespread, a parallel may be drawn with recent contractual forms regulating on-call work, namely “vouchers”. Despite the widespread factual complexity, work in the on-demand economy can be characterised as a set of digitally intermediated voucher-based contracts or zero-hours contracts. Far from being monolithic, this legal instrument represents rather an “organising principle of precarious work”, kind of a wide and various arrangement in which workers are not guaranteed a fixed (or even

⁹⁰⁸ GARBEN S., KILPATRICK C. and MUIR E. (2017), *Towards a European Pillar of Social Rights: upgrading the EU social acquis*, op. cit., pp. 4-5.

⁹⁰⁹ As explained in VALENDUC G. and VENDRAMIN P. (2016), *Work in the digital economy: sorting the old from the new*, op. cit., p. 34. Moreover, according to PRASSL and RISAK, “the tasks are often very short in duration – with the resulting relationships potentially characterised as a series of temporary employment relationships, which shift the risk of business downturns from crowdsourcers and platforms to individual workers, not unlike on-call work or zero-hours arrangements”. PRASSL J. and RISAK M. (2016), *Uber, Taskrabbit, and Co.: Platforms as Employers – Rethinking the Legal Analysis of Crowdwork*, op. cit., p. 632.

⁹¹⁰ This process has been characterised as the “de-mutualisation of personal work relations”, i.e. “a process of transforming the individual worker into the sole bearer of risks formerly mutualized as between workers and employing enterprises and, in a different sense, between workers themselves”, as explained in FREEDLAND M. (2013), *Burying Caesar: what was the standard employment contract?*, op. cit., p. 93.

⁹¹¹ HUWS U., SPENCER N. H. and JOYCE S. (2016), *Crowd Work in Europe. Preliminary Results from a Survey in the UK, Sweden, Germany, Austria and The Netherlands*, op. cit., p. 15. See also FREEDLAND M. R. and PRASSL J. (2017), *Employees, Workers, and the ‘Sharing Economy’: Changing Practices and Changing Concepts in the United Kingdom*, University of Oxford, Legal Research Paper Series, No. 19 (arguing that “in most contexts, on-demand economy work can be characterized as a set of digitally intermediated zero-hours contracts”).

any) number of hours in a given period and, at least on paper, in which they are not obliged to accept any work offers made by their employer/principal/client⁹¹².

By separately investigating a set of ultra-atypical forms of work, the following analysis will seek to provide an account of the variations underpinning platform-coordinated arrangements across Europe. Member states have conflicting regulations, the Dutch model, introduced by the Flexibility and Security Act (FSA) in 1999, and the British scheme⁹¹³, being on the two opposite ends of a spectrum. In The Netherlands, no minimum hours are assigned and workers are paid only if actually worked. A minimum wage is guaranteed for on-call workers employed for less than 15 hours per week. Nevertheless, after three months, the worker must be guaranteed a minimum number of working hours on the basis of the average hours worked in the previous quarter; social partners may adapt, and in some cases alter, certain modules for a specific sector in a collective agreement. The aim of the law was to discourage the use of the on-call contract as a sham for what should be a SER. According to commentators, the Dutch experience was successful.

Conversely, in the UK, ZHC workers are not entitled to any pay if the employer cannot provide them with work. In this system, workers are not paid for their inactive time away from the workplace, while they receive remuneration for the time spent working or waiting at the employer's premises. ZHC are considered as employment contracts only when: (i) an obligation to provide work personally is applied, (ii) employer and employee share a "mutuality of obligation"⁹¹⁴, (iii) the worker agrees to be under the "sufficient" control of the employer, either expressly or implicitly⁹¹⁵. Nevertheless, it is very difficult "for an individual to acquire sufficient continuity of employment to qualify for significant employment rights,

⁹¹² ADAMS A., FREEDLAND M. R. and PRASSL J. (2015), *The 'Zero-Hours Contract': Regulating Casual Work, or Legitimizing Precarity?* in *Giorn. dir. lav. rel. ind.*, 148, pp. 529-553.

⁹¹³ ADAMS Z. and DEAKIN S. (2014), *Re-regulating zero hours contracts*. Institute for Employment Rights, Liverpool. See also LEE G. (2017, August 7), *The number of people on zero hours contracts has quadrupled since records began*, retrieved from <https://goo.gl/3cb2Pm>.

⁹¹⁴ "[T]he parties [agree] to, respectively, provide work and to accept it in an abstractly defined future" according to COUNTOURIS N. (2012), *The legal determinants of precariousness in personal work relations: A European perspective*, op. cit., pp. 28-29. For an analysis on the role of contractual interpretation and the application of tests, see DEAKIN S. (2004), *Interpreting employment contracts: judges, employers, workers* in *Int'l J. Comp. Lab. L. & Indus. Rel.*, 20(2), pp. 203-212.

⁹¹⁵ For a complete review of various tests, see BURCHELL B., DEAKIN S. and HONEY S. (1999), *The employment status of individuals in non-standard employment*, Department of Trade and Industry, London, p. 5 ff. and p. 11 for other factors taken into account by courts.

including unfair dismissal and redundancy protection which require two years of service”⁹¹⁶.

Dissimilarly, the Irish model offers a certain degree of protection to workers, but such approach is not very widespread⁹¹⁷. If a worker is not called at all in a given week, she is entitled to a compensation for the availability to be engaged amounting to a fraction of the contract hours (25% of the available hours, with a cap). In 2015, a specific statutory definition was introduced in order to ban “exclusivity clauses”, one of the most exploitative features of this contractual arrangement: contractors were prevented from working for other companies, even without a guaranteed number of hours. Just like the platform-mediated arrangements, ZHCs have no specific legal status. Remarkably, at least the national minimum wage has to be paid for hours worked. That notwithstanding, these schemes determine a great deal of vulnerability and uncertainty, since all benefits are based on actual earnings. At the same time, national insurance payments decrease if the amount of hours is low, in fact, employers are expected to contribute only after exceeding a relatively high threshold.

In France, a voucher-based scheme (the so-called “*chèque emploi service universel*”) has existed since 1994, then modified in 2006 as for domestic work childcare. A very similar instrument was available in Italy until the beginning of 2017: each “voucher” – easily purchasable – had a nominal value of €10 (7.50 for the worker and the remaining part allocated to the national system of social security and for health and safety and administrative purposes). The government had firstly liberalised their use in 2012 but, due to a worrisome increase in their usage, it had to set up limitations (400 working days for each employee over three years) and the duty to notify the local directorates of the Ministry of Labour via text message the precise time period of usage. Under the concrete threat of an abrogative referendum, the government

⁹¹⁶ Understandably, it is nearly impossible to predict earnings in advance: the extreme variability in incomes exacerbates problems in meeting the aforementioned requirements. DEAKIN S. (2016), *New forms of employment: Implications for EU-law – The law as it stands* in WAAS B. (Ed.), *New forms of employment in Europe, Bulletin of comparative labour relations*, 94, Alphen aan den Rijn, The Netherlands, p. 49. Moreover, “[m]any working in the gig economy are ‘employees’ for the duration of their hire on a particular day – but not in weeks when they take time off, go on holiday or aren’t offered any work. As a result they often don’t accrue sufficient continuous service for entitlement to rights such as unfair dismissal or statutory maternity pay”, see NOVITZ T., BOGG A. L., BALES K., FORD M. and RUSSEL R. (2018, February 27), *Why the idea of ‘good work’ in a gig economy remains a distant ideal*, retrieved from <https://goo.gl/6ZY3Sh>.

⁹¹⁷ For a complete overview, see O’SULLIVAN M., TURNER T., LAVELLE J., MACMAHON J., MURPHY C., RYAN L., GUNNIGLE P. and O’BRIEN M. (2017), *The role of the state in shaping zero hours work in an atypical liberal market economy*, op. cit., p. 62 ff. (arguing that “zero hours work is operationalised through an alternative type of contract – an ‘If and When’ contract”).

repealed that provision. A new form (named “*PrestO*”, i.e. occasional jobs⁹¹⁸) has recently been introduced limiting the scope of application to certain clients and sectors⁹¹⁹. The Swedish homologous contract can be permanent or fixed term, with no guaranteed income. Similarly to the other national experiences, the employer is not obliged to pay for the inactive periods. Access to training and other benefits are regulated by each individual contract.

In Belgium, a similar template can be found under the label of “intermittent work” (so-called “*travail occasionnel*”). Designed in 2007 and revitalised in 2013, such short-term contracts of two consecutive days can be signed in order to deal with peak periods – with a cap of 50 days per year per single worker. An employer may take flexible measures for up to 100 days per year, contributing with a lump sum of €7.50 per hour in social security (up to €45 per day). The workers enjoy full social security rights as well as benefits afforded to standard employees in the same sector, and so have the same working conditions⁹²⁰. A new scheme devoted to domestic services (*titre-services*) has been launched at the beginning of 2004. The Belgian legislator has somehow merged voucher-based work and temporary-work agency into a hybrid triangular formula tying a worker, an employer and a final user. Service voucher organisations have to be recognised by the Ministry of Labour in order to employ workers on a permanent or fixed-term, full-time or part-time basis. A quota of at least 13 hours with a unit price of €9 per week has to be mandatorily offered after the

⁹¹⁸ Recently, a set of rules encompassing the so-called “family booklet” and the casual work contract was introduced. Act 24 April 2017, No. 50, transformed into Act 21 June 2017, No. 96. “The family booklet covers casual working activities related to household chores, elderly people or children care, and private teaching. Casual work contracts can be used by employers (professionals, self-employed workers, entrepreneurs, associations, and public organisations) that are staffed with over five permanent employees, do not operate in the construction sector, and are not involved in the execution of public procurement contracts. The hourly wage amounts to EUR 9 and can never be lower than EUR 36 for a full working day. These sums include social security contributions”. See FAIOLI M. (2018), *Gig Economy and Market Design. Why to Regulate the Market of Jobs carried out through Digital Platforms*, available at SSRN: <https://ssrn.com/abstract=3095403>.

⁹¹⁹ According to Decreto Legislativo, 15 June 2015, No. 81, Arts. 13-18, two types of *contratto di lavoro intermittente* exist. “Under the first type, the worker is not bound to accept calls, and the employer, to offer a minimum amount of work. In the second type, the worker undertakes to accept the calls. The employer still does not guarantee a minimum amount of hours but has to pay a monthly ‘availability indemnity’ for periods in which the worker is not called in. In case of a call, a minimum notice of one working day is required”. See DE STEFANO V. (2016), *Casual Work beyond Casual Work in the EU: The Underground Casualisation of the European Workforce—And What to Do about it*, op. cit., p. 439.

⁹²⁰ See also EUROFOUND (2017), *Non-standard forms of employment: Recent trends and future prospects*, p. 30 (explaining how this contractual form has been subsidised by the government and benefits from the standard labour regulations for the sector).

three initial months, and the contract has to be converted into a permanent one. The voucher organisation (public institutions, commercial businesses, temporary work agencies, private non-profit organisation) employs voucher workers for a maximum 500 hours per calendar year per client.

In Germany, “on-call worker” regulations curb the incidence of ZHC-style arrangements. It can be argued that the so-called “mini-jobs” serve the same purpose, by “provid[ing] work incentives for individuals with supposedly low earning potential”⁹²¹. Introduced as a contractual form aimed at supporting marginal employment and formalising undeclared work, they are part-time forms of employment mainly used for domestic household workers whose monthly salary cannot exceed €450. Although employers belonging to all German industries are allowed to offer these contracts, the form is commonly used in sectors such as catering and retail services. “Mini-jobbers” are entitled to sick pay and annual leave and exempted from income tax payments, while employers’ social insurance contributions are considerably below those for equivalent regular jobs (the rate is around 14%). The number of daily and weekly working hours has to be specified. If not agreed otherwise, at least ten working hours per week or three hours per shift must be paid, regardless the number of hours worked⁹²². Their classification is alternative to the employer-employee relationship, as long as the service provision does not exceed four working days per week – in most cases, falling within the scope of marginal part-time employment. A minimum wage is set, as well as benefits such as holiday allowances and paid sick leave are granted.

In conclusion, a final parallel may be drawn: such schemes, representing different policy approaches, have been acclaimed for their potential role in preventing a sharp increase in unemployment by encouraging flexible hiring policies, just as happened with gig work. Whether the “inclusive” aim has been reached or whether these tools may just be a rebranding for exploiting insecure labour, is hard to say⁹²³.

⁹²¹ On this point, see DEAKIN S. (2016), *New forms of employment: Implications for EU-law – The law as it stands*, op. cit., p. 52.

⁹²² Moreover, in the Netherlands, where zero hours clauses can only be concluded for the first 6 months of employment with the same employer, a special status for workers in the housework service sector has been introduced.

⁹²³ After a first phase of implementation, it has to be admitted that splitting regular jobs into “mini” or “zero-hours” ones turned out to be a weak response to the on-going crisis. See also DEAKIN S. (2016), *New forms of employment: Implications for EU-law – The law as it stands*, op. cit., p. 54 (advocating “a minimum guaranteed quantum of work or, failing that, an income guarantee” and recommending an equivalent treatment for different employment forms for tax purposes).

SAVING GIGS FROM THEMSELVES: TOWARDS “SHARED SOCIAL RESPONSIBILITY” FOR LABOUR PLATFORMS

TABLE OF CONTENTS: 1. A new chapter in an old saga? Issues at stake and potential outcomes from litigation cases. – 1.1. The legal status of platform workers: gate or game? – 2. The “task” ahead: plugging the gaps between organisational choices and legal schemes. Concluding remarks and policy recommendation.

1. A new chapter in an old saga. Issues at stake and potential outcomes from litigation cases.

Since the dawn of the platform economy, scholars and lawmakers have been striving to find a viable solution to numerous complex challenges that this new organisational model poses to the legal system. In brief, it has been claimed that the current employment law framework is not aptly suited to govern new working patterns and should be revised, either on legislative or interpretative level. Against this background, the vast majority of labour lawyers have concentrated their research on the issue of platform workers’ classification into either of the existing categories of employees or self-employed workers⁹²⁴. The discussion on setting employment law’s coverage is by no means new to scholars: in many cases, as discussed in Part 2, the delimitation of the “border areas” of the contract of service and contract for service has regularly posed practical, sometimes insurmountable, difficulties. Both in developing and industrialised countries, “the status of the crowd is, perhaps, the thorniest issue of all”⁹²⁵. It affects individuals but also employers seeking to implement new working practices. Accordingly, this paragraph will investigate the issues at stake in pending and potential lawsuits and their possible outcomes, by largely looking into the vexed question of worker classification.

Hence, it could be argued that the platform-based organisation of labour has definitively ossified an old policy and judicial concern. At the same time, it is true that a whole different level of exposure has recently been reached. There is no denying that digital instruments have added new dimensions to a set of stratified issues, and it would be erroneous to consider this entire phenomenon as a blinding *déjà vu*. New answers are therefore needed.

⁹²⁴ See CHERRY M. A. (2016), *Beyond Misclassification: The Digital Transformation of Work*, op. cit., p. 579 ff. (providing a “temporal snapshot” of current on-demand worker litigation in the United States).

⁹²⁵ HUWS U. (2016), *New forms of platform employment* in FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS), *The Digital Economy and the Single Market*, Brussels, p. 65.

Against this backdrop, Europe can be considered a relatively uncharted territory, in particular when it comes to litigation cases in the field of labour law and social protection regulations filed by platform workers⁹²⁶. A number of different dynamics may have led to this situation. First and foremost, despite the current ascent phase in the development of the collaborative economy, the presence of these digital infrastructures is still relatively limited. Regrettably, many workers – especially those in a vulnerable or isolated situation – could be unaware of the lack of compliance with employee-protective laws that could be invoked in their favour and, additionally, they are not really in a position to join forces due to the competitive nature of their relations (also with one another) or to the subjection to the employer's volatile will⁹²⁷. Moreover, it has to be noted that the concrete performances rendered in the context of crowdsourcing and work on demand via platform are collocated in a problematic area of business where informality (implying recruitment by word of mouth and cash payments), low wages and abuses are becoming increasingly frequent, which is a further complication. However, this does not mean that worker classification is not an issue of genuine relevance.

Whilst dealing with antitrust issues, for the time being, the ECJ ruling in C-434/15 is one of the most remarkable contributions one may refer to when analysing the judicial interventions impacting on the collaborative economy at the European level.

⁹²⁶ More than anything, at the moment, platforms are facing a “continental-wide” legal battle in the field of EU competition law.

⁹²⁷ Collective action is beyond the scope of this research. Many platforms classify workers as self-employed: in various jurisdictions this classification precludes workers from forming unions and engaging in collective bargaining. However, it is worth noting that, as explained by Berins Collier et al., labour groups have primarily taken three different approaches: (i) fighting in courts for reclassification of drivers as employees, (ii) tolerating independent contractor status but struggling for collective bargaining rights, and (iii) accepting independent contractor status but attempting to form workers' associations. These three paths correspond to three venues, namely courts, legislatures, and private settings, which need to be further explored. See BERINS COLLIER R., DUBAL V. B. and CARTER C. (2017), *Labor Platforms and Gig Work: The Failure to Regulate*, op. cit., p. 15 ff. More recently, protests and demonstrations over working conditions by *Deliveroo* and *Foodora* workers in the U.K., Italy and Belgium generated considerable publicity. Digital technologies may assist and complement direct action; they potentially also serve as independent sites from which workers can launch collective strategies to attempt to improve working conditions. Several spontaneous initiatives have been developed with significant results at a national level, for instance in Germany. First, these efforts represent a way to reduce information asymmetries, compare clients, join forces and, ultimately, increase bargaining power and support litigation and class actions. Unions that include platform workers (and, more in general, non-standard workers) could develop and become effective advocates for decent work and even a tool for social emancipation. See, generally, See SILBERMAN M. S. and IRANI L. (2016), *Operating an Employer Reputation System: Lessons from Turkoption, 2008-2015*, op. cit., p. 505.

In the United Kingdom, grassroots organisations such as IGWB (which stands for “Independent Workers Union of Great Britain”) are promoting lawsuits claiming the improper classification of gig-workers and achieving remarkable victories⁹²⁸. The same is with a landmark case before the Employment Tribunal that stated that drivers working for *Uber* in London have to be considered workers and not self-employed within the meaning of the Employment Rights Act⁹²⁹. However, despite these initial encouraging results, there is still a great deal of difficult ground to cover⁹³⁰.

Moreover, literature has nonetheless casted doubt on the potential of these very preliminary decisions. In particular, the first caveat is not a legal, but a more substantial one. Besides uncertainty, these lawsuits require hefty investments in time and money, thus disheartening any audacious initiative. As a consequence, they cannot be considered the only tactic aimed at restoring workers’ rights unilaterally denied. The second warning is that every litigation is based on a fact-intensive legal inquiry, therefore the solution depends on the concrete situation and cannot be used but between the parties. What applies to one situation does not necessarily have any implications for those workers working for another platform with a very similar business model. As a consequence, the relevant findings cannot be comprehensively applied to other cases, although it could be said that consistent case law may impose a particular interpretative guidance on this issue. Understandably, this situation implies a great deal of uncertainty, especially in borderline cases.

The case *Aaslam Y. & Farrar J. against Uber* is insightful in this regard. According to PRASSL, though it was called a major victory determining a profound advance of employment rights into the realm of the platform economy, the decision *only* concerns unmeasured work⁹³¹. In fact, the identification of the intermediate status would let drivers avail the benefit of the Working Time Regulations (1998) and

⁹²⁸ *First gig-economy company to admit to unlawfully classifying its couriers as independent contractors* (2017, May 12), retrieved from <https://goo.gl/A8VFDk>; *NHS blood service admits couriers are “workers”* (2017, June 30), retrieved from <https://goo.gl/g9yGDZ>.

⁹²⁹ Employment Tribunal, *Mr Y Aslam, Mr J Farrar and Others v Uber*, Case Numbers: 2202551/2015 & Others, 28 October 2016.

⁹³⁰ Moreover – at least in the U.S.A. context – platforms tend to settle to avoid the burden of a definite ruling about whether platform workers are employees or independent contractors.

⁹³¹ Although the Tribunal judgment only applies to the two drivers who brought the case, the doctrine of precedent in common law may reinforce this outcome. Accordingly, working time is to be calculated in accordance with WTR and is to be reckoned in accordance with the National Minimum Wage Regulations.

subsequent amendments⁹³². As a result, app-mediated workers may claim rights such as a maximum weekly limit on workers' of 48 hours, rest time, paid holidays, right to breaks.

In France⁹³³, a judgement of the *Conseil des Proudhommes de Paris* on December 20, 2016 has qualified the relation between a private-hire driver ("*voiture de transport avec chauffeur*") and a digital platform (*Le Cab*⁹³⁴) as that of an employment contract in the light of the exclusivity clause which prevented the driver from using other platforms or to serve a customer on his own⁹³⁵. In particular, "*les contraintes excessives qui lui étaient imposées*" reduce the autonomy commonly enjoyed by a contractor thus leading to a potential reclassification⁹³⁶. The judgement gives rise to unnecessary ambiguity because it could be interpreted in two opposing ways. In particular, what if a platform exercises substantial control power but does not impose an exclusivity clause? For the sake of completeness, the tribunal asserted that "the status of self-employed worker has been chosen by the company in order to 'escape' the constraints of the Labour Code while imposing obligations that can be considered proper of an employer-employee relationship"⁹³⁷.

⁹³² Employment Rights Act 1996, s 230(3) (b), the Working Time Regulations 1998, reg 36 (1) and the National Minimum Wage Act, s 54(3). The Working Time Regulations 1998, reg 2 (1). In case of independent contractors, WTR do not operate and its application is entirely left to the parties to negotiate or to be unilaterally imposed by the company. For a comparative analysis, see GRANDI B. (2013), *Fatti, categorie e diritti nella definizione del lavoro dipendente tra common law e civil law*, Torino.

⁹³³ The scope of a new legal framework should be broad enough to cope with issues such as protection of fair competition, clients and workers. A first step in this direction has been taken by the Law Macron in France, which has reinforced the information obligations between the platforms and the clients. According to this law, both the service providers and the owners of the platform must supply clear and transparent information (art. 134). The law requires the platforms to provide detailed information on the service, the different offers on line, civil and fiscal rights, obligations of the different parties involved and information about the professionals, service providers and consumers who use the platform. See L121-17 *Code de la consommation. Comments at Economie de partage et loi Macron: nouvelles obligations pour les plateformes collaboratives*

⁹³⁴ *LeCab* is a service provided by the company "Voxtur". See <https://www.lecab.fr/>.

⁹³⁵ VAN DE CASTEELE M. (2017, January 5), *Un chauffeur VTC (LeCab) requalifié en salarié: quel impact pour le modèle Uber?*, retrieved from <https://goo.gl/SAj3xw>.

⁹³⁶ The other elements that had been raised were not taken into account by the employment tribunal. It has to be recalled that article 60 of the *Loi n° 2016-1088 relative au travail, à la modernisation du dialogue social et à la sécurisation des parcours professionnels* affords individual and collective rights to "*les travailleurs utilisant une plateforme de mise en relation par voie électronique*" (independent contractors using an electronic matchmaking platform). The law entered into force on January 1, 2018. See *Décret* No. 2017-774 4/5/2017 available at <https://goo.gl/DjEGrV>.

⁹³⁷ The same tribunal has found no employment relationship in a similar case. See ESCANDE VARNIOL M.-C. (2017), *What protections for workers acting via digital platforms in a market economy?*

Moreover, of notable concern is the fact that the “Terms of Conditions” often try to obfuscate the actual relationship between the worker and the platform, since the latter unilaterally states that providers use the relevant service on their own term. Examples can be found in many adhesion-styled contracts⁹³⁸. Contracts are usually drafted purporting to create a self-employment relationship⁹³⁹. Such clauses are unlikely to be legally enforceable⁹⁴⁰ and the “coerced” labelling in a participation agreement may be easily disregarded when reality casts doubt on such naïve statements⁹⁴¹. As rightly pointed out, the inclusion of clauses denying the employee

Presentation, methodology and a French case. Moreover, the French social security institution has claimed contributions due by *Uber*.

⁹³⁸ For instance, “(vi) [Y]ou will not represent yourself as an employee or agent of a Requester or *Amazon Mechanical Turk*; (vii) you will not be entitled to any of the benefits that a Requester or *Amazon Mechanical Turk* may make available to its employees, such as vacation pay, sick leave, insurance programs, including group health insurance or retirement benefits” (see <https://www.mturk.com/participation-agreement>), or “You acknowledge that *Uber* does not provide transportation or logistics services or function as a transportation carrier and that all such transportation or logistics services are provided by independent third party contractors who are not employed by *Uber* or any of its affiliates” (see <https://www.uber.com/legal/terms/be-en/>), or rather “You promise that you will file all necessary legal documentation relating to your self-employment required by any governmental body, and pay all applicable taxes” (see <https://www.crowdfunder.com/legal/>); “Each User acknowledges and agrees that the relationship between Buyers and Sellers is that of an independent contractor. Nothing in this User Agreement creates a partnership, joint venture, agency or employment relationship between Users” (see <https://www.peopleperhour.com/static/terms>); “Neither your use of our website nor anything in this agreement creates an employment, partnership, joint venture, agency, franchise, or sales representative relationship between you and *CrowdFlower*. We do not provide you with any equipment or tools to complete a task. We do not provide you any benefits, workers’ compensation, or insurance coverage. We are not responsible for any expenses you incur in using our website” (see <https://www.crowdfunder.com/legal/>).

⁹³⁹ Moreover, companies may choose to blatantly misclassify workers as a result of arbitration agreements containing class action waivers, which cut off their liability for aggregate claims. See also GARDEN C. (2017), *Disrupting Work Law: Arbitration in the Gig Economy* in *University of Chicago Legal Forum*, pp. 205-234.

⁹⁴⁰ Platform firms seem to have taken advantage of the fact that, in a broad array of situations, “courts have become more and more willing to require enforcement of boilerplate clauses requiring arbitration of disputes and waiver of the right to bring class claims”. See COHEN J. E. (2017), *Law for the Platform Economy*, op. cit., p. 179 (explaining how “platform firms enjoy an especially privileged position from which to exploit the relational turn in litigation avoidance”).

⁹⁴¹ More strikingly, workers tend not to read such increasingly complex documents. As a consequence, it could be said that they do not “consent in the sense of understanding that to which they are consenting” see MACNEIL I. R. (1984), *Bureaucracy and Contracts of Adhesion* in *Osgoode Hall LJ*, 22, 5. See also CALO R. and ROSENBLAT A. (2017), *The Taking Economy: Uber, Information, and Power* in *Columbia Law Review*, 117(6), p. 35 (arguing that terms of service may “vary frequently, such as on a weekly basis”).

status demonstrates the fact that platform-shaped companies are aware of the legally ambiguous nature of the relationship. Nonetheless, many recent changes seem to be “performative gestures to appease the ongoing court case”⁹⁴², thus making things even more puzzling for workers and judges. What is worse, this approach results in a fragmented system of managerial responsibility for training and supervising workers. This entails a larger question of who takes the responsibility. Ultimately, in contentious cases, it is up to the courts to determine how far work contracting can be strained.

After all, it is all too plain that gig-workers may display some characteristics that are proper to independent contractors and others that are reminiscent of employees. In an increasingly relevant number of industries, the blurring of employment status is a topical question issue⁹⁴³. On a closer inspection, a tension between *de jure* and *de facto* situation is noticeable. The qualification of the legal relationship does not necessarily follow the designation chosen by the parties. Rather, the formal agreement and the intention of the parties may be “overturned” in order to give value to the actual day-by-day contract implementation. To further complicate matters, the tests, consisting of a multifactorial analysis that courts apply in a flexible manner, are notoriously malleable, maybe quite byzantine, and fact-dependent.

Therefore, using the “traditional” multifactorial test may lead to different conclusions as regards the question whether a platform worker is an employee or an self-employed worker⁹⁴⁴. As is well known, an overall assessment of concrete circumstances in each situation is essential. None of the factors is considered dispositive; rather, the court has to ponder the full range of relevant factors in interpreting and (and, if necessary, reclassifying) the relationship in question. As

⁹⁴² See WATERS F. and WOODCOCK J. (2017, September 20), *Far From Seamless: a Workers’ Inquiry at Deliveroo*, retrieved from <https://goo.gl/XdURbX>. More recently, in the UK, *Deliveroo* amended the participation agreement granting its riders to “to substitute themselves both before and after they have accepted a particular job”. In view of this new contractual provision, “it cannot be said that the riders undertake to do personally any work or services for another party”. See O’CONNOR S. (2017, November 14), *Deliveroo fends off couriers’ demands for union recognition*, retrieved from <http://on.ft.com/2zCg30X>.

⁹⁴³ Originally confined to the lower-end of the pay spectrum, this issue has come up repeatedly as regarding, for instance, freelance consultants labelled as self-employed “with working arrangements very similar to those of the employees they work alongside”. See HOUSE OF COMMONS – WORK AND PENSIONS COMMITTEE (2017), *Self-employment and the gig economy*, op. cit., p. 10.

⁹⁴⁴ This caveat “applies not only with regard to determination of employee status but also to other labour law questions”. However, “[t]he mere fact that crowdworkers often take the place of regular employment relationships cannot suffice as an argument for their blanket inclusion within the scope of labour law”. See WAAS B. (2017), *Introduction*, op. cit., pp. 21-22.

such, predictions are inherently uncertain. Conceivably, the one thing that is certain is that, in future, many claims will hang on workers status also in other European countries.

1.2. *The legal status of platform workers: gate or game?*

Being one of the most controversial issues when it comes to putting the platform-based arrangements in the legal context, an analysis of the status of “crowdworkers” and “workers on demand via platform” should be handled with care. Moreover, from the above it can be deduced that the *Uber* litigation might be considered as “the gig economy’s canary in the legal coalmine”⁹⁴⁵, due to its potential to set precedents for workers within and beyond the platform economy. In other words, platform-mediated labour will come under increasing judicial and regulatory scrutiny.

Resolving “another reincarnation”⁹⁴⁶ of an age-old legal question is of the utmost importance; therefore, an “agnostic” approach has to be put into place in order to avoid settling a new battleground for rival legions of scholars⁹⁴⁷. The five-factor analysis carried out in the second section of this dissertation, dealing with the main phases of the relationship between the platform and the worker (and the final client, too), was not accidental. Despite the varying nature of tasks, several aspects have been emphasised by taking into account the realities that may commonly be assessed to solve the classification issue also in court⁹⁴⁸.

⁹⁴⁵ BRUMM F. (2016), *Making Gigs Work: The new economy in context*, Master Thesis, Human Resources and Industrial Relations, University of Illinois – Urbana Champaign. While it is still too soon to judge its full impact, platform-facilitated work has racked up an impressive number of litigation cases. For a detailed analysis on the American context, see LEBERSTEIN S. and RUCKELSHAUS C. (2016), *Independent Contractor vs. Employee: Why independent contractor misclassification matters and what we can do to stop it*, NELP Policy Brief.

⁹⁴⁶ DAVIDOV G. (2017), *The status of Uber drivers: A purposive approach*, op. cit., p. 13.

⁹⁴⁷ DE STEFANO V. (2016), *Introduction: Crowdsourcing, the Gig-Economy, and the Law in Comp. Lab. L. & Pol’y J.*, 37(3), p. 461.

⁹⁴⁸ There are those who say that, in an attempt to fix the newly created employment problems, the platform economy could collapse and a huge number of potentially mutually beneficial exchanges may be destroyed. In sum, re-classifying drivers as employees is likely to extinguish the business model of the “platform industry”. Customers would also be affected due to a tight supply and increased fares. This guerrilla over misclassification could have devastating consequences. Many commentators even venture to suggest that this trend would destroy the platform economy. See KESSLER S. (2015, February 17), *The Gig Economy won’t last because it’s being sued to death*, retrieved from <https://goo.gl/LmtpKY>. See also GANDEL S. (2015, September 17), *Uber-nomics: Here’s what it would cost Uber to pay its drivers as employees*, retrieved from <http://fortune.com/2015/09/17/ubernomics/> (calculating that it would cost *Uber* \$4.1 billion per year to add drivers as employees, \$2.6 billion of which as a result of labour-related reimbursements).

That being said, why is it so important to determine whether or not a driver, a courier, a repairer or a consultant is working under an employment contract? Establishing employment status is not merely a dogmatic issue, but it is pivotal to determine the scope of workers' protection⁹⁴⁹. What seems to be most significant is that labour laws only regulate the employer-employee relationship and the complete range of protective norms can be enjoyed only entering the realm of employment⁹⁵⁰. As set out above, self-employed workers are supposed to have a substantial power when negotiating contracts with different clients⁹⁵¹, they are therefore excluded from fundamental principles and rights at work such as freedom of association and collective bargaining or protection against discrimination or unlawful dismissal⁹⁵². Moreover, many self-employed workers have no pension rights and they have no insurance rights⁹⁵³. As a consequence, "[d]etermining the financial costs and benefits of this way of organising work and [...] the employment rights of workers employed"⁹⁵⁴ under these non-standard working arrangements is fundamental.

⁹⁴⁹ ALEXANDER C. and TIPPETT E. C. (forthcoming), *The Hacking of Employment Law* in *Missouri Law Review* (arguing that "[a]ccording to many scholars, the legal status of platform workers presents two fundamental problems: noncompliance and avoidance. Non-compliance can arise from blatant misclassification of independent contractors by sharing companies, on the bet that they won't be caught. The true nature of an employment relationship can also be difficult to detect when an employer exercises control through software. In other cases, sharing companies can lawfully treat workers as independent contractors as a result of legal tests that use out-dated proxies for employment status. This form of legal avoidance may give sharing companies a competitive advantage that further erodes the reach of existing rules").

⁹⁵⁰ See also Directive 2010/41/EU of the European Parliament and of the Council of 7 July 2010 on the application of the principle of equal treatment between men and women engaged in an activity in a self-employed capacity and repealing Directive 86/613/ECC.

⁹⁵¹ Note that, in the framework of professional crowdsourcing, only high-level cognitive task can be negotiated directly.

⁹⁵² Moreover, under EU Law the application of the full range of anti-discriminatory measures with regard to employment and occupation to self-employed persons is not effective, see BARNARD C. (2011), *Discrimination law, self-employment and the liberal professions* in *European anti-discrimination law review*, 12, pp. 21-31, cited in DE STEFANO V. and ALOISI A. (forthcoming), *Fundamental labour rights, platform work and protection of non-standard workers*, *Bocconi Legal Studies Research Paper No. 3125866*. Available at SSRN: <https://ssrn.com/abstract=3125866> (arguing that "[f]reedom of association, and the right to collective bargaining and collective action, acting as 'enabling rights' can make labour rights effective for non-standard workers without the need to recur to burdensome and intimidating individual protection and enforcement mechanisms such as grievance procedures or judicial claims").

⁹⁵³ If gig-work is the main source of income, "the coverage and capacity to contribute to pension insurances and other types of social security is limited". EICHHORST W. and RINNE U. (2017), *Digital Challenges for the Welfare State*, op. cit., p. 2.

⁹⁵⁴ HUWS U., SPENCER N. H. and JOYCE S. (2016), *Crowd work in Europe: Preliminary results from a survey in the UK, Sweden, Germany, Austria and the Netherlands*, op. cit., p. 14.

At the same time, there is nothing inherently unlawful in the strategy implemented by platforms⁹⁵⁵: a firm can design and employ a business model relying on self-employed workers, on condition that they are genuinely independent, and to use software to connect these workers with final clients. Conversely, in many cases, workers are directed, controlled and disciplined, “through technological platforms that re-allocate and often obfuscate where the source of control might be located”⁹⁵⁶. The fact is that, under certain circumstances, the degree of control exercised by platforms through technological vectors of authority should “entitle gig workers [offering labour power and time, and having no effective individual price-setting capacity] to all of the protections of employment law, but they must first win a misclassification claim in court to vindicate their rights”⁹⁵⁷. To this extent, several successful employment misclassification claims have been carried out by workers arguing that the reality of the working conditions entail the existence an employment relationship.

As rightly pointed out by DE STEFANO, “both crowdwork and work on demand via apps allow for a far-reaching ‘personal outsourcing’ of activities to individuals[,] grant[ing] even more leverage to standardising terms and conditions of contracting out and assigning work whilst keeping a considerable control of business processes and outputs”⁹⁵⁸. Moreover, when employers disclaim responsibility for working conditions, this transfers a range of risks to individuals and, more broadly, to society as a whole. From workers’ perspective, such a model is not auspicious.

The *corpus* of European social law fails to define uniformly who is a worker. Article 45 of the Treaty on the Functioning of the European Union (TFEU) lays down a definition of worker within the meaning of freedom of movement, which – according to the case-law goes beyond a “classical” definition of a person involved in an employment contract⁹⁵⁹. At present, there is too much confusion regarding the

⁹⁵⁵ For a complete review on strategies, see ALEXANDER C. S. (2016), *Legal avoidance and the restructuring of work* in COHEN L. E., BURTON M. D. and LOUNSBURY M. (Eds.), *The structuring of work in organizations*, Bingley, UK, pp. 311-331.

⁹⁵⁶ GERSHON I. and CEFKIN M. (2017), *Click for Work: Rethinking Work, Rethinking Labor Through Online Work Distribution Platforms*, Working paper.

⁹⁵⁷ ALEXANDER C. S. and TIPPETT E. C. (forthcoming), *The Hacking of Employment Law*, op. cit., p. 34.

⁹⁵⁸ DE STEFANO V. (2016), *The rise of the “just-in-time workforce”: On-demand work, crowdwork, and labor protection in the “gig economy”*, op. cit., p. 476.

⁹⁵⁹ For instance, a person seeking work could also be considered a worker. Moreover, Article 49 ensures the same freedom to self-employed person, while Article 56 recognises the freedom to provide services.

term “worker”, as the definition varies according to the area in which it is to be applied. The first thing one should have clear in mind is that there is no such a provision whatsoever in the Treaties defining the legal determinants in order to be classified as a worker. To get a sense of this situation, in many jurisdictions the definition of employee varies according to the field (tax, social security, health and safety) where it has to be applied⁹⁶⁰. The normative chaos is evident. The CJEU came up with a unitary definition, to be used in the entirety of the membership of the Union⁹⁶¹. Settled case law has established, as a key factor, that the employment relationship is when “for a certain period of time a person performs a service for and under the direction of another person in return for which he receives remuneration”⁹⁶². The Court of Justice stated that the essential feature of an employment relationship is the power of command (understood as determining the activities carried out by the worker, the working conditions and conditions of

⁹⁶⁰ The Court of Justice of the European Union, CJEU, stated that the definition provided for in article 45 TFEU and regulation No. 1612/68 does not correspond with the definition used in Article 48 TFEU and regulation No. 1408/71. See C-85/96, EU:C:1998:217 paragraph 31. See BORELLI S. (2011), *Lavoratore (definizione eurunitaria)* in PEDRAZZOLI M. (Ed.), *Lessico giuslavoristico. Diritto del lavoro dell’Unione europea e del mondo globalizzato*, 3, Bologna, p. 123 (arguing that European Social Law provides for “case-by-case definitions”). The Court of Justice has developed a “functional” approach to the notion of the worker. See GIUBBONI S. (2009), *La nozione comunitaria di lavoratore subordinato* in CARUSO B. and SCIARRA S. (Eds.), *Il lavoro subordinato, Trattato di diritto privato dell’Unione europea*, Torino, pp. 35-75 (explaining how, under European Law, the definition of subordinate worker has not been developed for “protective purposes”, as in the Italian system, but in order to ensure and promote the access to the common labour market).

⁹⁶¹ An example of the latter is found in Belgium, where the legal employment status of a person does not necessarily matter as long as they earn less than a certain amount by working on an online platform. If a person earns more, however, then they need to be registered as self-employed. For France and Belgium, the concept of subordination also comes into play. In France, for example, subordination is determined by means of a tripartite categorisation of control: the power to direct, power to control and power to sanction. Only if workers fall out of all three of these categories, would they not be qualified as employees. INSPECTION GENERALE DES AFFAIRES SOCIALES (IGAS) (2016), *Les plateformes collaboratives, l’emploi et la protection sociale*, Paris. Should these criteria be applied to the platform economy, then workers could be regarded as employees unless they are free to accept or refuse to provide a service, do not receive directions or instructions and cannot receive sanctions (even for misconduct).

⁹⁶² Judgment of the Court of 31 May 1989. I. *Bettray v Staatssecretaris van Justitie*. Reference for a preliminary ruling: Raad van State - Netherlands. Case 344/87. CJEU, C-66/85, Deborah Lawrie-Blum v. Land Baden Wuerttemberg (on the primacy of facts principle). The CJEU is quite vague in defining what “under the direction” means. According to many authors, the formula may also cover the notions of economic and organisational dependence. See also FREDMAN S. (2004), *Marginalising Equal Pay Laws* in *Industrial Law Journal*, 33(3), pp. 281-285 (criticising the ECJ’s case law for its focus on subordination rather than on economic dependence, arguing that the latter concept would capture a wider spectrum of “atypical worker”).

remuneration) stemming from the internal structure of the contract⁹⁶³. In the Communication, the Commission emphasises that the CJEU has clarified that this definition shall also be used to determine who is to be considered a worker when applying certain EU directives in the social field. Understandably, national legislations and courts still could decide what requirements to be met to ascertain the existence of an employment relationship⁹⁶⁴.

The position of the Court is consistent: “the status of ‘worker’ within the meaning of EU law is not affected by the fact that a person has been hired as a self-employed person under national law, for tax, administrative or organisational reasons, as long as that person acts under the direction of his employer as regards, in particular, his freedom to choose the time, place and content of his work, does not share the employer’s commercial risks, and, for the duration of that relationship, forms an integral part of that employer’s undertaking, so forming an economic unit with that undertaking”. On the other hand, elements that lean toward independent contractor classification include non-routine work, workers setting their own schedules and using their own equipment, and workers getting paid per result. The exhibition of entrepreneurial activity or rather the economic dependency upon the employer is a proxy of the self-employed or employee status⁹⁶⁵.

But, according to detractors, “employment law draws a line in the sand”⁹⁶⁶. In most member countries, the boundary differentiating employees from self-employed workers is rarely unambiguous and the uncertainty regarding the legal status of platform worker results in their exclusion from the scope of labour law, thus making them an extremely precarious group⁹⁶⁷. The most common test, which courts apply in

⁹⁶³ See VENEZIANI B. (2009), *The Employment Relationship*, op. cit., p. 109.

⁹⁶⁴ CJEU, C-94/07, *Raccanelli v. Max-Planck Gesellschaft*.

⁹⁶⁵ At the same time, it has to be noted that, “[i]n order to determine whether someone working within the platform economy falls within the protection of EU labour law it would therefore be necessary to consider the personal scope of each relevant provision in turn”. See EUROPEAN PARLIAMENT (2017), *The Social Protection of Workers in the Platform Economy*, Committee on Employment and Social Affairs, p. 92. For a complete review, see MENEGATTI E. (2017), *A fair wage for workers-on-demand via app*, Paper presented at the Fifteenth International Conference in commemoration of Professor Marco Biagi, Modena, Marco Biagi Foundation, 20-21 March 2017, pp. 3-5.

⁹⁶⁶ O’CONNOR S. (2017, March 21), *The shifting borderline between employees and not-quite-employees*, retrieved from <http://on.ft.com/2nO7reD>. See also STAFFORD B. E. (2016), *Riding the Line between Employee and Independent Contractor in the Modern Sharing Economy* in *Wake Forest L. Rev.*, 51(5), pp. 1223-1254.

⁹⁶⁷ See WESTREGÅRD A. (2016), *The notion of “employee” in Swedish and European Union Law. An exercise in harmony or disharmony?* in EDSTRÖM Ö., CARLSON L. and NYSTRÖM B. (Eds.), *Globalisation, Fragmentation, Labour and Employment Law*, Uppsala, Sweden, pp. 185-206.

the absence of clear guidance in the legislation in force, is the “control” test⁹⁶⁸. This test, which is not a standalone assessment, examines the putative employer’s control over the way in which the work is performed⁹⁶⁹. Some of the other factors for ascertaining employee status are whether the employer may direct the way in which the work is performed, determine the hours involved, integrate the worker into the organisational structure of the entrepreneur. This incomplete list of factors contributes to the composition of an overall factual matrix that is taken into consideration when qualifying the status.

The existence of an employment relationship “depends on certain objective conditions being met (the form in which the worker and the employer have established their respective positions, rights and obligations, and the actual services to be provided), and not on how either or both of the parties describe the relationship”⁹⁷⁰. The label (or “*nomen juris*”) placed on to the relationship is a factor in the outcome, but it is certainly not dispositive⁹⁷¹. Three other main elements can be listed, namely (i) the work has to be carried out by the worker on behalf of someone else, (ii) the worker must be under that person’s supervision and (iii) the existence of

⁹⁶⁸ DE LUCA TAMAJO R. (2005), *Profili di rilevanza del potere direttivo del datore di lavoro*, op. cit., pp. 468-469 (stressing that “it is important to assess, in addition to the permanent availability of the worker, the potentiality of the instructions given by the employer, i.e. the power to interfere over the performance at any time, rather than their actuality and relevance. Moreover, the possible evolution of the organisation and interests of the employer must be taken into account”. According to the author, “the techno-legal criterion of managerial prerogatives is the most effective one when it comes to protecting work”, but also “the most suitable one for capturing such a varied area of legal obligations concerning human work”). See also PERULLI A. (1992), *Il potere direttivo dell'imprenditore*, Milano.

⁹⁶⁹ “It uses the following non-exclusive factors to assess the amount of control”. See TIPPETT E. C. (forthcoming), *Employee Classification in the Sharing Economy*, op. cit. The “control test” derives from a master/servant model of employment. See also ROGERS B. (2016), *Redefining Employment for the Modern Economy*, American Constitution Society.

⁹⁷⁰ INTERNATIONAL LABOUR OFFICE (2003), *The scope of the employment relationship*, International Labour Conference 91st Session, Geneva, Switzerland, p. 23. See also DEL CONTE M. (1995), *Lavoro autonomo e lavoro subordinato: la volontà e gli indici di denotazione* in *Orient. giur. lav.*, 1, pp. 66-72. Moreover, it has to be noted that “any human activity can be performed under the scheme of an employment relationship or under the scheme of self-employed work”. See Cass., 8 November 2016, No. 22658; Cass., 3 October 2016, No. 19701; Cass. 19 September 2016, No. 18320. See CAVALLINI G. (2017), *The (Unbearable?) Lightness of Self-employed Work Intermediation*, op. cit., p. 2.

⁹⁷¹ The interpretation of the actual terms of the contract is a matter for the court. See BURCHELL B., DEAKIN S. and HONEY S. (1999), *The employment status of individuals in non-standard employment*, Department of Trade and Industry, London, p. 12 (arguing that “the courts have consistently taken the view that the parties to the employment relationship cannot decide to ‘opt in’ or ‘opt out’ of the coverage of legislation, simply by choosing to describe their relationship in a particular way”).

a remuneration and its nature⁹⁷². According to the so-called typological method (i.e. rule of thumbs), other subsidiary factors for detecting employee status are: the continuous nature of the work⁹⁷³, the compliance with working hours⁹⁷⁴, and the provision of even non-specific guidance. But the list is, of course, much longer and variable⁹⁷⁵, and the factors might be combined in different ways⁹⁷⁶.

⁹⁷² These objective criteria are aimed at assessing whether the activities are effective and authentic, rather than marginal or ancillary. ECJ, *Betray*, Para. 17.

⁹⁷³ See Cass., 28 July 1995, No. 8260.

⁹⁷⁴ See Cass., 9 April 2004, No. 6983.

⁹⁷⁵ Other factors to be considered are the following: (i) the functional integration into the employer's business, (ii) the organisational dependence, (iii) the obligation to provide services exclusively or personally, (iv) the ownership of work-related equipment, (v) the nature of remuneration (single fee vs. monthly salary), (vi) the absence of risk of loss related to the business activity, (vii) the duration of the relationship, (viii) the performance of the work at the employer's premises.

⁹⁷⁶ The slight cautionary note is that no one of the factors represents a definitive test, while an appraisal of the overall picture is pivotal (this approach has been considered as a kind of approximation or "sufficient conformity"). This is a peculiar method of reasoning taking into account all the circumstances of the case (as opposed to the basic analytical method based on the identity between the case and the abstract designation). See DEL PUNTA R. (2017), *Un diritto per il lavoro 4.0* in CIPRIANI A., GRAMOLATI A. and MARI G. (Eds.), *Il lavoro 4.0. La IV rivoluzione industriale e le trasformazioni delle attività lavorative*, Firenze. See also NOGLER L. (1991), *Metodo e casistica nella qualificazione dei rapporti di lavoro* in *Dir. Lav. Rel. Ind.*, 1, p. 121 and ID. (2002), *Ancora su «tipo» e lavoro subordinato nell'impresa* in *Arg. dir. lav.*, 1, pp. 109-153. The multifactorial test is "surprisingly similar" in many jurisdictions. Employment Relationship Recommendation, 2006 (No. 198) is perhaps the most relevant recommendation concerning the employment relationship. For the purposes of the national policy of protection for workers in an employment relationship, the determination of the existence of such a relationship should be "guided primarily by the facts relating to the performance of work and the remuneration of the worker, notwithstanding how the relationship is characterized in any contrary arrangement, contractual or otherwise, that may have been agreed between the parties". Clear methods for guiding workers and employers as to the determination of the existence of an employment relationship should be promoted. "For the purpose of facilitating the determination of the existence of an employment relationship, Members should, within the framework of the national policy referred to in this Recommendation, consider the possibility of the following: (a) allowing a broad range of means for determining the existence of an employment relationship; (b) providing for a legal presumption that an employment relationship exists where one or more relevant indicators is present; and (c) determining, following prior consultations with the most representative organizations of employers and workers, that workers with certain characteristics, in general or in a particular sector, must be deemed to be either employed or self-employed". Moreover, the Recommendation lists 14 factors to find an employment relationship: "[m]embers should consider the possibility of defining in their laws and regulations, or by other means, specific indicators of the existence of an employment relationship. Those indicators might include: (a) the fact that the work: is carried out according to the instructions and under the control of another party; involves the integration of the worker in the organization of the enterprise; is performed solely or mainly for the benefit of another person; must be carried out personally by the worker; is carried out within specific working hours or at a workplace specified or agreed by the party requesting the work; is of a particular duration and

In general, this is a notoriously difficult question because of an interrelated set of issues⁹⁷⁷. Coming straight to common arrangements of the platform economy, it has to be acknowledged that a critical assessment of the worker classification is rather problematic. Labour platforms are reluctant to disclose their terms of services and relevant contracts, and it is extremely hard to retrace paperwork signed by workers providing services in the peer-to-peer transport sector or at the customer's premises (whether corporate or individual)⁹⁷⁸. Data is drawn from empirical observations, interviews and surveys.

Just to get a general idea, imposing to accomplish the job personally, either by forbidding subcontracting or with the assistance of software, coupled with the prohibition of working on multiple platforms, puts genuine autonomy and control remain beyond the grasp of most workers. In another section a list of conducts that may qualify as managerial prerogatives has been provided. A strict surveillance system – based on customer ratings, GPS features, bar-coding technology, time constraints, constant metrics, regular screenshots, response rates and obscure algorithms – or the possibility to determine the location of the performance and the allocation of time represent a way to “shield platform owners from having to deal directly with service providers”⁹⁷⁹. Moreover, the amount of detailed oversight and

has a certain continuity; requires the worker's availability; or involves the provision of tools, materials and machinery by the party requesting the work; (b) periodic payment of remuneration to the worker; the fact that such remuneration constitutes the worker's sole or principal source of income; provision of payment in kind, such as food, lodging or transport; recognition of entitlements such as weekly rest and annual holidays; payment by the party requesting the work for travel undertaken by the worker in order to carry out the work; or absence of financial risk for the worker”. According to Countouris, ILO took an overall approach to employment status “[...] seeking to confer protections beyond the strict confines of the contract of employment”. See COUNTOURIS N. (2012), *The legal determinants of precariousness in personal work relations: A European perspective*, op. cit., p. 29. For a detailed analysis, see CASALE G. (2007), *La qualificazione del rapporto di lavoro nella Raccomandazione No. 198/2006 dell'Organizzazione Internazionale del Lavoro* in *Riv. it. dir. lav.*, 3, pp. 135-143. See also INTERNATIONAL LABOUR OFFICE (2013), *Regulating the employment relationship in Europe: A guide to Recommendation No. 198*, Governance and Tripartism Department, Geneva, Switzerland.

⁹⁷⁷ SPRAGUE R. (2015), *Worker (Mis)Classification in the Sharing Economy: Square Pegs Trying to Fit in Round Holes*, Presented at the Academy of Legal Studies in Business Annual Conference, Philadelphia, PA, August 6-10, 2015.

⁹⁷⁸ As repeatedly stated, “the downstream party deploys authority (hierarchy) mainly by informal agreements in order not to get in conflict with legal regulations”. MUEHLBERGER U. (2005), *Hierarchies, relational contracts and new forms of outsourcing*, op. cit., p. 16.

⁹⁷⁹ VAN DOORN N. (2017), *Platform labor: on the gendered and racialized exploitation of low income service work in the 'on-demand' economy*, op. cit., p. 903 (providing a list of “strategies that enforce the immunity of both the buyer of a service”).

powerful control constitutes strong evidence that a platform has the right to control. There is no consistency between the contractual label of “self-employed workers” and the fact that platforms dictate the terms of the job: in some cases, the mischaracterisation of subordinate workers is blatant thus making the purported independent relationship a legal sham⁹⁸⁰.

At the same time, even the lack of distinguishable control power does not provide significant arguments in favour of a self-employed status⁹⁸¹. All of this is particularly significant when one considers that subordinate nature is not “a freestanding and universal characteristic of being a worker”⁹⁸². While employment on a discontinuous basis indicates a certain degree of independence, the fact that workers are commonly paid a low rate of pay and forced to brag and beg to secure work might lay in favour of the existence of a relation of subordination⁹⁸³. Understandably, even practical reality, regardless of the contractual statement, may sometimes be fuzzy and far from clear-cut. This lead to a downward spiral as the current uncertainty has the unintended side effect of further preventing platforms from supporting workers because such assistance may be used as a factor proving the existence of an employment relationship. Upon closer examination, in the light of the above-mentioned criteria, these realities seem to be compatible with the existence of an employment status, thus resulting in a “significant murkiness”. Far from supposedly catering freedom and flexibility, this pattern combines a strong command power, exerted through software, with the tremendous advantages of “liquid responsibilities”⁹⁸⁴, as shown in the table below. As already said, the current results also suggest that a case-by-case assessment is necessary, and much will depend on the relative weight attached to each circumstance of the individual case.

⁹⁸⁰ See VOZA R. (2017), *Il lavoro e le piattaforme digitali: the same old story?*, op. cit., p. 10 (arguing that platform companies might rearrange the concrete execution as a direct countermeasure to developing case law).

⁹⁸¹ TIPPETT E. C. (forthcoming), *Employee Classification in the Sharing Economy*, op. cit.

⁹⁸² Bates van Winkelhof v Clyde & Co & Anor UKEAT/0568/11/RN.

⁹⁸³ For a focus on the Italian case, see MENEGATTI E. (2018), *On-Demand Workers by Application: Autonomia o Subordinazione?* in ZILIO GRANDI G. and BIASI M. (Eds.), *Commentario Breve allo Statuto del Lavoro Autonomo e del Lavoro Agile*, Padova, pp. 93-111.

⁹⁸⁴ DE STEFANO V. (2017), *Labour is not a technology – Reasserting the Declaration of Philadelphia in Times of Platform Work and Gig-Economy* in *IUSLabor*, 2, p. 16.

Table 2 Overview of a selection of features in a platform-based working format⁹⁸⁵

	<i>Online/global services</i>		<i>Offline/local services</i>		
	<i>Online: Professional Crowdsourcing</i>		<i>At the customer's premises manual services</i>		<i>Passengers transport</i>
	<i>Non-routine</i>	<i>Routine</i>	<i>Complex</i>	<i>Simple</i>	<i>/</i>
<i>– managerial and direction power</i>	Tenuous	Strong	Tenuous	Strong	Strong
<i>– supervision and control power</i>	Tenuous	Strong	Medium	Strong	Strong
<i>– coordination with the platform</i>	Episodic	Episodic	Constant	Constant	Constant
<i>– flexibility in the time schedule</i>	High	Medium	Medium	Low	Low
<i>– continuity of the performance</i>	Rare	Medium	Rare	Rare	Strong
<i>– ownership of equipment</i>	Yes	Yes	Yes	No	Yes
<i>– personal labour (irreplaceability)</i>	Yes	No	Yes	Yes/No	Yes

However, no final word as to legal characterisation of platform-coordinated workers has yet been forthcoming. It is notable that there is a great temptation to “close the case” urging for a possibly generalised reclassification aimed at protecting those workers engaged in particularly flexible forms of employment. This is an easy way to resolve a political controversy quickly and definitively⁹⁸⁶. Nonetheless, in defence of platforms, it has to be said that the idea that all platform work is consistently bogus self-employment could prove to be wrong: “newly created jobs may only under certain conditions be conceived of as classic standard employment relationships with long-term employment prospects, collective contractual

⁹⁸⁵ Table 2 considers significant factors when deciding whether someone is an employee in the platform economy scenario. Author’s own elaboration, drawing on the analysis of “Characteristics of the Employment Relationship”, published by the European Network of Legal Experts in the Field of Labour Law (ELLN). The boxes marked with a grey background indicate the factors that might lay in favour of the existence of a relation of subordination in a potential misclassification lawsuit.

⁹⁸⁶ ARTHURS H. W. (2017), *The false promise of the Sharing Economy*, op. cit.

classifications and full social security"⁹⁸⁷. If such a trend was to be of such a direction, it must be said that all platform workers might lose the (virtual) freedom they cherish to choose their work hours, while enjoying a wide range of legal entitlements and safeguards which would come at a cost.

In this respect, *Uber* is a particularly good case for analysis as it brings the unbalanced model into sharpest relief. In the landmark judgment *Aslam v Uber BV* the court focused on the "practical realities" of the relationship between *Uber* and its drivers⁹⁸⁸. By conceptualising the conclusions, *Uber* drivers could be reclassified as workers (eligible for minimum wage, sick leave and paid holiday provisions but not entitled to any kind of protection against unfair dismissal or the right to a notice before being fired⁹⁸⁹) rather than independent contractors, as maintained by the company in the "terms of service". In particular, by denying that the company exercises a mere enabling activity between two opposite groups of users, the British court emphasises that *Uber* does not provide the opportunity for individually negotiating the content of the obligation, while tasks are performed personally, with no possibility for drivers to be replaced temporarily⁹⁹⁰. However, the cause for enthusiasm might be mitigated. There can be no denying of the negative aspects of this verdict. First and foremost, workers are left in an intermediate area, and the narrowed definition of their status may "reinforce *Uber's* penalizing practices which may deactivate drivers rejecting several consecutive trips"⁹⁹¹, at any time and for any or no reason. Therefore, those victories can be seen as only partial ones, or rather as a

⁹⁸⁷ EICHHORST W., HINTE H., RINNE U. and TOBSCH, V. (2016), *How Big is the Gig? Assessing the Preliminary Evidence on the Effects of Digitalization on the Labor Market*, op. cit., p. 1.

⁹⁸⁸ Case 2202551/2015 & others, *Aslam, Farrar & Ors v. Uber BV & Ors*, judgement of 28 Oct. 2016. More recently *Uber* failed to overturn the ruling as the Employment Appeal Tribunal fully upheld Employment Tribunal's findings.

⁹⁸⁹ DAVIES A. C. L. (2014), 'Half a Person': a Legal Perspective on Organising and Representing 'Non-Standard' Workers in BOGG A. and NOVITZ T. (Eds.), *Voices at Work: Continuity and Change in the Common Law*, Oxford, UK, pp. 123-124.

⁹⁹⁰ "The notion that *Uber* in London is a mosaic of 30,000 small businesses linked by a common 'platform' is to our minds faintly ridiculous".

⁹⁹¹ JAMIL R. (2017), *Drivers vs Uber—The limits of the Judicialization: Critical review of London's employment tribunal verdict in the case of Aslam Y. & Farrar J. against Uber in Revue Interventions Économiques. Papers in Political Economy*, (58), retrieved from <http://journals.openedition.org/interventionseconomiques/3449>. See also CABRELLI D. (2017), *Uber e il concetto giuridico di "worker": la pro-spettiva britannica (nota a UK Employment Tribunal, Central London, England, United Kingdom, 26 ottobre 2016, n. 2202551/2015)* in *Dir. rel. ind.*, 27(2), pp. 575-581.

total debacle if one subscribes to the view that claiming full employee status could be even more problematic in the future⁹⁹².

Against this backdrop, “[t]he legislature has in essence taken the view that casual workers who would not necessarily fall within ‘employee’ status should not, for that reason, be denied basic protections which do not depend, for their effective functioning, upon the employment relationship in question being regular or long-term”⁹⁹³. Having said that, main arguments of a thirteen-point analysis detailing *Uber’s* business cycle as well as the concrete execution of drivers’ performances are worth reading, as they effectively describe its strongly “interventionist” role shaping a predominant influence over the supplier of the underlying service:

- (1) The contradiction in the Rider Terms between the fact that *ULL* purports to be the drivers’ agent and its assertion of “sole and absolute discretion” to accept or decline bookings.
- (2) The fact that *Uber* interviews and recruits drivers.
- (3) The fact that *Uber* controls the key information (in particular the passenger’s surname, contact details and intended destination) and excludes the driver from it.
- (4) The fact that *Uber* requires drivers to accept trips and/or not to cancel trips, and enforces the requirement by logging off drivers who breach those requirements.
- (5) The fact that *Uber* sets the (default) route and the driver departs from it at his peril.
- (8) The fact that *UBV* fixes the fare and the driver cannot agree a higher sum with the passenger. The supposed freedom to agree a lower fare is obviously nugatory.
- (7) The fact that *Uber* imposes numerous conditions on drivers (such as the limited choice of acceptable vehicles), instructs drivers as to how to do their work and, in numerous ways, controls them in the performance of their duties.
- (8) The fact that *Uber* subjects drivers through the rating system to what amounts to a performance management/disciplinary procedure. [...] (10) The guaranteed earnings schemes (albeit now discontinued).
- (11) The fact that *Uber* accepts the risk of loss which, if the drivers were genuinely in business on their own account, would fall upon them.
- (12) The fact that *Uber* handles complaints by passengers, including complaints about the driver.
- (13) The fact that *Uber* reserves the power to amend the drivers’ terms unilaterally.

⁹⁹² Moreover, as a direct consequence of opportunistic practices, “the use of the intermediate category may result in encouraging levelling down”. See ROGERS B. (2016), *Employment Rights in the Platform Economy: Getting Back to Basics* in *Harvard Law & Policy Review*. See also GRIERSON J. and DAVIES R. (2017, February 10), *Pimlico Plumbers loses appeal against self-employed status*, retrieved from <https://gu.com/p/5qjyy/stw>. Moreover, the operation of the “worker” notion has not been consistently successful in bringing casual and intermittent work within the scope of minimum wage and working time protection, in part because more traditional legal tests have reappeared in a modified form, and courts have taken a formalistic approach to interpretation which has allowed employers to use contractual boilerplate to deflect the application of protective labour standards. See DEAKIN S. (2003), ‘Enterprise-Risk’: *The Juridical Nature of the Firm Revisited* in *Industrial Law Journal*, 32(2), pp. 97-114.

⁹⁹³ DEAKIN S. and MORRIS G. (2009), *Labour Law*, Oxford, UK, pp. 146-147.

As has appeared evident from these judicial findings, there are strong arguments in favour of an employment relationship. Unlike conventional self-employed workers, platform workers are subject to the selection, direction, monitoring and discipline of an employing entity⁹⁹⁴, whether “unitary” or distributed, which is the very opposite of the mere provision of an introduction between two independent parties acting on their own account. As has been rightly emphasised, “[i]t appears from the employment tribunal ruling that *Uber* makes extensive use of standard form terms and conditions to set up a web of contracts, the aim of which is to deflect various legal liabilities”⁹⁹⁵. More importantly, one should not lose sight of the overall background: in the most extreme cases, terms and conditions might be specifically designed as a sham, intended to mask an *underlying* reality. In totality, the evidence indicates that a conventional employer-employee is often hidden under the guise of non-standard working arrangements. To conclude, the *Cerberus* firms “obtain the same results as they would in providing wage employment – giving orders, controlling work and penalizing shortcoming – without, however, having to shoulder the responsibilities traditionally attached to that of employer”⁹⁹⁶.

Inevitably, this short analysis does not make justice of the legal and factual complexities of these rulings. The good thing is that these litigations “continue to play an important deterrence role, both drawing public attention to these practices and dissuading some firms from embracing the independent contractor business model”⁹⁹⁷. In this respect, it is worth noting that cases like the British one have by no doubt contributed to uncovering actual working conditions and the most common

⁹⁹⁴ TIPPETT E. C. (forthcoming), *Employee Classification in the Sharing Economy*, op. cit. (arguing that “control is *distal* because some high level manager [...] sets the threshold for terminating drivers based on star ratings, but it is implemented ‘automatically’ [...]. Control is *distributed* because the task of rating driver performance is assigned to customers, each of whom is fractionally responsible for determining whether a driver keeps or loses the contract with the ride-hailing service”).

⁹⁹⁵ DEAKIN S. and MARKOU C. (2017), *The Law-Technology Cycle and the Future of Work*, op. cit., p. 6.

⁹⁹⁶ MEDA D. (2016), *The future of work: the meaning and value of work in Europe*, op. cit., p. 13.

⁹⁹⁷ DUBAL V. B. (2017), *Winning the Battle, Losing the War?: Assessing the Impact of Misclassification Litigation on Workers in the Gig Economy*, op. cit., p. 747 (highlighting “the significant limitations of such litigation in effecting and enforcing stability and security for gig workers” and arguing that “misclassification litigation is not well-suited as a solo strategy”). For a recent update, see PACELLA G. (2017), *Lavoro e piattaforme: una sentenza brasiliana qualifica subordinato il rapporto tra Uber e gli autisti* in *Riv. it. dir. lav.*, 3, pp. 570-592 (after analysing the Brazilian ruling *Vara do Trabalho de Belo Horizonte – MG February 14, 2017, n. 0011359 – 34.2016.5.03.0112 – Márcio Toledo Gonçalves Est. – R.L. S.F. c. Uber do Brasil Tecnologia l.t.d.a.*, the author argues that the *Uber* business model redefines the boundaries of the contract of employment, without erasing them or calling into question their legitimacy).

business model in the “platform-based” industry⁹⁹⁸. To conclude, if the trend unveiled by this verdict continues⁹⁹⁹, and if the multifactorial analysis defined in the Communication should be applied in a strict sense, there might be a “domino effect” in Europe¹⁰⁰⁰. However, while the legal concept of employment is capacious and flexible enough to be interpreted to cover many if not most platform-coordinated workers, not all courts and administrative agencies will do so, at least in the U.S. That means these questions will linger for many years to come¹⁰⁰¹. As a consequence, even if litigation should succeed in restoring protections, it must be seen only as a “part of a comprehensive campaign that deploys multiple strategies” to promote economic and social advance¹⁰⁰².

Undeniably though, the issue goes beyond whether the workers fall into a particular doctrinal category. What is at stake is the meaning of “decent work” in times of digital transformation and how to ensure it for all.

2. The “task” ahead: plugging the gaps between organisational choices and legal schemes. Concluding remarks and policy recommendations.

This research has sought to develop a deeper understanding of the evolving phenomenon of platform-mediated labour. The following brief comments lead inevitably to the last mile of this passionate investigation. Promisingly, one of the corollaries of this development is that digitalisation has the power “to fundamentally

⁹⁹⁸ See, for instance, SACHS B. (2016, October 26), *What the UK Decision Implies for Uber Drivers in the U.S.*, retrieved from <https://goo.gl/4PqULs>.

⁹⁹⁹ Similarly, *Deliveroo* is under investigation in UK by the central arbitration committee to determine the employment status of its couriers. See MCGOOGAN C. (2017, March 6), *Tribunal to rule on Deliveroo riders’ employment status*, retrieved from <https://goo.gl/d4whjY>.

¹⁰⁰⁰ A recent survey explored the extent platform workers feel they have autonomy over the work. Among more than 5,000 people, fewer than four in ten respondents assert that “the way work is organised makes them feel like their own boss”, while almost half revealing that this is not the case. For the sake of completeness, in some respects contradicting what has been argued on the subject, those who have provided transport using their vehicle are most likely to say they feel like their own boss. See CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT (2017), *To gig or not to gig? Stories from the modern economy*, London, p. 23.

¹⁰⁰¹ The matter is far from being settled and the complexity is still daunting; “[g]iven the multitude of factors that can be examined, it is hardly remarkable that courts and labor officials can arrive at conflicting results while purporting the same test”. STAFFORD B. E. (2016), *Riding the Line between Employee and Independent Contractor in the Modern Sharing Economy*, op. cit., p. 1232.

¹⁰⁰² CUMMINGS S. L. and RHODE D. L. (2009), *Public interest litigation: Insights from theory and practice in Fordham Urb. LJ*, 36(4), pp. 603-651.

change the functioning of our economies, labor markets and welfare states”¹⁰⁰³, while also contributing to a series of troublesome effects for non-standard and marginal workforce groups. Such a pattern may lead to enhanced self-determination and a better work-life-balance for employees, but may also result in more insecurity and periods of involuntary unemployment. Platform-mediated labour is a minuscule proportion of the labour market for the time being, but the policy challenges it brings up are part of a much broader set of trends and questions about the new world of work that researchers and labour lawyers cannot afford to disregard¹⁰⁰⁴.

In light of that, this contribution has showed that many common practices in the on-demand economy might easily spread across economic segments and sectors, as well as many essential features of working through an app are already shared with other jobs in more traditional industries. These strong intermingling of old and new challenges constitutes the underlying reason why platform-based work has catalysed so much attention in recent times. As I hope to have demonstrated, implications of the digital economy are too important to be left to rival armies fighting to impose their opposite ideological agendas. That is why the legal community must not be a bystander while major societal transformations occur. One of the most interesting challenges posed by the collaborative economy is how to regulate it appropriately. Accordingly, this final paragraph will tentatively advance some modest policy solutions to deal with the questions raised by the platformisation of labour.

Given the complex panorama, this analysis constitutes an open-ended assignment: the scrutiny of (the evolution of) the platform economy represents only one of the many aspects that make up the attractive discussion over the future of work¹⁰⁰⁵. In spite of the abundance of theories speculating on the impact of digitalisation on employment rates, greater uncertainty has now surrounded the potential outcome of this paradigm shift in the organisation of work, both at the individual and at the collective level. This moment of transition may encourage an in-depth reflection on how to reinforce and redesign established institutional solutions in the field of social protection.

¹⁰⁰³ EICHHORST W. and RINNE U. (2017), *Digital Challenges for the Welfare State*, op. cit., p. 10 (recommending the introduction of an action plan on skill formation, social protection and taxation).

¹⁰⁰⁴ PÁRAMO P. and VEGA M. L. (2017), *New forms of work and labour inspection: the new compliance challenges* in *IUSLabor*, 2, p. 3 (arguing that “[t]hese growths have become today an extending trend, or even a pattern, in the labour market”).

¹⁰⁰⁵ For a complete review of the state of the debate, see GUARASCIO D. and SACCHI S. (2017), *Digitalizzazione, automazione e futuro del lavoro*, Roma (in Italian).

The evidence shows that platform-based work might jeopardise workers' rights and distort competition among economic and social actors, by touching on the foundation of traditional social protection systems. On the one hand, this shining model represents a sort of "throwback to the industrial model, incorporating the efficiency and control of automatic management, without the industrial model's job security or stability"¹⁰⁰⁶. On the other, the use of non-employment arrangements (both non-standard and independent work) has enabled platform operators to gain a competitive advantage over the contenders, as companies such as *Uber*, *Deliveroo* or *Upwork* face a tinier regulatory burden compared to their traditional competitors¹⁰⁰⁷. Indeed, the chance to externalise costs associated with direct employment is a powerful driver for the proliferation of such atypical formats placing workers at a disadvantage¹⁰⁰⁸.

It comes as no surprise then that the meaning and role of labour market institutions are being questioned. Yet most of what is written or said about the digital transformation of work overexposes the radical novelty of the on-going changes and demands for the rules governing European labour markets to be drastically revised and adapted to this global metamorphosis¹⁰⁰⁹. While law has always lagged behind technological development, this challenge becomes more and more critical as the pace of innovation speeds up in the digital age. But platform labour "should not be understood as a single unified phenomenon, let alone a novel category of work relationships calling for *sui generis* regulatory responses"¹⁰¹⁰. Innovation can evolve in a direction compliant with public policy objectives. To put it bluntly, technology demands leadership from governments, and leadership requires values such as the ambition to maintain a balance between social purpose

¹⁰⁰⁶ CHERRY M. A. (2016), *Beyond Misclassification: The Digital Transformation of Work*, op. cit., p. 579.

¹⁰⁰⁷ SÖDERQVIST F. (2016, July 5), *The dawn of the platform based labour market*, retrieved from <https://unionenopinion.se/blogg/dawn-platform-based-labour-market/>. Much of this criticism also asks for intervention in fields such as consumer protection (including privacy and data security) and the promotion of public health and safety.

¹⁰⁰⁸ According to a study commissioned by the European Parliament, "the platform economy provides the potential to facilitate new forms of working and to 'repackage' existing forms of work arrangements in ways that avoid the responsibilities of employment". See EUROPEAN PARLIAMENT (2017), *The Social Protection of Workers in the Platform Economy*, Committee on Employment and Social Affairs, p. 77.

¹⁰⁰⁹ DACHS B. (2018), *The impact of new technologies on the labour market and the social economy*, EPRS, European Parliamentary Research Service, Scientific Foresight Unit (STOA), Brussels.

¹⁰¹⁰ PRASSL J. and RISAK M. (2016), *Uber, Taskrabbit, and Co.: Platforms as Employers – Rethinking the Legal Analysis of Crowdwork*, op. cit., p. 621.

and objectives of efficiency.

Therefore, reaffirming the major binary divide between workers genuinely self-employed and those in an employment relationship would be helpful in the attempt to reduce labour market segmentation and rising inequalities¹⁰¹¹. In this respect, many scholars have always loudly advocated to extend the scope of rights such as unionisation, collective bargaining, social security, and legal protection (such as minimum wage laws) to cover non-standard workers¹⁰¹². However, before proposing any changes to the current rules, solutions should be sought by interpreting the notion of employment in a resilient or elastic way. Moreover, as claimed in the previous section, the existing legal framework should be exploited to its maximum possibilities as appropriate, also taking into account the great diversity of arrangements and contexts. Understandably, another crucial answer should be closing legal loopholes that incentivise exploitative compartments by a marginal group of deceitful companies¹⁰¹³. In addition to this, more effort needs to be made to ensure that regulations are effectively applied, in order “to avoid the risk that these workers are considered by default as falling in a normative vacuum with no access to labour rights”¹⁰¹⁴.

Despite minor attempts, at the moment, “platforms are self-regulating entities and their development has been largely extra-legal”¹⁰¹⁵ in an attempt to disrupt

¹⁰¹¹ For instance, under Swedish labour law, the social partners have the possibility to define the employee notion based on industry practice through the means of collective agreements. Adapting the concept of employment to new forms of work is therefore easier.

¹⁰¹² DE STEFANO V. and ALOISI A. (forthcoming), *Fundamental labour rights, platform work and protection of non-standard workers*, op. cit. (maintaining that “preventing self-employed workers who do not own a genuine and significant business organisation from bargaining collectively is at odds with the recognition of the right to collective bargaining as a human and a fundamental right and, consequently, arguing that only self-employed individuals who do not provide ‘labour’ but instead provide services using an independent, genuine and significant business organisation that they own and manage can have their right to bargain collectively restricted”).

¹⁰¹³ As already claimed, it is important to claim that innovation should not be a basis for an exemption or a *sui generis* status. CODAGNONE C., ABADIE F. and BIAGI F. (2016), *The Future of Work in the ‘Sharing Economy’. Market Efficiency and Equitable Opportunities or Unfair Precarisation?*, op. cit., p. 3 (arguing that platforms cannot stand “above the law”).

¹⁰¹⁴ DE STEFANO V. (2017), *Labour is not a technology – Reasserting the Declaration of Philadelphia in Times of Platform-Work and Gig-Economy*, op. cit., p. 13. See also EVANS J. and GIBB E. (2009), *Moving from precarious employment to decent work*, Geneva, Switzerland.

¹⁰¹⁵ For a stimulating reflection on instruments that regulators can use to nudge platform companies towards better labour-management practices, see FINCK M. (2017), *Digital Regulation: Designing a Supranational Legal Framework for the Platform Economy*, LSE Legal Studies Working Paper, No. 15. Available at SSRN: <https://ssrn.com/abstract=2990043>. In contrast to this interpretation, see COHEN

regulations¹⁰¹⁶. While it is correct to assert that the internal mechanism could boost the implementation of certain standards in terms of background controls, reliability of clients and certainty of payments, the myth of self-regulation – defined as the freedom from any outside interference – is not a panacea. Regulators should not be seduced by the claims of the uniqueness of these models¹⁰¹⁷. Fortunately, there is no shortage of international initiatives aimed at promoting *Codes of Conducts*¹⁰¹⁸ or *Guidelines*¹⁰¹⁹, in order to discipline the minimum levels of payment by the platforms, increase the transparency of criteria applied in the operation of internal rating systems, and ensure the legitimacy of content exchanged online¹⁰²⁰. In the face of these trends, several advocacy initiatives are demanding to address the special need for protection of platforms workers, and design rules aimed at contrasting unjustified rejections of the work completed or capricious deactivation of their accounts¹⁰²¹. It is time to define a “social responsibility by default” model which

M. and SUNDARARAJAN A. (2015), *Self-regulation and innovation in the peer-to-peer sharing economy* in *U. Chi. L. Rev. Dialogue*, 82(1), pp. 116-133. For a complete picture, see EPSTEIN R. A. (2013), *Can Technological Innovation Survive Government Regulation* in *Harv. JL & Pub. Pol’y*, 36(1), p. 87; GAMITO M. C. (2016), *Regulation.com. Self-Regulation and Contract Governance in the Platform Economy: A Research Agenda* in *Eur. J. Legal Stud.*, 9(2), p. 53.

¹⁰¹⁶ See KATZ V. (2015), *Regulating the sharing economy* in *Berkeley Tech. LJ*, 30, pp. 1067-1126.

¹⁰¹⁷ More importantly, the actors having interest in shaping the regulatory arena must be prevented from colonising and monopolising the debate. See MACKENZIE R. and MARTÍNEZ LUCIO M. (2005), *The realities of regulatory change: beyond the fetish of deregulation* in *Sociology*, 39(3), pp. 499-517.

¹⁰¹⁸ AUSTRIAN CHAMBER OF LABOUR et al. (2016), *Frankfurt Paper on Platform Based Work*, Frankfurt. As of 2017, eight companies have adhered to the code of conduct approved by a German federation of digital matching companies on a voluntary basis. Improvements are needed to make gig work fully beneficial also to workers. Several distinct priorities appear urgent; for a preliminary list, see ALOISI A., DE STEFANO V. and SILBERMAN M. S. (2017, May 29), *A Manifesto to Reform the Gig Economy*, op. cit. (setting achievable objectives for a healthy “digital transition” such as employment contracts for “regulars”, a reference to the collective agreement of “comparable” professionals, working standards for all – whether professionals or amateurs, portability and interoperability of ratings, the removal of exclusivity clauses binding workers, to list but a few). See also KOVÁCS E. (2017), *Regulatory Techniques for ‘Virtual Workers’ in Hungarian Labour Law E-Journal*, 2, p. 3 (arguing that “[...] codes of conduct and international framework agreements could play a significant role in the regulation of cross-border forms of virtual work”).

¹⁰¹⁹ See *OECD Guidelines for Multinational Enterprises*, available at: www.oecd.org/corporate/mne/.

¹⁰²⁰ See *Paid Crowdsourcing for the Better, Guideline for a prosperous and fair cooperation between companies, clients and crowdworkers*, available at: <http://crowdsourcing-code.com/>. Moreover the German trade union IG Metall has launched www.faircrowdwork.org, a platform supporting crowdworkers and promoting the share of information.

¹⁰²¹ See also UNI GLOBAL UNION (2017, December 11), *Global Union Sets new Rules for the Next Frontier of Work: Ethical AI and Employee Data Protection*, retrieved from <https://goo.gl/HMR24A>, and ETUC

promotes investments in upskilling strategies for incumbent workers. At the same time, representative bodies should be set up in these new digitally mediated non-standard work environments¹⁰²².

In a nutshell, it is fundamental that technology improves agile working arrangements that may well be desired by different types of workers, but such increased flexibility must be delivered without turning marginal workers into second-class citizens. In order to unleash the full potential of the “platform revolution” it is pivotal to temper the impulse to digital uniqueness with decisive actions to safeguard workers’ rights. Consequently, the claim that these models need to be supported or incentivised merely in view of their allegedly innovative nature and increased contribution to the activation of workers seems to be groundless. In this vein, the alarm on the irremediable obsolescence of existing legal notions is somehow misplaced. Nevertheless, recent episodic legislative interventions may have created an infinite series of subcategories and exceptions, instead of handling these instantiations as parts of a unique category. At this stage, the lawmakers’ reluctance to legislate is not to blame, not only because an extreme activism could impede the growth of this fast-rising business segment. Many online platforms are still in their business “infancy” and it is genuinely unknown how they will develop¹⁰²³. Put in these more general terms, legislative headlong rushes may end up crystallising transient organisational realities in a permanent shape, thus asphyxiating the development of “peripheral” entrepreneurial initiatives and hindering innovation.

In the last decades, indeed, the proliferation of contractual solutions and the profound differences among European Member States have determined an uneven playing field when it comes to social rights. Platform worker do not necessarily need new regulations, but an unambiguous framework and a more effective enforcement. Paradoxically, a courier performing the same activity can be classified as a quasi-subordinate worker in Italy, as a self-employed worker in France, as an employee in Germany, as a “zero-hours” contract worker in the UK or as an intermittent worker

(2016, June 16), *ETUC resolution on digitalisation: “towards fair digital work”*, retrieved from <https://goo.gl/PrZvSX>.

¹⁰²² An example is offered by *Foodora* couriers in Vienna, Austria, who recently established the first works council for platform- or app-based workers. Other grassroots initiatives are taking place all around Europe.

¹⁰²³ Finally, there is an increasing number of genuinely successful small entrepreneurs, focused on particular niches or offering special skills, for whom crowdwork and work on-demand via platform have become a very profitable source of new business.

in Belgium¹⁰²⁴. It is worth emphasising that such fragmentation can be reduced thanks to uniform measures, which in turn may lower the costs associated with expansion, and hence encourage business development. Concomitantly, it is important to avoid unnecessary regulatory burdens. Thus, a harmonised frame of reference is much more desirable, while a patchwork of differing legislations may result in an open invitation to legal arbitrage or jurisdiction shopping¹⁰²⁵. As already flagged above, this sort of permanent state of exception, grounded on the allegedly transformative nature of the innovation sector, should be disallowed. Accordingly, even disruptive companies entering the labour market must play by the rules. Concerning the latter, the promise of new employment opportunities should not precipitate a “social race to the bottom” resulting in dehumanisation, commodification and deskilling of work¹⁰²⁶.

In the previous section, this research has reviewed national practices as well as legislations that may be adapted with regard to labour platforms and, more broadly, to new forms of platform-mediated casual working patterns. Emphasis should be given to the fact that developing specific legislation targeting platforms might prove to be unfruitful. Conversely, different methods are needed, taking into account the defining characteristics and legal determinants of each atypical form of work. In order to reconcile new working patterns with long-lasting open issues, this chapter concludes by recommending a thoughtful regulatory approach. Having decided how to treat platforms whose influence and command on the ultimate provider is intense,

¹⁰²⁴ CRAIG J. D. and LYNK S. M. (Eds.) (2006), *Globalization and the future of labour law*, Cambridge, MA, p. 2 (arguing that “the regulation of these workplaces, when they are regulated at all, remains the province of national labour and employment laws [...]”, despite “dynamic push of international trade patterns, capital investment flows, and migratory labour movements”).

¹⁰²⁵ It is therefore advisable to improve standards for digital labour platforms at the European level. However, according to the European Commission, “[i]t is undisputed that the centre of gravity for action in the social field should and will always remain with national and local authorities and their social partners”. See EUROPEAN COMMISSION (2017), *Reflection paper on the social dimension of Europe*, Brussels, p. 30. For an analysis on the European institutions’ legal competence to regulate platform-mediated labour, see RISAK M. (2018), *Fair Working Conditions for Platform Workers: Possible Regulatory Approaches at the EU level*, Berlin, p. 13 (focusing on Article “153(2) (b) TFEU, which provides for the adoption of directives setting minimum requirements with respect to *inter alia* ‘working conditions’ as set out in Article 153(1) (b) TFEU”).

¹⁰²⁶ Concerns are being voiced around its rapid growth and the potential impact of on inequality, productivity and innovation. Quality of jobs is a key element of a virtuous cycle for companies that results in increased profitability. TON Z. (2014), *The good jobs strategy: How the smartest companies invest in employees to lower costs and boost profits*, Boston, MA. This is why it is urgent to counter the dominant view that non-standard or even precarious employment is necessary to make the labour market more flexible to increase competitiveness and (good-quality) employment.

“surgical” regulatory interventions shall help the collaborative economy companies to adjust and improve their business model, building a new phase of “shared social responsibility”¹⁰²⁷. In this sense, the current European attitude is perceived as a fair balance between supporting entrepreneurs’ confidence and implementing workers’ protections, but considerable efforts need to be done in order to ensure a stable and sustainable future.

Hopefully, this detailed contribution adds coherence to a series of discourses in a way that refocuses the crux of the policy debates, resolves some on-going points of contention and moves the debate forward. A number of interesting themes emerge, some of which have so far received less attention and deserve further study. There are three main messages which could come out of this research. First and foremost, *Uberisation* does not redefine the notion of the firm. Contrariwise, the common business model in the platform economy combines different features and functions belonging to classical models (that are hierarchies, market and networks) with controversial results in terms of balancing between the powers exercised and the responsibilities assumed. Secondly, the rapidly increasing popularity and success of new, atypical and hybrid working arrangements suggest their impact only just begun to emerge. This study illuminates how platforms are forging a relatively complex externalisation model of employment relations subject to pressures for work intensification and based on structured insecurity. Since problems concerning employment status and misclassification extend much beyond the boundaries of the platform economy, creating a specific category of worker in this sector would artificially segment the labour market and it would also add complexity. Lastly, in the three main subsectors taken into consideration, platform-mediated labour has once again revealed its true colours: everything but “disruptive” working patterns. Rather, platforms re-intermediate traditionally casual working arrangements throughout a digital and dispersed chain. Specifically, it is argued that much of the competitive advantage of the new platform-based players derives from their failure to comply with labour or social security regulations. If that should also be the case, in future, there could be the risk of platforms acting as brokers for precarious work, rather than creating new opportunities.

¹⁰²⁷ As argued in ALOISI A. (2016), *Commoditized Workers. Case Study Research on Labour Law Issues Arising from a Set of ‘On-Demand/Gig Economy’ Platforms*, op. cit., p. 687. See also DAS ACEVEDO D. (2016), *Regulating Workforce Relationships in the Sharing Economy in Emp. Rts. & Emp. Pol’y J.*, 20(1), p. 10.

All the observations developed thus far push towards the goal not “to make all work standard, but rather to make all work decent”¹⁰²⁸. Improving working conditions in the collaborative economy might counter the forces making platform companies legally vulnerable. While law-abiding firms treating their workers appropriately may struggle to compete, and could be driven out of business, their direct competitors are experiencing problems that will corrode the on-demand economy if left unresolved. Rather than designing (new) schemes specifically for new forms of employment, the key challenge is to find strategies to integrate platform-based labour into existing contractual arrangements and social protection systems. Ultimately, by advocating a flexible and “illuminated” use of traditional categories and tests to regulate platform-coordinated work, this research recommends that business models should be selected in line with available legal patterns, without stifling innovation, reducing competitiveness or thwarting job creation.

To restore the level playing field, it is important to close the gap between regulatory modules and concrete working arrangements. This is a way to ensure that the future world of work is proactively shaped and not only imagined or, even worse, awaited.

¹⁰²⁸ See INTERNATIONAL LABOUR OFFICE (2015), *Conclusions of the Meeting of Experts on Non-Standard Forms of Employment*, available at <https://goo.gl/MtbrcW>.

BIBLIOGRAPHY

- AA.VV. (2009), *La figura del datore di lavoro, articolazioni e trasformazioni: in ricordo di Massimo D'Antona, dieci anni dopo: atti del XVI Congresso nazionale di diritto del lavoro*, Catania, 21-23 maggio 2009, Milano.
- ABRAHAM K. G. and TAYLOR S. K. (1996), *Firms' Use of Outside Contractors: Theory and Evidence* in *Journal of Labor Economics*, 14(3), pp. 394-424.
- ACCORNERO A. (2001), *La «società dei lavori»* in *Sociologia del lavoro*, 80, pp. 49-56.
- ACCORNERO A. (2001), *Pezzi di lavoro in il Mulino*, 50(1), pp. 102-114.
- ACCORNERO A. (1997), *Era il secolo del lavoro*, Bologna.
- ACCORNERO A. (1994), *Il mondo della produzione*, Bologna.
- ACEMOGLU D. and RESTREPO P. (2017), *Robots and Jobs: Evidence from US labor markets*, NBER Working Paper No. 23285.
- ACEMOGLU D. and ROBINSON J. A. (2012), *Why nations fail: The origins of power, prosperity, and poverty*, New York.
- ADAM D., BREMERMAN M., DURAN J., FONTANAROSA F., KRAEMER B., WESTPHAL H., KUNERT A. and TÖNNES LÖNNROOS L. (2016), *Digitalisation and working life: lessons from the Uber cases around Europe*, EurWORK, European Observatory of Working Life.
- ADAMS A., FREEDLAND M. R. and PRASSL J. (2015), *The 'Zero-Hours Contract': Regulating Casual Work, or Legitimizing Precarity?* in *Giorn. dir. lav. rel. ind.*, 148, pp. 529-553.
- ADAMS Z. and DEAKIN S. (2014), *Re-regulating zero hours contracts*. Institute for Employment Rights, Liverpool.
- ADAMS Z. and DEAKIN S. (2014), *Institutional Solutions to Inequality and Precariousness in Labour Markets in British Journal of Industrial Relations*, 52(4), pp. 779-809.
- AGLIETTA M. (2000), *A theory of capitalist regulation: The US experience*, London.
- AKERLOF G. A. (1970), *The market for "lemons": Quality uncertainty and the market mechanism* in *The Quarterly Journal of Economics*, 84(3), pp. 488-500.
- ALCHIAN A. A. and DEMSETZ H. (1972), *Production, Information Costs, and Economic Organization* in *American Economic Review*, 62, pp. 777-795.
- ALES E. and FAIOLI M. (2010), *Self-employment and bogus self-employment in the European construction industry*, Expert Report, Self-employment and bogus self-employment in the construction industry in Italy.
- ALEXANDER C. S. (2016), *Legal avoidance and the restructuring of work* in COHEN L. E., BURTON M. D. and LOUNSBURY M. (Eds.), *The structuring of work in organizations*, Bingley, UK, pp. 311-331.
- ALEXANDER C. S. and TIPPETT E. C. (forthcoming), *The Hacking of Employment Law* in *Missouri Law Review*, 82.
- ALLEN J., ROOT J. and SCHWEDE A. (2017), *The Firm of the Future*, Bain Brief.
- ALLEVA G. (2017), *L'impatto sul mercato del lavoro della quarta rivoluzione industriale*, Communication of the President of The National Institute for Statistics (Istat), retrieved from <https://goo.gl/pbSmtD>.
- ALLEVA P. (1996), *Ridefinizione della fattispecie di contratto di lavoro. Prima proposta di legge* in GHEZZI G. (Ed.), *La disciplina del mercato del lavoro. Proposte per un testo unico*, Roma.
- ALMEIDA R., LEITE CORSEUIL C. H. and POOLE J. P. (2017), *The impact of digital technologies on routine tasks: do labor policies matter?*, Paper presented at the IZA Workshop: Labor Productivity and the Digital Economy, 30-31 October 2017.
- ALOISI A. (forthcoming), *The role of European institutions in promoting decent work in the collaborative economy* in BRUGLIERI M. (Ed.), *Multi-disciplinary design of sharing services*, Milano.

ALOISI A. (2016), *Commoditized Workers. Case Study Research on Labour Law Issues Arising from a Set of 'On-Demand/Gig Economy' Platforms in Comp. Lab. L. & Pol'y J.*, 37(3), pp. 653-690.

ALOISI A. (2016), *Il lavoro "a chiamata" e le piattaforme online della collaborative economy: nozioni e tipi legali in cerca di tutele in Labour & Law Issues*, 2(2), pp. 16-56.

ALOISI A., DE STEFANO V. and SILBERMAN M. S. (2017, May 29), *A Manifesto to Reform the Gig Economy*, retrieved from <https://goo.gl/fX67S9>.

AMATORI F. (1991), *Forme di impresa in prospettiva storica* in ZAMAGNI S. (Ed.), *Imprese e mercati*, Torino, pp. 123-154.

ANTHES E. (2017), *The shape of work to come: Three ways that the digital revolution is reshaping workforces around the world* in *Nature*, 550, pp. 316-319.

ANTÓN J.-I., FERNÁNDEZ-MACÍAS E. and MUÑOZ DE BUSTILLO R. (2012), *Identifying bad jobs across Europe* in CARRÉ F., FINDLAY P., TILLY C. and WARHURST C. (Eds.), *Are bad jobs inevitable?: Trends, determinants and responses to job quality in the twenty-first century*, Basingstoke, pp. 25-44.

APPAY B. (2010), *'Precarization' and Flexibility in the Labour Process: A Question of Legitimacy and a Major Challenge for Democracy* in THORNLEY C., JEFFERYS S. and APPAY B. (Eds.), *Globalization and Precarious Forms of Production and Employment*, Cheltenham, UK, pp. 23-39.

ARMANO E. and MURGIA A. (2017), *Introduzione* in ARMANO E., MURGIA A. and TELI M. (Eds.), *Platform Capitalism e confini del lavoro negli spazi digitali*, Sesto San Giovanni (MI), pp. 7-16.

ARMANO E. and MURGIA A. (Eds.) (2017), *Mapping Precariousness, Labour Insecurity and Uncertain Livelihoods: Subjectivities and Resistance*, London.

ARNOLD D. and BONGIOVI J. R. (2013), *Precarious, informalizing, and flexible work: Transforming concepts and understandings in American Behavioral Scientist*, 57(3), pp. 289-308.

ARNTZ M., GREGORY T. and ZIERAHN U. (2017), *Revisiting the risk of automation in Economics Letters*, 159(C), pp. 157-160.

ARNTZ M., GREGORY T. and ZIERAHN U. (2016), *The risk of automation for jobs in OECD countries: A comparative analysis*, *OECD Social, Employment, and Migration Working Papers*, No. 189.

ARONOWITZ S. and DiFAZIO W. (1994), *The jobless future: Sci-Tech and the Dogma of Work*, Minneapolis, MN.

ARTHURS H. W. (2017), *The false promise of the Sharing Economy*, Paper presented at the LLRN 3rd Conference, Labour Law Research Network, Toronto 25-27 June 2017.

ARTHURS H. W. (1965), *The dependent contractor: A study of the legal problems of countervailing power* in *The University of Toronto Law Journal*, 16(1), pp. 89-117.

ATKINSON J. (1987), *Flexibility or fragmentation? The United Kingdom Labour Market in the Eighties* in *Labour and Society*, 12(1), pp. 87-105.

ATKINSON J. (1984), *Manpower Strategies for Flexible Organisations* in *Personnel Management*, 16(8), pp. 28-31.

ATKINSON R. D. and WU J. (2017), *False Alarmism: Technological Disruption and the US Labor Market, 1850-2015*, *Information Technology and Innovation Foundation*.

AURIEMMA S. (2017), *Subordinazione nell'epoca dell'economia digitale* in *Riv. giur. lav.*, 2, pp. 129-133.

AURIEMMA S. (2017), *Impresa, lavoro e subordinazione digitale al vaglio della giurisprudenza* in *Riv. giur. lav.*, 1, pp. 281-290.

AUSTRIAN CHAMBER OF LABOUR et al. (2016), *Frankfurt Paper on Platform Based Work*, Frankfurt.

AUTOR D. H. (2016, August 15), *The Shifts – Great and Small – in Workplace Automation*, retrieved from <https://mitsmr.com/2blCUi7>.

AUTOR D. H. (2015), *Why are there still so many jobs? The history and future of workplace automation* in *The Journal of Economic Perspectives*, 29(3), pp. 3-30.

AUTOR D. H. (2013), *The "task approach" to labor markets: an overview*, NBER Working Paper, No. 18711.

AUTOR D. H. (2001), *Wiring the labor market in The Journal of Economic Perspectives*, 15(1), pp. 25-40.

AUTOR D. H. and DORN D. (2013), *The growth of low-skill service jobs and the polarization of the US labour market in American Economic Review*, 103(5), pp. 1553-1597.

AUTOR D. H., DORN D., KATZ L. F., PATTERSON C. and VAN REENEN J. (2017), *The Fall of the Labor Share and the Rise of Superstar Firms*, NBER Working Paper, No. 23396.

AUTOR D. H., LEVY F. and MURNANE R. J. (2003), *The skill content of recent technological change: An empirical exploration in The Quarterly Journal of Economics*, 118(4), pp. 1279-1333.

BAKER G., GIBBONS R. and MURPHY K. J. (2002), *Relational Contracts and the Theory of the Firm in The Quarterly Journal of Economics*, 117(1), pp. 39-84.

BAKHSI H., SCHNEIDER P., DOWNING J., OSBORNE M. (2017, September 28), *Are robots taking our jobs?*, retrieved from <https://shar.es/1VOO0q>.

BAINES T. S., LIGHTFOOT H. W., BENEDETTINI O. and KAY J. M. (2009), *The servitization of manufacturing: A review of literature and reflection on future challenges in Journal of Manufacturing Technology Management*, 20(5), pp. 547-567.

BANFI D. and BOLOGNA S. (2011), *Vita da freelance. I lavoratori della conoscenza e il loro futuro*, Milano.

BARASSI L. (1915), *Il contratto di lavoro nel diritto positivo italiano*, Milano.

BARBERA M. (2010), *Trasformazioni della figura del datore di lavoro e flessibilizzazione delle regole del diritto in Giorn. dir. lav. rel. ind.*, 126, pp. 203-255.

BARNARD C. (2011), *Discrimination law, self-employment and the liberal professions in European Anti-Discrimination Law Review*, 12, pp. 21-31.

BAVARO V. (2017), *Questioni in Diritto su*

Lavoro Digitale, Tempo e Libertà, paper presented at "Impresa, lavoro e non lavoro nell'economia digitale", Brescia, 12-13 October 2017.

BEBLAVÝ M., MASELLI I. and MARTELLUCCI E. (2012), *Workplace Innovation and Technological Change, CEPS Special Report*, Brussels.

BECK U. (1992), *The risk society: Towards a new modernity*, London.

BEFORT S. F. (2003), *Revisiting the black hole of workplace regulation: A historical and comparative perspective of contingent work in Berkeley Journal of Employment and Labor Law*, 24(1), pp. 153-178.

BEFORT S. F. (2002), *Labor and Employment Law at the Millennium: A Historical Review and Critical Assessment in Boston College Law Review*, 43(2), pp. 351-460.

BEKKER S. (2012), *Flexicurity: The Emergence of a European Concept*, Cambridge, UK.

BELL D. (1973) *The Coming of Post-Industrial Society. A Venture in Social Forecasting*, New York.

BELL M. (2012), *Between flexicurity and fundamental social rights: the EU directives on atypical work in European Law Review*, 37(1), pp. 31-48.

BELL M. (2011), *Achieving the Objectives of the Part-Time Work Directive? Revisiting the PartTime Workers Regulations in Industrial Law Journal*, 40(3), pp. 254-279.

BELLACE J. R. (1996), *Labour Law for the Post-Industrial Era in Int'l J. Comp. Lab. L. & Indus. Rel.*, 12(3), pp. 189-194.

BELLONI A. (2017), *Uberization*, Milano.

BENERÍA L. (2001), *Shifting the risk: New employment patterns, informalization, and women's work in International Journal of Politics, Culture, and Society*, 15(1), pp. 27-53.

BENTOLILA S. and DOLADO J. J. (1994), *Labour flexibility and wages: Lessons from Spain in Economic Policy*, 9(18), pp. 55-99.

BENZELL S. G., KOTLIKOFF L. J., LAGARDA G. and SACHS J. D. (2015), *Robots are us: Some economics of human replacement*, NBER Working Paper, No. 20941.

BERCUSSON B. and ESTLUND C. (Eds.) (2008), *Regulating labour in the wake of globalisation: new challenges, new institutions*, Oxford, UK and Portland, OR.

BERG J. (2016), *Income Security in the On-Demand Economy: Findings and Policy Lessons from a Survey of Crowdworkers in Comp. Lab. L. & Pol'y J.*, 37(3), pp. 543-576.

BERG J. and DE STEFANO V. (2017, April 18), *It's time to regulate the gig economy*, retrieved from <https://goo.gl/3LzThW>.

BERG J. and DE STEFANO V. (2015, July 10), *Regulating work in the 'gig economy'*, retrieved from <https://goo.gl/cs3tXp>.

BERG J., ALEKSYNKA M., DE STEFANO V. and HUMBLET M. (forthcoming), *Non-standard employment around the world: regulatory answers to face its challenges* in *Bulletin of Comparative Industrial Relations*.

BERGER T., CHEN C. and FREY C. B. (2017), *Drivers of disruption? Estimating the Uber effect*, Working Paper, Oxford Martin School, University of Oxford.

BERGER T. and FREY C. B. (2016), *Structural Transformation in the OECD: Digitalisation, Deindustrialisation and the Future of Work*, OECD Social, Employment and Migration Working Papers, No. 193.

BERGVALL-KÅREBORN B. and HOWCROFT D. (2014), *Amazon Mechanical Turk and the commodification of labour in New Technology, Work and Employment*, 29(3), pp. 213-223.

BERINS COLLIER R., DUBAL V. B. and CARTER C. (2017), *Labor Platforms and Gig Work: The Failure to Regulate*, IRLE Working Paper, No. 106.

BERMAN S. and MARSHALL A. (2014), *The next digital transformation: from an individual-centered to an everyone-to-everyone economy in Strategy & Leadership*, 42(5), pp. 9-17.

BERTA G. (2014), *Produzione intelligente. Un viaggio nelle nuove fabbriche*, Torino.

BERTOLINI S. (2003), *The microregulation of atypical jobs in Italy: The case of collaborators* in ZEYINOGLU I. U. (Ed.), *Flexible Work Arrangements: Conceptualizations and*

International Experiences, The Hague, The Netherlands, pp. 45-63.

BHUIYAN J. (2015, March 29) *Why Is Uber New York Funneling Thousands of Drivers to This Training Class?*, retrieved from <https://goo.gl/jmyEKF>.

BIAGI M. (2003), *L'outsourcing: una strategia priva di rischi?* in MONTUSCHI L., TIRABOSCHI M. and TREU T. (Eds.), *Marco Biagi: un giurista progettuale*, Milano, pp. 271-285.

BIAGI M. (1978), *La dimensione dell'impresa nel diritto del lavoro*, Milano.

BIAGI M. and TIRABOSCHI M. (1999), *Le proposte legislative in materia di lavoro parasubordinato: tipizzazione di un "tertium genus" o codificazione di uno "Statuto dei lavori"?* in *Lav. dir.*, 4, pp. 571-592.

BIASI M. (2018), *Dai pony express ai riders di Foodora. L'attualità del binomio subordinazione-autonomia (e del relativo metodo di indagine) quale alternativa all'affannosa ricerca di inedite categorie* in ZILIO GRANDI G. and BIASI M. (Eds.), *Commentario Breve allo Statuto del Lavoro Autonomo e del Lavoro Agile*, Padova, pp. 67-91.

BIASI M. (2014), *Dal divieto di interposizione alla codatorialità: le trasformazioni dell'impresa e le risposte dell'ordinamento*, WP C.S.D.L.E. "Massimo D'Antona".IT, 218.

BISOM-RAPP S. and COIQUAUD U. (2017), *The Role of the State towards the Grey Zone of Employment: Eyes on Canada and the United States* in *Revue Interventions économiques in Papers in Political Economy*, 58.

BLANPAIN R. (2011), *Decent Work in the European Union: Hard Goals, Soft Results* in *Emp. Rts. & Emp. Pol'y J.*, 15(1), pp. 29-42.

BOCK A.-K., BONTOUX L., FIGUEIREDO DO NASCIMENTO S., SZCZEPANIKOVA A. (2016), *The future of the EU collaborative economy – Using scenarios to explore future implications for employment*, JRC Science for Policy Report.

BOERI T., CAHUC P. and ZYLBERBERG A. (2015), *The Costs of Flexibility-Enhancing Structural Reforms: A Literature Review*, OECD Economics Department Working Papers, No. 1227.

BOERI T. and GARIBALDI P. (2007), *Two tier reforms of employment protection: A honeymoon effect?* in *The Economic Journal*, 117(521), pp. F357-F385.

BÖGENHOLD D., KLINGLMAIR R. and KANDUTSCH F. (2018), *Self-employment on the way in a digital economy: A variety of shades of grey*, IfS Discussion Paper No. 01.

BÖGENHOLD D., KLINGLMAIR R. and KANDUTSCH F. (2017), *Solo Self-Employment, Human Capital and Hybrid Labour in the Gig Economy* in *Foresight and STI Governance*, 11(4), pp. 23-32.

BOGG A., COSTELLO C., DAVIES A. C. L. and PRASSL J. (Eds.) (2015), *The autonomy of labour law*, Oxford, UK.

BOLTANSKI L. and CHIAPELLO E. (2005), *The new spirit of capitalism*, New York and London.

BONOMI A. (1997), *Il capitalismo molecolare: la società al lavoro nel Nord Italia*, Torino.

BOOKS A. (1988), *Myth and Muddle-an Examination of Contracts for the Performance of Work* in *University of New South Wales Law Journal*, 11(2), pp. 48-101.

BOOTH A. L., FRANCESCONI M. and FRANK J. (2002), *Temporary jobs: stepping stones or dead ends?* in *The Economic Journal*, 112(480), pp. 189-213.

BORELLI S. (2011), *Lavoratore (definizione eurunitaria)* in PEDRAZZOLI M. (Ed.), *Lessico giuslavoristico. Diritto del lavoro dell'Unione europea e del mondo globalizzato*, 3, Bologna, pp. 123-136.

BORZAGA M. (2012), *Lavorare per progetti: uno studio su contratti di lavoro e nuove forme organizzative d'impresa*, Padova.

BOSCH G. (2004), *Towards a new standard employment relationship in Western Europe* in *British Journal of Industrial Relations*, 42(4), pp. 617-636.

BOSCH G. and PHILIPS P. (Eds.) (2003), *Building chaos: an international comparison of deregulation in the construction industry*, London.

BOSTROM N. (2014), *Superintelligence: Paths, Dangers, Strategies*, Oxford, UK.

BOTSMAN R. and ROGERS R. (2011), *What's mine is yours: how collaborative consumption is changing the way we live*, London.

BOWLES J. (2014, July 24), *Chart of the Week: 54% of EU jobs at risk of computerisation*, retrieved from <https://goo.gl/hqwkr4>.

BOWLES S. and GINTIS H. (1993), *The revenge of homo economicus: contested exchange and the revival of political economy* in *Journal of Economic Perspectives*, 7(1), pp. 83-102.

BOWLES S. and GINTIS H. (1988), *Contested exchange: political economy and modern economic theory* in *The American Economic Review*, 78(2), pp. 145-150.

BRADACH J. L. and ECCLES R.G. (1989), *Price, authority, and trust: From ideal types to plural forms* in *Annual Review of Sociology*, 15(1), pp. 97-118.

BRADSHAW T. (2017, July 9), *Self-driving cars prove to be labour-intensive for humans*, retrieved from <https://on.ft.com/2uHBIq>.

BRASS T. (2004), *"Medieval working practices"? British agriculture and the return of the gangmaster* in *Journal of Peasant Studies*, 31(2) pp. 313-340.

BREGIANNIS F., BRUURMIJN W. J., CALON E. and ORTEGA M. A. D. (2017), *Workers in the Gig Economy, Identification of Practical Problems and Possible Solutions*, Tilburg University WP.

BRODIE D. (2005) *Employees, workers and the self-employed* in *Industrial Law Journal*, 34(3), pp. 253-260.

BROLLO M. (1990), *Il "lavoro decentrato" nella dottrina e nella giurisprudenza* in *Quad. dir. lav. rel. ind.*, 8, pp. 133-159.

BRONZINI G. (2016), *Le linee guida della Commissione europea sulla collaborative economy: much ado for nothing?* in *Riv. it. dir. lav.*, 4, pp. 259-271.

BRONZINI G. (2016), *Il (futuro) giuridico del lavoro autonomo nell'era della share-economy* in *Riv. it. dir. lav.*, 1, pp. 75-94.

BRONZINI G. (1997), *Postfordismo e garanzie: il lavoro autonomo* in BOLOGNA S. and FUMAGALLI A. (Eds.), *Il lavoro autonomo di*

seconda generazione. *Scenari del post-fordismo*, Milano, pp. 319-347.

BROOKS C. and MOODY K. (2016, July 26), *Interview: Busting the Myths of a Workerless Future*, retrieved from <https://goo.gl/Fk8dvvf>.

BROOKS E. (2017, May 22), *The 'Last Chance for Social Europe': The European Pillar of Social Rights can only work if integrated into the EU's existing policies*, retrieved from <https://goo.gl/m6dFMe>.

BROUGHTON A., GREEN M., RICKARD C., SWIFT S., EICHHORST W., TOBSCH V. and TROS F. (2016), *Precarious Employment in Europe: Patterns, Trends and Policy Strategies in Studies for the European Parliament's Committee on Employment and Social*.

BROWN M., FALK A. and FEHR E. (2004), *Relational contracts and the nature of market interactions in Econometrica*, 72(3), pp. 747-780.

BRUMM F. (2016), *Making Gigs Work: The new economy in context*, Master Thesis, Human Resources and Industrial Relations, University of Illinois – Urbana Champaign.

BRUSCO S. (1982), *The Emilian model: productive decentralisation and social integration in Cambridge Journal of Economics*, 6(2), pp. 167-184.

BRYNJOLFSSON E. and MCAFEE A. (2015, August 12), *Will Humans Go the Way of Horses?*, retrieved from <http://fam.ag/1OfGFFX>.

BRYNJOLFSSON E. and MCAFEE A. (2014), *The second machine age: work, progress, and prosperity in a time of brilliant technologies*, New York.

BRYNJOLFSSON E. and MCAFEE A. (2011), *Race against the machine*, Lexington, MA.

BRYNJOLFSSON E., MALONE T. W., GURBAXANI V. and KAMBIL A. (1994), *Does information technology lead to smaller firms? in Management Science*, 40(12), pp. 1628-1644.

BUELENS J. and PEARSON J. (2012), *Standard work: an anachronism?*, Antwerp and Cambridge, UK.

BURCHELL B., DEAKIN S. and HONEY S. (1999), *The employment status of individuals in*

non-standard employment, Department of Trade and Industry, London.

BURCHELL B., DAY D., HUDSON M., LADIPO D., MANKELOW R., NOLAN J., REED H., WICHERT I. and WILKINSON F. (1999), *Job Insecurity and Work Intensification: Flexibility and the Changing Boundaries of Work*, York.

BURKE A. (Ed.) (2015), *The Handbook of Research on Freelancing and Self-employment*, Dublin.

BUSACCA B. (2005). *Decentramento produttivo e processi di esternalizzazione: il mutamento dell'organizzazione produttiva in Dir. rel. ind.*, 2, pp. 324-332.

BUSCH C., DANNEMANN G., SCHULTE-NÖLKE H., WIEWIÓROWSKA-DOMAGALSKA A. and ZOLL F. (2016), *Discussion Draft of a Directive on Online Intermediary Platforms in Journal of European Consumer and Market Law*, 5(4), pp. 164-169.

BUSCH C., SCHULTE-NÖLKE H., WIEWIÓROWSKA-DOMAGALSKA A. and ZOLL, F. (2016), *The Rise of the Platform Economy: A New Challenge for EU Consumer Law? in Journal of European Consumer and Market Law*, 5(1), pp. 3-10.

BUSCHOFF K. S. and SCHMIDT C. (2009), *Adapting labour law and social security to the needs of the 'new self-employed'—comparing the UK, Germany and the Netherlands in Journal of European Social Policy*, 19(2), pp. 147-159.

BUTERA F. (2005), *Il castello e la rete. Impresa, organizzazioni e professioni nell'Europa degli anni '90*, Milano.

BUTLER S. (2017, April 5), *Deliveroo accused of 'creating vocabulary' to avoid calling couriers employees*, retrieved from <https://gu.com/p/68cj8>.

BUTSCHEK S., KAMPKÖTTER P. and SLIWKA D. (2017), *Paying Gig Workers*, Paper presented at the IZA Workshop: Labor Productivity and the Digital Economy, 30-31 October 2017.

CABRELLI D. (2017), *Uber e il concetto giuridico di "worker": la pro-spettiva britannica (nota a UK Employment Tribunal, Central London, England, United Kingdom, 26 ottobre 2016, n.*

2202551/2015) in *Dir. rel. ind.*, 27(2), pp. 575-581.

CAFAGGI F. (Ed.) (2004), *Reti di imprese tra regolazioni e norme sociali. Nuove sfide per diritto ed economia*, Bologna.

CALO R. and ROSENBLAT A. (2017), *The Taking Economy: Uber, Information, and Power in Columbia Law Review*, 117(6), pp. 1623-1690.

CAMPANELLA P. (2004), *Outsourcing e rapporti di lavoro. La dimensione giuslavoristica dei processi di esternalizzazione dell'impresa* in CAMPANELLA P. and CLAVARINO A. (Eds.), *L'impresa dell'outsourcing*, Milano, pp. 99-139.

CAPPELLI P. (2001) *On-line recruiting in Harvard Business Review*, 79(3), pp. 139-146.

CAPPELLI P. (1998), *The New Deal at Work: Managing the Market-Based Employment Relationship*, Boston, MA.

CAPPELLI P. and KELLER J. R. (2013), *Classifying work in the new economy in Academy of Management Review*, 38(4), pp. 575-596.

CAPPELLI P. and NEUMARK D. (2004), *External Churning and Internal Flexibility: Evidence on the Functional Flexibility and Core-Periphery Hypotheses in Industrial Relations*, 43(1), pp. 148-182.

CARABELLI U. (2004), *Organizzazione del lavoro e professionalità: una riflessione su contratto di lavoro e post-taylorismo in Giorn. dir. lav. rel. ind.*, 4., pp. 1-99.

CARABELLI U. (1999), *Flessibilizzazione o destrutturazione del mercato del lavoro? Il lavoro interinale in Italia ed in Europa* in LISO F. and CARABELLI U. (Eds.), *Il lavoro temporaneo. Commento alla legge n. 196/1997*, Milano, pp. 33-96.

CARINCI F. (2007), *Diritto privato e diritto del lavoro*, Torino.

CARINCI F. (1985), *Rivoluzione tecnologica e diritto del lavoro: il rapporto individuale in Giorn. dir. lav. rel. ind.*, pp. 203-241.

CARINCI M. T. (2008), *Utilizzazione e acquisizione indiretta del lavoro: somministrazione e distacco, appalto e subappalto, trasferimento d'azienda e di ramo*, Torino.

CARINCI M. T. (2001), *L'interposizione e il lavoro interinale* in CARINCI F. and MISCIONE M., *Il diritto del lavoro dal "Libro Bianco" al Disegno di legge delega*, Milano.

CARINCI M. T. (2000), *La fornitura di lavoro altrui*, Milano.

CARRÉ F., FINDLAY P., TILLY C. and WARHURST C. (2012), *Job quality: Scenarios, analysis and interventions in ID., Are bad jobs inevitable?: Trends, determinants and responses to job quality in the twenty-first century*, Basingstoke, pp. 1-22.

CARUSO B. (2017), *La rappresentanza delle organizzazioni di interessi tra disintermediazione e re-intermediazione in Arg. dir. lav.*, 3, pp. 555-579.

CARUSO B. (2013), *"The Employment Contract is Dead: Hurrah for the Work Contract!" A European Perspective* in STONE K. V. W. and ARTHURS H. (Eds.), *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, New York, pp. 95-111.

CARUSO B. (2004), *Flexibility in Labour Law: The Italian Case* in CARUSO B. and FUCHS M. (Eds.), *Labour Law and Flexibility in Europe: The Cases of Germany and Italy*, Baden Baden, pp. 11-46.

CASALE G. (2007), *La qualificazione del rapporto di lavoro nella Raccomandazione No. 198/2006 dell'Organizzazione Internazionale del Lavoro in Riv. it. dir. lav.*, 3, pp. 135-143.

CASELLI F. and MANNING A. (2017), *Robot Arithmetic: Can New Technology Harm All Workers or the Average Worker?*, CEP Discussion Paper, No. 1497.

CASILLI A. (2016, November 20), *Never mind the algorithms: the role of click farms and exploited digital labor in Trump's election*, retrieved from <https://goo.gl/QA2ZKA>.

CASILLI A. (2016), *Is There a Global Digital Labor Culture? Marginalization of Work, Global Inequalities, and Coloniality*, Paper presented at the 2nd symposium of the Project for Advanced Research in Global Communication (PARGC), Philadelphia, PA.

CASTELLS M. (2011), *The rise of the network society: The information age: Economy, society, and culture*, Oxford, UK.

CASTELLS M. (1996), *The information age: Economy, society, and culture*, Oxford, UK.

CASTELVETRI L. (2002), *Perché discutere (ancora) di alternativa tra contratto e rapporto di lavoro?* in *Dir. rel. ind.*, 3, pp. 467-477.

CASTELVETRI L. (2001), *Libertà contrattuale e subordinazione*, Milano.

CASTELVETRI L. (1994), *Il diritto del lavoro delle origini*, Milano.

CAUFFMAN C. (2016), *The Commission's European Agenda for the Collaborative Economy – (Too) Platform and Service Provider Friendly?* in *Journal of European Consumer and Market Law*, 5(6), pp. 235-243.

CAUFFMAN C. and SMITS J. (2016), *The sharing economy and the law: food for European lawyers* in *Maastricht Journal of European and Comparative Law*, 23(6), pp. 903-907.

CAVALLINI G. (2017), *The (Unbearable?) Lightness of Self-employed Work Intermediation*, Paper presented at the Fifteenth International Conference in commemoration of Professor Marco Biagi, Modena, Marco Biagi Foundation, 20-21 March 2017.

CELATA G. (1980), *L'operaio disperso* in AA.VV. (1980), *L'impresa in frantumi*, Roma, pp. 83-108.

CENTAMORE G. and RATTI L. (2017), *Oltre il dilemma qualificatorio: potenzialità e limiti del diritto antidiscriminatorio nella protezione del lavoratore on-demand*, paper presented at "Impresa, lavoro e non lavoro nell'economia digitale", Brescia, 12-13 October 2017.

CESTER C. (2016), *Il neotipo e il prototipo: precarietà e stabilità* in MAZZOTTA O. (Ed.), *Lavoro ed esigenze dell'impresa tra diritto sostanziale e processo dopo il Jobs Act*, Torino, pp. 73-87.

CHANDLER A. D. (2005), *Shaping the Industrial Century: The Remarkable Story of the Evolution of the Modern Chemical and Pharmaceutical Industries*, Cambridge, MA.

CHANDLER A. D. (1993), *The visible hand: The managerial revolution in American business*, Cambridge, MA.

CHARTERED INSTITUTE OF PERSONNEL AND DEVELOPMENT (2017), *To gig or not to gig? Stories from the modern economy*, London.

CHERRY M. A. (2016), *People Analytics and Invisible Labor* in *St. Louis U. L. J.*, 61. Available at SSRN: <https://ssrn.com/abstract=3004797>.

CHERRY M. A. (2016), *Virtual work and invisible labor* in CRAIN M., POSTER W. and CHERRY M. (Eds.), *Invisible Labor: Hidden Work in the Contemporary World*, Oakland, CA, pp. 71-86.

CHERRY M. A. (2016). *Beyond Misclassification: The Digital Transformation of Work* in *Comp. Lab. L. & Pol'y J.*, 37(3), pp. 577-602.

CHERRY M. A. (2010), *A taxonomy of virtual work* in *Ga. L. Rev.*, 45(4), pp. 951-1014.

CHERRY M. A. (2009), *Working for (virtually) minimum wage: applying the Fair Labor Standards Act in Cyberspace* in *Alabama Law Review*, 60(5), pp. 1077-1110.

CHERRY M. A. (2006), *No Longer Just Company Men: The Flexible Workforce and Employment Discrimination* in *Berkeley J. Emp. & Lab. L.*, 27(1), pp. 209-222.

CHERRY M. A. and ALOISI A. (2017), *"Dependent Contractors" in the Gig Economy: A Comparative Approach* in *American University L. R.*, 66(3), pp. 635-689.

CHESLEY N. (2014), *Information and communication technology use, work intensification and employee strain and distress* in *Work, Employment & Society*, 13(4), pp. 485-514.

CINGANO F., LEONARDI M., MESSINA J. and PICA G. (2010), *The effects of employment protection legislation and financial market imperfections on investment: evidence from a firm-level panel of EU countries* in *Economic Policy*, 25(61), pp. 117-163

CIUCCIOVINO S. (2000), *Trasferimento di ramo d'azienda ed esternalizzazione* in *Arg. dir. lav.*, 2, pp. 385-406.

CLARK J. and WEDDERBURN L. (1987), *Juridification – a Universal Trend: The British Experience in Labor Law* in TEUBNER G. (Ed.), *Juridification of Social Spheres*, Berlin and New York, pp. 163-190.

COASE R. H. (1988), *The firm, the market, and the law*, Chicago, IL.

COASE R. H. (1937), *The nature of the firm in Economica*, 4(16), pp. 386-405.

CODAGNONE C., ABADIE F. and BIAGI F. (2016), *The Future of Work in the 'Sharing Economy'. Market Efficiency and Equitable Opportunities or Unfair Precarisation?*, JRC Science for Policy Report, Luxembourg.

CODAGNONE C., BIAGI F. and ABADIE F. (2016), *The Passions and the Interests: Unpacking the 'Sharing Economy'*, JRC Science Policy Report, Luxembourg.

COFFEY D. and THORNLEY C. (2010), *Legitimizing precarious employment: Aspects of the post-Fordism and lean production debates* in THORNLEY C., JEFFERYS S. and APPAY B. (Eds.), *Globalization and precarious forms of production and employment: Challenges for workers and unions*, Cheltenham, UK, pp. 40-61.

COHEN J. E. (2017), *Law for the Platform Economy* in U.C. Davis Law Review, 51(1), pp. 133-204.

COHEN L. (2003), *A Consumers' Republic: The politics of mass consumption in Postwar America* in *Journal of Consumer Research*, 31(1), pp. 236-239.

COHEN M. and SUNDARARAJAN A. (2015), *Self-Regulation and Innovation in the Peer-to-Peer Sharing Economy* in *University of Chicago Law Review Dialogue*, 82(1), pp. 116-133.

COLANGELO M. and MAGGIOLINO M. (forthcoming), *Uber: A New Challenge for Regulation and Competition Law?* in *Market and Competition Law Review*.

COLANGELO G. and MAGGIOLINO M. (2018), *Uber and the challenges for antitrust law and regulation* in *MediaLaws*, 1, pp. 176-188.

COLANGELO G. and MAGGIOLINO M. (2017), *Sistemi di pagamento e mercati a due versanti: gli insegnamenti dei casi MasterCard e American*

Express in Mercato Concorrenza Regole, 19(2), pp. 215-248.

COLLING T. (1995), *From hierarchy to contract? Subcontracting employment in the service economy* in *Warwick Papers in Industrial & Business*, No. 52.

COLLINS H. (2015, November 10), *A Review of The Concept of The Employer by Dr Jeremias Prassl*, retrieved from <https://goo.gl/dwQOWY>.

COLLINS H. (2011), *Theories of rights as justifications for labour law* in DAVIDOV G. and LANGILLE B. (Eds.), *The idea of Labour Law*, Oxford, UK, pp. 137-155.

COLLINS H. (2007), *Legal responses to the standard form contract of employment* in *Industrial Law Journal*, 36(1), pp. 2-18.

COLLINS H. (2001), *Regulating the employment relation for competitiveness* in *Industrial Law Journal*, 30(1), pp. 17-48.

COLLINS H. (2000), *Justifications and Techniques of Legal Regulation of the Employment Relation* in COLLINS H., DAVIES P. L. and RIDEOUT R. (Eds.), *Legal regulation of the employment relation*, London, pp. 3-27.

COLLINS H. (1997), *The productive disintegration of labour law* in *Industrial Law Journal*, 26(4), pp. 295-310.

COLLINS H. (1990), *Ascription of legal responsibility to groups in complex patterns of economic integration* in *Modern Law Review*, 53(6), pp. 731-744.

COLLINS H. (1990), *Independent contractors and the challenge of vertical disintegration to employment protection laws* in *Oxford J. Legal Stud.*, 10(3), pp. 356-360.

COLLINS H. (1986), *Market power, bureaucratic power, and the contract of employment* in *Industrial Law Journal*, 15(1), pp. 1-15.

COMIN D. and HOBIJA B. (2010), *An exploration of technology diffusion* in *The American Economic Review*, 100(5), pp. 2031-2059.

COMMONWEALTH OF AUSTRALIA (2017), *Corporate avoidance of the Fair Work Act 2009*,

Education and Employment References Committee Report, Canberra.

CONNELLY C. E. and GALLAGHER D. G. (2004), *Emerging trends in contingent work research* in *Journal of Management*, 30(6), pp. 959-983.

CORAZZA L. (2014), *Dipendenza economica e potere negoziale del datore di lavoro* in *Giorn. dir. lav. rel. ind.*, 4, pp. 647-660.

CORAZZA L. (2004), *“Contractual integration” e rapporti di lavoro. Uno studio sulle tecniche di tutela del lavoratore*, Padova.

CORAZZA L. and RAZZOLINI O. (2014), *Who is an employer?*, WP C.S.D.L.E. “Massimo D’Antona”.INT, 110.

CORAZZA L. and ROMEI R. (2014), *Il puzzle delle trasformazioni* in CORAZZA L. and ROMEI R. (Eds.), *Diritto del lavoro in trasformazione*, Bologna, pp. 7-14.

CORPORAAL G. F. and LEHDONVIRTA V. (2017), *Platform Sourcing: How Fortune 500 Firms are Adopting Online Freelancing Platforms*, Oxford Internet Institute.

CORTE COSTITUZIONALE (2016), *Il servizio di trasporto di passeggeri non di linea fornito attraverso applicazioni software – materiali per una ricerca*, Servizio Studi – Area di diritto comparati.

COUNTOURIS N. (2012), *The legal determinants of precariousness in personal work relations: A European perspective* in *Comp. Lab. L. & Pol’y J.*, 34(1), pp. 21-46.

COUNTOURIS N. (2009), *European Social Law as an Autonomous Legal Discipline* in *Yearbook of European Law*, 28(1), pp. 95–122.

COUNTOURIS N. (2007), *The Changing Law of the Employment Relationship. Comparative Analyses in the European Context*, Ashgate.

COUNTOURIS N., DEAKIN S., FREEDLAND M., KOUKIADAKI A. and PRASSL J. (2016), *Report on temporary employment agencies and temporary agency work: A comparative analysis of the law on temporary work agencies and the social and economic implications of temporary work in 13 European countries*, Geneva, Switzerland.

COUNTOURIS N. and HORTON R. (2009), *The Temporary Agency Work Directive: Another broken promise?* in *Industrial Law Journal*, 38(3), pp. 329-338.

COURNÈDE B., DENK O., GARDA P. and HOELLER P. (2016), *Enhancing Economic Flexibility: What is in it for Workers?*, OECD Economic Policy Papers, No. 19.

CRAIG J. D. and LYNK S. M. (Eds.) (2006), *Globalization and the future of labour law*, Cambridge, MA.

CRESPY A. (2017, May 16), *European Pillar of Social Rights mirrors EU good intentions and contradictions*, retrieved from <https://goo.gl/5t7xj3>.

CROWLEY M., TOPE D., CHAMBERLAIN L. J. and HODSON R. (2010), *Neo-Taylorism at work: Occupational change in the post-Fordist era* in *Social Problems*, 57(3), pp. 421-447.

CRUZ VILLALÓN J. (2013), *Il lavoro autonomo economicamente dipendente in Spagna* in *Diritti lavori mercati*, 2(2), pp. 287-315.

CUMMINGS S. L. and RHODE D. L. (2009), *Public interest litigation: Insights from theory and practice* in *Fordham Urb. LJ*, 36(4), pp. 603-651.

CUNEO G. (1997), *Il successo degli altri*, Milano.

CUNNINGHAM-PARMETER K. (2016), *From Amazon to Uber: defining employment in the modern economy* in *Boston University Law Review*, 96(1), pp. 1617-1672.

DACHS B. (2018), *The impact of new technologies on the labour market and the social economy*, EPRS, European Parliamentary Research Service, Scientific Foresight Unit (STOA), Brussels.

D’ANTONA M. (1998), *Diritto del lavoro di fine secolo: una crisi di identità* in *Riv. giur. lav.*, pp. 311-331.

D’ANTONA M. (1996), *Ridefinizione della fattispecie di contratto di lavoro. Seconda proposta di legge* in GHEZZI G. (Ed.), *La disciplina del mercato del lavoro. Proposte per un Testo Unico*, Roma.

D'ANTONA M. (1995), *Limiti costituzionali alla disponibilità del tipo contrattuale nel diritto del lavoro* in *Arg. dir. lav.*, 1, pp. 63-90.

D'ASCENZO A. and GROSSI T. (2017), *Piattaforme digitali e legittimità nell'attività di intermediazione tra domanda ed offerta di lavoro: il caso JustKnock* in *Bollettino Adapt*.

DAGNINO E. (2016), *Labour and Labour Law in the time of the On-Demand Economy* in *Revista Derecho Social y Empresa*, 6, pp. 1-23.

DAGNINO E. (2016), *Uber law: prospettive giuslavoristiche sulla sharing/on-demand economy* in *Dir. rel. ind.*, 1, pp. 137-163.

DARBÉRA R. (2015), *Principles for the regulation of for-hire road passenger transportation services*, OECD International Transport Forum.

DAS ACEVEDO D. (2016), *Regulating Workforce Relationships in the Sharing Economy* in *Emp. Rts. & Emp. Pol'y J.*, 20(1), pp. 1-36.

DASKALOVA V (2017), *Regulating the New Self-Employed in the Uber Economy: What Role for EU Competition Law?*, TILEC Discussion Paper No. 28. Available at SSRN: <https://ssrn.com/abstract=3009120>.

DAU-SCHMIDT K. G. (2001), *Employment in the new age of trade and technology: Implications for labor and employment law* in *Industrial Law Journal*, 76(1), pp. 1-28.

DÄUBLER W. (2017), *Challenges to Labour Law* in PERULLI A. (Ed.), *L'idea di diritto del lavoro, oggi: In ricordo di Giorgio Ghezzi*, Padova, pp. 485-506.

DÄUBLER W. and KLEBE T. (2016), *Crowdwork: datore di lavoro in fuga?* in *Giorn. dir. lav. rel. ind.*, 3, pp. 471-502.

DAVIDOV G. (2017), *The status of Uber drivers: A purposive approach* in *Spanish Labour Law and Employment Relations Journal*, 6(1-2), pp. 6-15.

DAVIDOV G. (2014), *Setting labour law's coverage: Between universalism and selectivity* in *Oxford Journal of Legal Studies*, 34(3), pp. 543-566.

DAVIDOV G. (2006), *The Reports of My Death are Greatly Exaggerated: Employee as a Viable (Though Overly-Used) Legal Concept* in DAVIDOV

G. and LANGILLE B. (Eds.), *Boundaries and Frontiers of Labour Law*, Oxford, UK and Portland, OR, pp. 133-152.

DAVIDOV G. (2005), *Who is a Worker?* in *Industrial Law Journal*, 34(1), pp. 57-71.

DAVIDOV G. (2002), *The three axes of employment relationships: A characterization of workers in need of protection* in *The University of Toronto Law Journal*, 52(4), pp. 357-418.

DAVIDOV G. and LANGILLE B. (2006), *Introduction: Goals and Means in the Regulation of Work* in ID. (Eds.), *Boundaries and Frontiers of Labour Law: Goals and means in the regulation of work*, Oxford, UK and Portland, OR, pp. 1-10.

DAVIDOV G., FREEDLAND M. and KOUNTOURIS N. (2015), *The Subjects of Labor Law: "Employees" and other Workers* in FINKIN M. W. and MUNDLAK G. (Eds.), *Comparative Labor Law. Research Handbooks in Comparative Law Series*, Cheltenham, UK, pp. 115-131.

DAVIES A. C. L. (2014), *'Half a Person': a Legal Perspective on Organising and Representing 'Non-Standard' Workers* in BOGG A. and NOVITZ T. (Eds.), *Voices at Work: Continuity and Change in the Common Law*, Oxford, UK, pp. 122-137.

DAVIES A. C. L. (2013), *Regulating Atypical Work: Beyond Equality* in COUNTOURIS N. and FREEDLAND M. (Eds.), *Resocialising Europe in a Time of Crisis*, Cambridge, UK, pp. 230-249.

DAVIES A. C. L. (2013), *EU Labour Law*, Cheltenham, UK – Northampton, MA.

DAVIES P. L. (2000), *Lavoro subordinato e lavoro autonomo* in *Dir. rel. ind.*, 2, pp. 207-216.

DAVIES P. L. and FREEDLAND M. (2006), *The Complexities of the Employing Enterprise* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and Frontiers of Labour Law*, Oxford, UK and Portland, OR, pp. 273-294.

DAVIES P. L. and FREEDLAND M. (1983), *Kahn-Freund's Labour and the Law*, London.

DAVIS G. F. (2015), *What might replace the modern corporation: Uberization and the web page enterprise* in *Seattle U. L. Rev.*, 39(2), pp. 501-516.

DAVIS N. J. (2007), *Presumed assent: The judicial acceptance of clickwrap* in *Berkeley Tech. L. J.*, 22(1), pp. 577-598.

DE GRIP A., HOEVENBERG J. and WILLEMS E. (1997), *Atypical employment in the European Union* in *Int'l Lab. Rev.*, 136(1), pp. 49-72.

DE GROEN W. P. and MASELLI I. (2016), *The Impact of the Collaborative Economy on the Labour Market* CEPS Special Report No. 138.

DE GROEN W. P., LENAERTS K., BOSCH R. and PAQUIER F. (2017), *Impact of Digitalisation and the On-Demand Economy on Labour Markets and the Consequences for Employment and Industrial Relations*, Study prepared for the European Economic and Social Committee, Brussels.

DE LUCA TAMAJA R. (2007), *Diritto del lavoro e decentramento produttivo in una prospettiva comparata: scenari e strumenti* in *Riv. it. dir. lav.*, 1, pp. 3-63.

DE LUCA TAMAJA R. (2005), *Ragioni e regole del decentramento produttivo* in *Dir. rel. ind.*, 2, pp. 307-311.

DE LUCA TAMAJA R. (2005), *Profili di rilevanza del potere direttivo del datore di lavoro* in *Riv. It. Dir. Lav.*, 1, pp. 467-490.

DE LUCA TAMAJA R. (2004), *Riorganizzazione del sistema produttivo e imputazione dei rapporti di lavoro* in LYON-CAEN A. and PERULLI A. (Eds.), *Trasformazione dell'impresa e rapporti di lavoro: atti del seminario dottorale internazionale*, Venezia 17-21 giugno, Padova, pp. 38-52.

DE LUCA TAMAJA R. (2003), *Metamorfosi dell'impresa e nuova disciplina dell'interposizione* in *Riv. it. dir. lav.*, 1, pp. 176-188.

DE LUCA TAMAJA R. (2002), *Le esternalizzazioni tra cessione di ramo d'azienda e rapporti di fornitura* in DE LUCA TAMAJA R. (Ed.), *I processi di esternalizzazione. Opportunità e vincoli giuridici*, Napoli, pp. 9-69.

DE LUCA TAMAJA R. (1999), *I processi di terziarizzazione "intra moenia" ovvero la fabbrica multisocietaria* in AA.VV., *Studi sul lavoro. Scritti in onore di Gino Giugni*, Bari.

DE LUCA TAMAJA R. (1997), *Per una revisione delle categorie qualificatorie del diritto del lavoro:*

l'emersione del "lavoro coordinato" in Arg. dir. lav., 5, pp. 41-64.

DE LUCA TAMAJA R. (Ed.) (1979), *Il diritto del lavoro nell'emergenza*, Napoli.

DE LUCA TAMAJA R. (1976), *La norma inderogabile nel diritto del lavoro*, Napoli.

DE LUCA TAMAJA R., FLAMMIA R., PERSIANI M. (1998), *La crisi della nozione di subordinazione e della sua idoneità selettiva dei trattamenti garantistici. Prime proposte per un nuovo approccio sistematico in una prospettiva di valorizzazione di un tertium genus: il lavoro coordinato* in AA.VV., *Subordinazione e autonomia: vecchi e nuovi modelli*, Torino, pp. 331-345.

DE STEFANO V. (2017), *Labour is not a technology – Reasserting the Declaration of Philadelphia in Times of Platform-Work and Gig-Economy* in *IUSLabor*, 2.

DE STEFANO V. (2016), *Casual Work beyond Casual Work in the EU: The Underground Casualisation of the European Workforce—And What to Do about it* in *European Labour Law Journal*, 7(3), pp. 421-441.

DE STEFANO V. (2016), *The rise of the "just-in-time workforce": On-demand work, crowdwork, and labor protection in the "gig economy"* in *Comp. Lab. L. & Pol'y J.*, 37(3), pp. 471-504.

DE STEFANO V. (2016), *Introduction: Crowdsourcing, the Gig-Economy, and the Law* in *Comp. Lab. L. & Pol'y J.*, 37(3), pp. 461-470.

DE STEFANO V. (2014), *A tale of oversimplification and deregulation: the mainstream approach to labour market segmentation and recent responses to the crisis in European countries* in *Industrial Law Journal*, 43(3), pp. 253-285.

DE STEFANO V. (2011), *Evoluzione del potere organizzativo e direttivo del datore di lavoro e conseguenze sulla nozione giuridica di subordinazione*, Doctoral Dissertation, Bocconi University, Milano.

DE STEFANO V. (2009), *Smuggling-in flexibility: temporary work contracts and the "implicit threat" mechanism*, ILO Working Document, 4.

DE STEFANO V. and ALOISI A. (forthcoming), *Fundamental labour rights, platform work and protection of non-standard workers*, Bocconi Legal Studies Research Paper No. 3125866. Available at SSRN: <https://ssrn.com/abstract=3125866>.

DEAKIN S. (2016), *New forms of employment: Implications for EU-law – The law as it stands* in WAAS B. (Ed.) *New forms of employment in Europe*, *Bulletin of comparative labour relations*, 94, Alphen aan den Rijn, The Netherlands, pp. 43-54.

DEAKIN S. (2016), *The Contribution of Labour Law to Economic Development and Growth* in DU TOIT T. (Ed.), *Labour Law and Social Progress Holding the Line or Shifting the Boundaries?* *Bulletin for Comparative Labour Relations*, Alphen an den Rijn, The Netherlands, pp. 19-39.

DEAKIN S. (2015, November 3), *Luddism in the Age of Uber*, retrieved from <https://goo.gl/BHa6hL>.

DEAKIN S. (2013), *What exactly is happening to the contract of employment? Reflections on Mark Freedland and Nicola Kountouris's Legal Construction of Personal Work Relations in Jerusalem Review of Legal Studies*, 7(1), pp. 135-144.

DEAKIN S. (2007), *Does the 'Personal Employment Contract' Provide a Basis for the Reunification of Employment Law?* in *Industrial Law Journal*, 36(1), pp. 68-83.

DEAKIN S. (2006), *The comparative evolution of the employment relationship* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and frontiers of labour law*, Oxford, UK and Portland, OR, pp. 89-108.

DEAKIN S. (2004), *Interpreting employment contracts: judges, employers, workers* in *Int'l J. Comp. Lab. L. & Indus. Rel.*, 20(2), pp. 201-226.

DEAKIN S. (2003), *'Enterprise-Risk': The Juridical Nature of the Firm Revisited* in *Industrial Law Journal*, 32(2), pp. 97-114.

DEAKIN S. (2000), *The many futures of the contract of employment*, *ESRC Working Paper*, 191.

DEAKIN S. and MARKOU C. (2017, September 25), *London Uber ban: regulators are finally catching up with technology*, retrieved from <https://goo.gl/ZQM4d7>.

DEAKIN S. and MARKOU C. (2017), *The Law-Technology Cycle and the Future of Work*, paper presented at "Impresa, lavoro e non lavoro nell'economia digitale", Brescia, 12-13 October 2017.

DEAKIN S. and MORRIS G. (2009), *Labour Law*, Oxford, UK.

DEAKIN S. and WILKINSON F. (1998), *Labour Law and Economic Theory – A Reappraisal*, Working Paper, ESCR Centre for Business Research, No. 2.

DEAKIN S. and WILKINSON F. (2005), *The Law of the Labour Market: Industrialisation, Employment, and Legal Evolution*, Oxford, UK.

DECKOP J. R., MANGEL, R. and CIRKA C. C. (1999), *Getting more than you pay for: Organizational citizenship behavior and pay-for-performance plans* in *Academy of Management Journal*, 42(4), pp. 420-428.

DEGRYSE C. (2016), *Digitalisation of the economy and its impact on labour markets*, *WP ETUI*, No 2.

DE FRANCESCHI A. (2016), *The Adequacy of Italian Law for the Platform Economy* in *Journal of European Consumer and Market Law*, 5(1), pp. 56-61.

DEL CONTE M. (2016), *Il Jobs Act e la protezione del lavoro* in *Var. dir. lav.*, 1, pp. 21-38.

DEL CONTE M. (2015), *Premesse e prospettive del Jobs Act* in *Dir. rel. ind.*, 4, pp. 939-960.

DEL CONTE M. (1995), *Lavoro autonomo e lavoro subordinato: la volontà e gli indici di denotazione* in *Orient. giur. lav.*, 1, pp. 66-72.

DEL CONTE M. (2006), *Rimodulazione degli assetti produttivi tra libertà di organizzazione dell'impresa e tutele dei lavoratori* in *Dir. rel. ind.*, 2, pp. 311-322.

DEL CONTE M. and TIRABOSCHI M. (2004), *Diversification of the Labour Force: The Scope of Labor Law and the Notion of Employee: Italy* in ARAKI T. and OUCHI (Eds.), *Labour Law in Motion. Diversification of the Labour Force &*

Terms and Conditions of Employment, Bulletin of Comparative Labour Relations Series, 53, The Hague, The Netherlands.

DEL PUNTA R. (2017), *Un diritto per il lavoro 4.0* in CIPRIANI A., GRAMOLATI A. and MARI G. (Eds.), *Il lavoro 4.0. La IV rivoluzione industriale e le trasformazioni delle attività lavorative*, Firenze, pp. 225-249.

DEL PUNTA R. (2008), *Le molte vite del divieto di interposizione nel rapporto di lavoro* in *Riv. it. dir. lav.*, 2, pp. 129-160.

DEL PUNTA R. (2001), *L'economia e le ragioni del diritto del lavoro* in *Giorn. dir. lav. rel. ind.*, 1, pp. 1-44.

DEL PUNTA R. (2000), *Mercato o gerarchia? Il disagio del diritto del lavoro nell'era delle esternalizzazioni* in *Dir. Merc. Lav.*, 1, pp. 49-67.

DELLAROCAS C. and NARAYAN R. (2006), *A statistical measure of a population's propensity to engage in post-purchase online word-of-mouth* in *Statistical Science*, 21(2), pp. 277-285.

DELOITTE (2015), *From Brawn to Brains: The impact of technology on jobs*.

DELSEN L. (1991), *Atypical employment relations and government policy in Europe* in *Labour*, 5(3), pp. 285-316.

DEMSETZ H. (1988), *The theory of the firm revisited* in *Journal of Law, Economics, & Organization*, 4(1), pp. 517-536.

DENOZZA F. (2017), *The Contractual Theory of the Firm and Some Good Reasons for Regulating the Employment Relationship* in PERULLI A. and TREU T. (Eds.), *Enterprise and Social Rights*, Alphen aan den Rijn, The Netherlands, pp. 25-37.

DEPILLIS L. (2015, February 3), *New tech companies say freelancing is the future of work. But there's a downside for workers*, retrieved from <http://wapo.st/1zfachHk>.

DI AMATO A. (2016), *Uber and the Sharing Economy* in *Italian Law Journal*, 2(1), pp. 177-190.

DIBADJ R. (2004), *Reconceiving the Firm* in *Cardozo L. Rev.*, 26(4), pp. 1459-1534.

DICKENS L. (2004), *Problems of Fit: Changing Employment and Labour Regulation in British* *Journal of Industrial Relations*, 42(4), pp. 595-616.

DI MAGGIO P. (2009), *Introduction: Making sense of the contemporary firm and prefiguring its future* in ID. (Ed.), *The twenty-first-century firm: changing economic organization in international perspective*, Princeton, NJ, pp. 3-30.

DOERINGER P. B. and PIORE M. J. (1985), *Internal labor markets and manpower analysis*, New York.

DOHERTY M. (2009), *When the working day is through: the end of work as identity?* in *Work, employment and society*, 23(1), pp. 84-101.

DOKKA J., MUNFORD M. and SCHANZENBACH D. W. (2015), *Workers and the Online Gig Economy*, The Hamilton Project.

DØLVIK J. E. and JESNES K. (2017), *Nordic labour markets and the sharing economy: Report from a pilot project*, Nordic Council of Ministers.

DONINI A. (2016), *Regole della concorrenza e attività di lavoro nella on demand economy: brevi riflessioni sulla vicenda Uber, nota a Trib. Milano, sez. spec. impresa, ord. 9 luglio 2015* in *Riv. it. dir. lav.*, 2, pp. 46-50.

DONINI A. (2015), *Il lavoro digitale su piattaforma* in *Labour & Law Issues*, 1(1), pp. 50-71

DONINI A. (2015), *Mercato del lavoro sul web: regole e opportunità* in *Dir. rel. ind.*, 2, pp. 433-458.

DONOVAN S. A., BRADLEY D. H. and SHIMABUKURO J. O. (2016), *What Does the Gig Economy Mean for Workers?*, Congressional Research Service, Washington, DC.

DOWNES L. and NUNES P. (2014), *Big bang disruption: Strategy in the age of devastating innovation*, London.

DRAHOKOUPIL J. and FABO B. (2016), *The platform economy and the disruption of the employment relationship*, ETUI Policy Brief, No. 5.

DRAHOKOUPIL J. and PIASNA A. (2017), *Work in the platform economy: Beyond lower transaction*

costs in *Intereconomics: Review of European Economic Policy*, 52(6), pp. 335-340.

DUBAL V. B. (2017), *Winning the Battle, Losing the War?: Assessing the Impact of Misclassification Litigation on Workers in the Gig Economy* in *Wisconsin Law Review*, pp. 739-802.

DUBE A. and KAPLAN E. (2010), *Does outsourcing reduce wages in the low-wage service occupations? Evidence from janitors and guards* in *ILR Review*, 63(2), pp. 287 – 306.

DUJARIER M. A. (2014), *Le travail du consommateur: De Mac Do à eBay: comment nous coproduisons ce que nous achetons*, Paris.

DUKES R. (2014), *The Labour Constitution: The Enduring Idea of Labour Law*, Oxford, UK.

DÜLL N. (2004), *Defining and assessing precarious employment in Europe: a review of main studies and surveys*, Working Paper Economix.org.

DURWARD D., BLOHM I. and LEIMEISTER J. M. (2016), *Principal Forms of Crowdsourcing and Crowd Work* in FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS), *The Digital Economy and the Single Market*, Brussels, Belgium, pp. 39-55.

DURWARD D., BLOHM I. and LEIMEISTER J. M. (2016), *Crowd work* in *Business & Information Systems Engineering*, 58(4), pp. 281-286.

EDELMAN B. G. and GERADIN D. (2016), *Efficiencies and Regulatory Shortcuts: How Should We Regulate Companies Like Airbnb and Uber* in *Stanford Technology Law Review*, 19(2), pp. 293-328.

EDWARDS B., WOLFENZON D. and YEUNG B. (2005), *Corporate governance, economic entrenchment, and growth* in *Journal of Economic Literature*, 43(3), pp. 655-720.

EDWARDS R. C. (1979), *Contested Terrain: The Transformation of the Workplace in America*, New York.

EICHHORST W. and MARX P. (2015), *Introduction: an occupational perspective on non-standard employment* in ID. (Eds.), *Non-standard employment in post-industrial labour markets: an occupational perspective*, Cheltenham, UK and Northampton, MA, pp. 1-28.

EICHHORST W. and MARX P. (2011), *Reforming German Labor Market Institutions: A Dual Path to Flexibility* in *Journal of European Social Policy*, 21(1), pp. 73-87.

EICHHORST W. and RINNE U. (2017), *Digital Challenges for the Welfare State*, IZA Policy Paper, No. 134.

EICHHORST W., BRAGA M., FAMIRA-MUHLBERGER U., GERARD M. et al. (2013), *Social protection rights of economically dependent self-employed workers*, European Parliament Directorate General for Internal Policies.

EICHHORST W., HINTE H., RINNE U. and TOBSCH V. (2016), *How Big is the Gig? Assessing the Preliminary Evidence on the Effects of Digitalization on the Labor Market*, IZA Policy Paper, No. 117.

EICHHORST W., WOZNY F. and MÄHÖNEN E. (2015), *What is a Good Job?*, IZA DP, No. 9461.

EIRO (2002), *“Economically Dependent Workers”*. *Employment Law and Industrial Relations*, European Industrial Relations Observatory, available at <https://goo.gl/QpcoVN>.

EISENBREY R. and MISHEL L. (2016), *Uber Business Model Does Not Justify a New “Independent Worker” Category*, Economic Policy Institute, available at <https://goo.gl/EJd4i6>.

ELLN (2009), *Thematic Report 2009: Characteristics of the Employment Relationship*, European Labour Law Network.

ENGBLOM S. (2003), *Self-employment and the Personal Scope of Labour Law Comparative Lessons from France, Italy, Sweden, the United Kingdom and the United States*, Doctoral Dissertation, European University Institute, Florence.

EPSTEIN R. A. (2013), *Can Technological Innovation Survive Government Regulation* in *Harv. JL & Pub. Pol’y*, 36(1), pp. 87-104.

ESCANDE VARNIOL M.-C. (2018), *The Legal Framework for Digital Platform Work: The French Experience* in MCKEE D., MAKELA F. and SCASSA T. (Eds.), *Law and the “Sharing Economy”*: *Regulating Online Market Platforms*, Ottawa.

ESCANDE VARNIOL M.-C. (2017), *What protections for workers acting via digital platforms in a market economy? Presentation, methodology and a French case.*

ETUC (2016, June 16), *ETUC resolution on digitalisation: "towards fair digital work"*, retrieved from <https://goo.gl/PrZvSX>.

EU-OSHA (2015), *A review on the future of work: online labour exchanges, or 'crowdsourcing': implications for occupational safety and health.*

EUROFOUND (2017), *Exploring self-employment in the European Union*, Publications Office of the European Union, Luxembourg.

EUROFOUND (2017), *In-work poverty in the EU*, Publications Office of the European Union, Luxembourg.

EUROFOUND (2017), *Italy: New rules to protect self-employed workers and regulate ICT-based mobile work.*

EUROFOUND (2017), *Non-standard forms of employment: Recent trends and future prospects*, Dublin.

EUROFOUND (2017), *Sixth European Working Conditions Survey – Overview report (2017 update)*, Publications Office of the European Union, Luxembourg.

EUROFOUND (2015), *New forms of employment*, Publications Office of the European Union, Luxembourg.

EUROFOUND (2013), *Employment polarisation and job quality in the crisis: European Jobs Monitor 2013*, Dublin.

EUROFOUND (2013), *Self-employed or not self-employed? Working conditions of 'economically dependent workers'*, Background paper, Dublin.

EUROFOUND (2010), *Flexible forms of work: 'very atypical' contractual arrangements*, Dublin.

EUROFOUND and INTERNATIONAL LABOUR OFFICE (2017), *Working anytime, anywhere: The effects on the world of work*, Luxembourg and Geneva, Switzerland.

EUROPEAN COMMISSION (2017), *Reflection paper on the social dimension of Europe*, Brussels.

EUROPEAN COMMISSION (2017), *Statement of President Juncker on the Proclamation of the*

European Pillar of Social Rights, retrieved from <https://goo.gl/JUcLb2>.

EUROPEAN COMMISSION (2016), *The use of collaborative platforms*, Flash Eurobarometer, No. 438.

EUROPEAN COMMISSION (2015), *Employment and Social Developments in Europe 2014*, Luxembourg.

EUROPEAN EXPERT GROUP ON FLEXICURITY (2007), *Flexicurity Pathways – Turning hurdles into stepping stones*, Final Report, Brussels.

EUROPEAN FOUNDATION FOR THE IMPROVEMENT OF LIVING AND WORKING CONDITIONS (2004), *Outsourcing of ICT and Related Services in the EU: A status report*, Office for Official Publications of the European Union.

EUROPEAN PARLIAMENT (2017), *The Social Protection of Workers in the Platform Economy*, Committee on Employment and Social Affairs.

EUWALS R. and HOGEBRUGGE M. (2006), *Explaining the Growth of Part-time Employment: Factors of Supply and Demand in Labour*, 20(3), pp. 533-557.

EVANS D. S. (2003), *The Antitrust Economics of Multi-Sided Platform Markets* in *Yale Journal on Regulation*, 20(2), pp. 325-381.

EVANS D. S. and SCHMALENSSEE R. (2016), *Matchmakers: the new economics of multisided platforms*, Cambridge, MA.

EVANS J. and GIBB E. (2009), *Moving from precarious employment to decent work*, Geneva, Switzerland.

EZRACHI A. and STUCKE M. E. (2016), *Virtual Competition*, Cambridge, MA.

EZRACHI A. and STUCKE M. E. (2015), *Online Platforms and the EU Digital Single Market*, University of Tennessee Legal Studies Research Paper, No. 283.

FAIOLI M. (2018), *Gig Economy and Market Design. Why to Regulate the Market of Jobs carried out through Digital Platforms*, available at SSRN: <https://ssrn.com/abstract=3095403>.

FAIOLI M. (2017), *Jobs "App"*, *Gig-Economy e sindacato* in *Riv. giur. lav.*, 2, pp. 291-305.

- FAIOLI M. (2008), *Il lavoro prestato irregolarmente*, Milano.
- FALERI C. (2007), *Asimmetrie informative e tutela del prestatore di lavoro*, Milano.
- FARRELL D. and GREIG F. (2016), *Paychecks, Paydays, and the Online Platform Economy: Big Data on Income Volatility*, JP Morgan Chase Institute.
- FARVAQUE N. (2015), *Thematic review on personal and household services*, Directorate-General for Employment, Social Affairs and Inclusion European Employment Policy Observatory (EEPO), Brussels.
- FELSTEAD A. (1993), *The corporate paradox: power and control in the business franchise*, London.
- FELSTINER A. (2011), *Working the Crowd: Employment and Labor Law in the Crowdsourcing Industry* in *Berkeley J. Emp. & Lab. L.*, 32(1), pp. 143-204.
- FERRARA M. and MAVILIA R. (2012), *Dai distretti industriali ai poli di innovazione. L'Italia nel Mediterraneo*, Milano.
- FERRARESE M. R. (2000). *Il diritto al presente: globalizzazione e tempo delle istituzioni*, Bologna.
- FERRARO G. (1998), *Dal lavoro subordinato al lavoro autonomo* in *Giorn. dir. lav. rel. ind.*, 3, pp. 429-507.
- FERRUGGIA A. (2011), *Le esternalizzazioni "relazionali" nel decentramento di attività dell'impresa*, Doctoral dissertation, University of Bologna.
- FIELD F. and FORSEY A. (2016), *Sweated Labour, Uber and the 'gig economy'*, retrieved from <https://goo.gl/1MBZmZ>.
- FINCK M. (2017), *Digital Regulation: Designing a Supranational Legal Framework for the Platform Economy*, LSE Legal Studies Working Paper, No. 15/.
- FINKIN M. W. (2016), *Beclouded Work, Beclouded Workers in Historical Perspective* in *Comp. Lab. L. & Pol'y J.*, 37(3), pp. 603-618.
- FINKIN M. W. and MUNDLAK G. (Eds.) (2015), *Comparative Labor Law*, Cheltenham, UK.
- FLECKER J. and SCHÖNAUER A. (2016). *The Production of 'Placelessness': Digital Service Work in Global Value Chains* in FLECKER J. (Ed.), *Space, Place and Global Digital Work*, London, pp. 11-30.
- FORD M. (2015), *Rise of the Robots. Technology and the Threat of a Jobless Future*, New York.
- FREEDLAND M. (2013), *Burying Caesar: what was the standard employment contract?* in STONE K. V. W. and ARTHURS H. (Eds.), *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, New York, pp. 81-94.
- FREEDLAND M. (2007), *Application of labour and employment law beyond the contract of employment* in *International Labour Review*, 146(1-2), pp. 3-20.
- FREEDLAND M. (2006), *From the Contract of Employment to the Personal Work Nexus* in *Industrial Law Journal*, 35(1), pp. 1-26.
- FREEDLAND M. R. (2003), *The Personal Employment Contract*, Oxford, UK.
- FREEDLAND M. and KOUNTOURIS N. (2017), *Some Reflections on the 'Personal Scope' of Collective Labour Law* in *Industrial Law Journal*, 46(1), pp. 52-71.
- FREEDLAND M. and KOUNTOURIS N. (2011), *The Legal Construction of Personal Work Relations*, Oxford, UK.
- FREEDLAND M. and PRASSL J. (2017), *Employees, Workers, and the 'Sharing Economy': Changing Practices and Changing Concepts in the United Kingdom*, University of Oxford, Legal Research Paper Series, No 19.
- FREDMAN S. (2006), *Precarious Norms for Precarious Workers* in FUDGE J. and OWENS R. (Eds.), *Precarious Work, Women and the New Economy*, London, pp. 177-200.
- FREDMAN S. (2004), *Marginalising Equal Pay Laws* in *Industrial Law Journal*, 33(3), pp. 281-285.
- FREDMAN S. (2004), *Women at work: The broken promise of flexicurity* in *Industrial Law Journal*, 33(4), pp. 299-319.

FREDMAN S. (1997), *Labour law in flux: the changing composition of the workforce in Industrial Law Journal*, 26(4), pp. 337-352.

FREEDMAN A. (1996), *Contingent work and the role of labor market intermediaries* in MANGUM G. and MANGUM S. (Eds.), *Of Heart and Mind: Social Policy Essays in Honor of Sar A. Levitan*, Kalamazoo, MI, pp. 177-199.

FRENKEN K. and SCHOR J. (2017), *Putting the sharing economy into perspective in Environmental Innovation and Societal Transitions*, 23, pp. 3-10.

FREY C. B. and OSBORNE M. A. (2017), *The future of employment: how susceptible are jobs to computerisation?* in *Technological Forecasting and Social Change*, 114, pp. 254-280.

FREY C. B. and OSBORNE M. A. (2015), *Technology at work: the future of innovation and employment*, Citi GPS Report.

FRIEDMAN G. (2014), *Workers without employers: shadow corporations and the rise of the gig economy* in *Review of Keynesian Economics*, 2(2), pp. 171-188.

FRIEDMAN T. (2005), *The world is flat: A brief history of the globalized world in the 21st century*, London.

FROUD J., HASLAM, C., JOHAL S. and WILLIAMS K. (2000), *Shareholder value and financialization: consultancy promises, management moves* in *Economy and Society*, 29(1), pp. 80-110.

FRY E. (2017, August 29), *The Gig Economy Isn't Just For Startups Anymore*, retrieved from <http://for.tn/2iDaCYp>.

FUDGE J. (2017), *The future of the standard employment relationship: Labour law, new institutional economics and old power resource theory* in *Journal of Industrial Relations*, 59(3), pp. 374-392.

FUDGE J. (2016), *Challenging the Borders of Labour Rights* in DU TOIT T. (Ed.), *Labour Law and Social Progress Holding the Line or Shifting the Boundaries?* *Bulletin for Comparative Labour Relations*, Alphen an den Rijn, pp. 73-88.

FUDGE J. (2012), *Blurring Legal Boundaries: Regulating for Decent Work* in FUDGE J., MCCRYSTAL S. and SANKARAN K. (Eds.),

Challenging the Legal Boundaries of Work Regulation, Oxford, UK, pp. 1-26.

FUDGE J. (2006), *Fragmenting work and fragmenting organizations: The contract of employment and the scope of labour regulation* in *Osgoode Hall LJ*, 44(4), pp. 609-648.

FUDGE J. (2006), *The Legal Boundaries of the Employer, Precarious Workers, and Labour Protection* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and Frontiers of Labour Law: Goals and means in the regulation of work*, Oxford, UK and Portland, OR, pp. 297-315.

FUDGE J. (2005), *Beyond vulnerable workers: Towards a new standard employment relationship in Canadian Lab. & Emp. LJ*, 12, pp. 151-176.

FUDGE J. (2003), *Labour protection for self-employed workers* in *Just Labour*, 3, pp. 36-45.

FUDGE J. (1999), *New Wine into Old Bottles: Updating Legal Forms to Reflect Changing Employment Norms* in *U. Brit. Colum. L. Rev.*, 33(1), pp. 129-152.

FUDGE J. and OWENS R. (2006), *Precarious work, women, and the new economy: The challenge to legal norms* in FUDGE J. and OWENS R. (Eds.), *Precarious work, women, and the new economy: The challenge to legal norms*, Oxford, UK, pp. 3-30.

FUDGE J., TUCKER E. and VOSKO L. F. (2003), *Changing boundaries in employment: developing a new platform for labour law* in *Canadian Lab. & Emp. LJ*, 10, pp. 329-366.

GAETA L. (1997), *Qualità totale e teorie della subordinazione* in SPAGNUOLO VIGORITA L. (Ed.), *Qualità totale e diritto del lavoro*, Milano, pp. 103-128.

GALANTINO L. (1992), *Diritto del lavoro*, Torino.

GALGANO F. (1993), *Le istituzioni della società post-industriale* in GALGANO F., CASSESE S., TREMONTI G. and TREU T. (Eds.), *Nazioni senza ricchezza, ricchezze senza nazione*, Bologna, pp. 13-33.

GALLINO L. (2014), *Vite rinviate: Lo scandalo del lavoro precario*, Roma and Bari.

GALLINO L. (2009), *L'impresa irresponsabile*, Torino.

GALLINO L. (2007), *Il lavoro non è una merce: contro la flessibilità*, Roma and Bari.

GALLINO L. (1998), *Se tre milioni vi sembrano pochi: sui modi per combattere la disoccupazione*, Torino.

GAMITO M. C. (2016), *Regulation.com. Self-Regulation and Contract Governance in the Platform Economy: A Research Agenda* in *Eur. J. Legal Stud.*, 9(2), pp. 53-67.

GANDEL S. (2015, September 17), *Ubernomics: Here's what it would cost Uber to pay its drivers as employees*, retrieved from <http://fortune.com/2015/09/17/ubernomics/>.

GARBEN S. (2017), *Protecting Workers in the Online Platform Economy: An overview of regulatory and policy developments in the EU*, European Risk Observatory Discussion paper.

GARBEN S. (2017), *The Constitutional (Im)balance between 'the Market' and 'the Social' in the European Union* in *European Constitutional Law Review*, 13(1), pp. 23-61.

GARBEN S., KILPATRICK C. and MUIR E. (2017), *Towards a European Pillar of Social Rights: upgrading the EU social acquis*, College of Europe Policy Brief, No. 1.

GARDEN C. (2017), *Disrupting Work Law: Arbitration in the Gig Economy* in *University of Chicago Legal Forum*, pp. 205-234.

GAROFALO D. (2017), *Lavoro, impresa e trasformazioni organizzative in Frammentazione organizzativa e lavoro: rapporti individuali e collettivi*, Giornate di studio AIDLASS, Cassino, 18 e 19 May 2017.

GAROFALO M. G. (1999), *Un profilo ideologico del diritto del lavoro* in *Giorn. dir. lav. rel. ind.*, 21, pp. 9-31.

GAWER A. (2009), *Platforms, Markets and Innovation*, Cheltenham, UK, and Northampton, MA.

GEE K. (2017, August 8), *In a Job Market This Good, Who Needs to Work in the Gig Economy?*, retrieved from <http://on.wsj.com/2uBSChM>.

GERADIN D. (2016), *Online Intermediation Platforms and Free Trade Principles – Some Reflections on the Uber Preliminary Ruling Case*.

Available at SSRN: <https://ssrn.com/abstract=2759379>.

GERON T. (2013, January 23), *Airbnb and the unstoppable rise of the share economy*, retrieved from <https://goo.gl/QQq3fr>.

GERSHON I. and CEFKIN M. (2017), *Click for Work: Rethinking Work, Rethinking Labor Through Online Work Distribution Platforms*, Working paper.

GERA E. (2013), *Il contratto di lavoro oggi: flessibilità e crisi economica* in *Giorn. dir. lav. rel. ind.*, 4, pp. 687-713.

GERA E. (2006), *Subordinazione, statuto protettivo e qualificazione del rapporto di lavoro* in *Giorn. dir. lav. rel. ind.*, 1, pp. 1-37.

GERA E. (2003), *La subordinazione e i rapporti atipici nel diritto italiano* in CARABELLI U. and VENEZIANI B. (Eds.), *Du travail salariè au travail indipendent: permanences et mutations*, Bari, pp. 47-89.

GERA E. (1996), *La flessibilità: variazioni sul tema* in *Riv. giur. lav.*, 1, p. 123, now in AA.VV. (1996), *Lavoro decentrato, interessi dei lavoratori, organizzazione delle imprese*, Bari.

GERA E. (1988), *La subordinazione tra tradizione e nuove proposte* in *Giorn. dir. lav. rel. ind.*, 4, pp. 621-639.

GHOSE A., IPEIROTIS P. G. and SUNDARARAJAN A. (2009), *The Dimensions of Reputation in Electronic Markets, 2nd Statistical Challenges in E-Commerce Research Symposium*, Working Paper.

GIASANTI L. (2008), *Lavoro subordinato non standard: tra regolazione giuridica e tutela sociale*, Roma.

GIBBONS R. (2001), *Firms (and other relationships)* in DIMAGGIO P. (Ed.), *The twenty-first-century firm: changing economic organization in international perspective*, Princeton, NJ, pp. 186-199.

GILLESPIE A., RICHARDSON R., VALENDUC G. et al. (1999), *Technology Induced Atypical Work-Forms. Report for the Office of technology assessment of the European Parliament (STOA)*, Brussels.

GILLESPIE T. (2014), *The Relevance of Algorithms* in GILLESPIE T., BOCZKOWSKI P. and FOOT K. (Eds.), *Media Technologies*, Cambridge, MA, pp. 167-199.

GILSON R. J., SABEL C. F. and SCOTT R. E. (2009), *Contracting for innovation: vertical disintegration and interfirm collaboration* in *Columbia Law Review*, 109(3), pp. 431-502.

GIUBBONI S. (2009), *La nozione comunitaria di lavoratore subordinato* in CARUSO B. and SCIARRA S. (Eds.), *Il lavoro subordinato, Trattato di diritto privato dell'Unione europea*, Torino, pp. 35-75.

GIUBBONI S. (2011), *La protezione dei lavoratori non-standard nel diritto dell'Unione Europea. Note introduttive* in AA.VV., *Studi in onore di Tiziano Treu*, Napoli, pp. 1449-1462.

GIUGNI G. (1994), *Una lezione sul diritto del lavoro* in *Giorn. dir. lav. rel. ind.*, 2, pp. 202-211.

GOBBLE M. M. (2015), *Regulating innovation in the new economy* in *Research-Technology Management*, 58(2), pp. 251-267.

GOETZ C. J. and SCOTT R. E. (1981), *Principles of relational contracts* in *Virginia Law Review*, 67(6), pp. 1089-1150.

GOLDSCHMIDT D. and SCHMIEDER J. F. (2017), *The rise of domestic outsourcing and the evolution of the German wage structure* in *The Quarterly Journal of Economics*, 132(3), pp. 1165-1217.

GOLZIO L. (2005), *L'evoluzione dei modelli organizzativi d'impresa* in *Dir. rel. ind.*, 2, pp. 312-323.

GOOS M., MANNING A. and SALOMONS A. (2014), *Explaining job polarization: Routine-biased technological change and offshoring* in *American Economic Review*, 104(8), pp. 2509-2526.

GORLA G. (1962), *Standard Conditions and Form Contracts in Italian Law* in *The American Journal of Comparative Law*, pp. 1-20.

GORZ A. (2003), *L'immateriale. Conoscenza, valore e capitale*, Torino.

GOZZER F. (2015, June 13), *Trabajo dice que los chóferes de Uber son empleados de la firma*, retrieved from <https://goo.gl/BeWPhB>.

GRAGNOLI E. and PERULLI A. (Eds.) (2004), *La riforma del mercato del lavoro e i nuovi modelli contrattuali: commentario al decreto legislativo 10 settembre 2003*, Padova.

GRAHAM M., HJORTH I. and LEHDONVIRTA V. (2017), *Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods* in *Transfer: European Review of Labour and Research*, 23(2), pp. 135-162.

GRAMANO E. (2018), *Working performance and organisational flexibility: at the core of the employment contract*, Paper presented at the Sixteenth International Conference in commemoration of Professor Marco Biagi, Modena, Marco Biagi Foundation, 19-20 March 2018.

GRANDI B. (2013), *Fatti, categorie e diritti nella definizione del lavoro dipendente tra common law e civil law*, Torino.

GRANDI M. (1999), *Il problema della subordinazione tra attualità e storia* in AA.VV., *Le trasformazioni del lavoro. La crisi della subordinazione e l'avvento di nuove forme di lavoro*, Milano.

GRANDI M. (1997), *"Il lavoro non è una merce": una formula da rivedere* in *Lav. dir.*, 4, pp. 557-580.

GRANDI M. (1989), *La subordinazione tra esperienza e sistema dei rapporti di lavoro* in PEDRAZZOLI M. (Ed.), *Lavoro subordinato e dintorni*, Bologna, pp. 77-91.

GRANDI M. (1977), *Diritto del lavoro e società industriale* in *Riv. it. dir. lav.*, 1, pp. 3-23.

GRANDORI A. (1999), *Organizzazione e modello economico*, Bologna.

GRAY M. L. (2016, January 8), *Your job is about to get 'taskified'*, retrieved from <http://lat.ms/1RtDjRA>.

GRIERSON J. and DAVIES R. (2017, February 10), *Pimlico Plumbers loses appeal against self-employed status*, retrieved from <https://gu.com/p/5qjyy/stw>.

GRIMSHAW D., JOHNSON M., RUBERY J. and KEIZER A. (2016), *Reducing precarious work*

protective gaps and the role of social dialogue in Europe, available at <https://goo.gl/xBHddy>.

GRIMSHAW D., MARCHINGTON M., RUBERY J. and WILLMOTT H. (2005), *Introduction: Fragmenting Work Across Organizational Boundaries* in MARCHINGTON M., GRIMSHAW D., RUBERY J. and WILLMOTT H. (Eds.), *Fragmenting work: Blurring organizational boundaries and disordering hierarchies*, Oxford, UK, pp. 2-38.

GRIMSHAW D., WILLMOTT H. and RUBERY J. (2005), *Inter-organizational networks: Trust, power, and the employment relationship* in MARCHINGTON M., GRIMSHAW D., RUBERY J. and WILLMOTT H. (Eds.), *Fragmenting work. Blurring organizational boundaries and disordering hierarchies*, Oxford, UK, pp. 39-62.

GRISWOLD A. (2016, October 1), *The Uber economy looks a lot like the pre-industrial economy*, retrieved from <https://qz.com/806117>.

GROFF A. L., CALLEGARI P. and MADDEN P. M. (2015), *Platforms Like Uber and the Blurred Line Between Independent Contractors and Employees* in *Computer Law Review International*, 16(6), pp. 166-171.

GUARASCIO D. and SACCHI S. (2017), *Digitalizzazione, automazione e futuro del lavoro*, Roma.

GUNDERSON M. (2013), *Changes in the Labor Market and the Nature of Employment in Western Countries* in STONE K. V. W. and ARTHURS H. (Eds.), *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, New York, pp. 23-41.

HALAC M. (2012), *Relational contracts and the value of relationships* in *The American Economic Review*, 102(2), pp. 750-779.

HALLERÖD B., EKBRAND H. and BENGTSSON M. (2015), *In-work poverty and labour market trajectories: Poverty risks among the working population in 22 European countries* in *Journal of European Social Policy*, 25(5), pp. 473-488.

HARDIE M. (2016), *The feasibility of measuring the sharing economy*, UK Office for National Statistics, available at <https://goo.gl/bq8Hs6>.

HARRIS S. D. and KRUEGER A. B. (2015), *A Proposal for Modernizing Labor Laws for Twenty-First-Century Work: The "Independent Worker"*, The Hamilton Project, Brookings.

HART O. D. (1995), *Firms, contracts, and financial structure*, Oxford, UK.

HART O. D. (1988), *Incomplete Contracts and the Theory of the Firm* in *Journal of Law, Economics, & Organization*, 4(1), pp. 119-139.

HART O. D. and MOORE J. (2005), *On the design of hierarchies: coordination versus specialization* in *Journal of political Economy*, 113(4), pp. 675-702.

HATFIELD I. (2015), *Self-employment in Europe*, Institute for Public Policy Research, London.

HATZOPOULOS V. and ROMA S. (2017), *Caring for Sharing? The Collaborative Economy under EU Law* in *Common Market Law Review*, 54(1), pp. 81-128.

HEAD S. (2014), *Mindless: Why smarter machines are making dumber humans*, New York.

HEALY J., NICHOLSON D. and PEKAREK A. (2017), *Should we take the gig economy seriously?* in *Labour & Industry: a Journal of the Social and Economic Relations of Work*, 27(3), pp. 232-248.

HEALY J., PEKAREK A. and NICHOLSON D. (2017, July 3), *Gig economy businesses like Uber and Airtasker need to evolve to survive*, retrieved from <https://goo.gl/cREnAn>.

HELLER N. (2017, May 15), *Is the Gig Economy Working?*, retrieved from <http://nyer.cm/256mlYx>.

HENDRICKSON C. (2018, January 8), *The Gig Economy's Great Delusion*, retrieved from <https://goo.gl/oNv8sv>.

HENDRICKX F. (2017), *European labour law and the millennium shift: from post to Pillar*, Draft presented at the Roger Blanpain Commemoration Conference, Leuven, 3-4 November 2017.

HENDRICKX F. (2017), *The European Pillar of Social Rights: Interesting times ahead* in *European Labour Law Journal*, 8(3), pp. 191-192.

HENDRICKX F. (2012), *Foundations and functions of contemporary labour law in European Labour Law Journal*, 3(2), pp. 108-130.

HEPPLE B. (2013), *Back to the Future: Employment Law under the Coalition Government in Industrial Law Journal*, 42(3), pp. 203-223.

HEPPLE B. (Ed.) (1986), *The making of labour law in Europe: a comparative study of nine countries up to 1945*, London.

HERMAN E. (2014), *Working poverty in the European Union and its main determinants: An empirical analysis in Engineering Economics*, 25(4), pp. 427-436.

HEYES J. and HASTINGS T. (2017), *The Practices of Enforcement Bodies in Detecting and Preventing Bogus Self-Employment*, European Platform Undeclared Work, European Commission, Brussels.

HEYES J. and LEWIS P. (2014), *Employment protection under fire: Labour market deregulation and employment in the European Union in Economic and Industrial Democracy*, 35(4), pp. 587-607.

HILL K. (2017, February 25), *There's no magic in venture-backed home care*, retrieved from <https://goo.gl/LQcoFM>.

HINRICHS K. and JESSOLA M. (Eds.) (2012), *Labour Market Flexibility and Pension Reforms: Flexible Today, Secure Tomorrow?*, New York.

HOBBSAWM E. J. (1972), *La rivoluzione industriale e l'impero. Dal 1750 ai giorni nostri*, Torino.

HOLMSTRÖM B. and MILGROM P. (1994), *The firm as an incentive system in The American Economic Review*, 84(4), pp. 972-991.

HORTON J. J. (2010), *Online Labor Markets in SABERI A. (Ed.), Internet and Network Economics*, Stanford, CA, pp. 515-522.

HORTON J. J. and CHILTON L. B. (2010), *The labor economics of paid crowdsourcing in Proceedings of the 11th ACM conference on Electronic commerce*, pp. 209-218.

HOUSE OF COMMON, WORK AND PENSIONS COMMITTEE (2017), *Self-employment and the gig economy*, London.

HOUSEMAN S. N. (2001), *Why employers use flexible staffing arrangements: Evidence from an establishment survey in ILR Review*, 55(1), pp. 149-170.

HOWE J. (2006, June), *The Rise of Crowdsourcing*, retrieved from <https://www.wired.com/2006/06/crowds/>.

HUDSON-SHARP N. and RUNGE J. (2017), *International Trends in Insecure Work: A Report for the Trades Union Congress*, National Institute of Economic and Social Research.

HUNT A. and MACHINGURA F. (2016), *A good gig? The rise of on-demand domestic work*, Overseas Development Institute Working Paper No. 7.

HUNT A., SAMMAN E. and MANSOUR-ILLE D. (2017), *Syrian women refugees in Jordan: Opportunity in the gig economy?*, Overseas Development Institute Report.

HUSSENOT A. (2017, August 21), *Why the future of work could lie in freelancing*, retrieved from <http://wef.ch/2vWWHPR>.

HUWS U. (2017), *Where did online platforms come from? The virtualization of work organization and the new policy challenges it raises in MEIL P. and KIROV V. (Eds.), Policy Implications of Virtual Work*, London, pp. 29-48.

HUWS U. (2016), *New forms of platform employment in FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS), The Digital Economy and the Single Market*, Brussels, Belgium.

HUWS U. (2016, June 1), *Logged In*, retrieved from <https://goo.gl/ik6BWL>.

HUWS U. (2014), *Labor in the global digital economy: The cybertariat comes of age*, New York.

HUWS U. (2009), *The making of a cybertariat? Virtual work in a real world in Socialist Register*, 37, pp. 1-23.

HUWS U. and JOYCE S. (2016), *The economic and social situation of crowd workers and their legal status in Europe*, International Labor Brief.

HUWS U., SPENCER N. H. and JOYCE S. (2016), *Crowd Work in Europe. Preliminary Results from a Survey in the UK, Sweden*,

Germany, Austria and The Netherlands, Foundation for European Progressive Studies.

HUWS U., SPENCER N. H., SYRDAL D. S. and HOLTS K. (2017), *Work in the European Gig Economy. Research Results from The UK, Sweden, Germany, Austria, The Netherlands, Switzerland and Italy*, Foundation for European Progressive Studies.

HYDE A. (2006), *What is labor law?* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and frontiers of labour law*, Oxford, UK and Portland, OR, pp. 37-61.

HYDE A. (1998), *Employment law after the death of employment* in *U. Pa. J. Lab. & Emp. L.*, 1(1), pp. 99-116.

ICHINO P. (2004), *Lezioni di diritto del lavoro: un approccio di labour law and economics*, Milano.

ICHINO P. (2001), *Il dialogo tra economia e diritto del lavoro* in *Riv. it. dir. lav.*, 1, pp. 165-201.

ICHINO P. (1999), *Il diritto del lavoro ei confini dell'impresa* in *Giorn. dir. lav. rel. ind.*, 2/3, pp. 203-275.

ICHINO P. (1998), *The labour market: A lawyer's view of economic arguments* in *Int'l Lab. Rev.*, 137, pp. 299-312.

ICHINO P. (1996), *Il lavoro e il mercato*, Milano.

ICHINO P. (1990), *La fuga dal lavoro subordinato* in *Democrazia e diritto*, 1, pp. 69-76.

ICHINO P. (1989), *Subordinazione e autonomia nel diritto del lavoro*, Milano.

INSPECTION GENERALE DES AFFAIRES SOCIALES (IGAS) (2016), *Les plateformes collaboratives, l'emploi et la protection sociale*, Paris.

INTERNATIONAL LABOUR OFFICE (2016), *Non-standard employment around the world: Understanding challenges, shaping prospects*, Geneva, Switzerland.

INTERNATIONAL LABOUR OFFICE (2015), *Conclusions of the Meeting of Experts on Non-Standard Forms of Employment*, available at <https://goo.gl/MtbrCW>.

INTERNATIONAL LABOUR OFFICE (2013), *Regulating the employment relationship in Europe: A guide to Recommendation No. 198*, Governance and Tripartism Department, Geneva, Switzerland.

INTERNATIONAL LABOUR OFFICE (2006), *The employment relationship*, International Labour Conference, 95th Session, 2006 Report V(1).

INTERNATIONAL LABOUR OFFICE (2003), *The scope of the employment relationship*, International Labour Conference 91st Session, Geneva, Switzerland.

INTERNATIONAL LABOUR ORGANIZATION (2011), *Policies and Regulations to Combat Precarious Employment*, available at: <https://goo.gl/TmmXTS>.

INTERNATIONAL LABOUR ORGANIZATION (2003), *The Scope of the Employment Relationship*, Report V, International Labour Conference, 91st Session, Geneva, Switzerland.

INTERNATIONAL LABOUR ORGANIZATION (1997), *Contract Labour – Report VI(1) to the 85th Session of the International Labour Conference*, Geneva, Switzerland.

INVERSI C., DUNDON T. and BUCKLEY L.-A. (2017), *'I Don't Work For, I Work With...'* *Disposable workers and working time regulation in the gig-economy*, Paper prepared for presentation at the "5th Conference of the Regulating for Decent Work Network" at the International Labour Office, Geneva, Switzerland, 3-5 July 2017.

IPEIROTIS P. G. (2010), *Demographics of Mechanical Turk*, Working paper CeDER-10-01, NYU, Stern School of Business.

IPEIROTIS P. G. and HORTON J. J. (2011), *The need for standardization in crowdsourcing in Proceedings of the workshop on crowdsourcing and human computation at CHI*.

IRANI L. (2015, January 15), *Justice for 'data janitors'*, retrieved from <http://www.publicbooks.org/justice-for-data-janitors/>.

IRANI L. and SILBERMAN M. S. (2013), *Turkopticon: Interrupting worker invisibility in Amazon Mechanical Turk* in *Proceedings of the*

SIGCHI Conference on Human Factors in Computing Systems, pp. 611-620.

ISAAC E. (2014), *Disruptive innovation: Risk-shifting and precarity in the age of Uber*, Paper presented at the Berkeley Roundtable on the International Economy.

ITALIAN SENATE OF THE REPUBLIC (2017), *Report on the Impact of the Fourth Industrial Revolution on the Labour Market*, Committee Labour and Social Security; retrieved from <https://goo.gl/bAMBEz>.

JACOBIDES M. G. (2005), *Industry change through vertical disintegration: How and why markets emerged in mortgage banking* in *Academy of Management Journal*, 48(3), pp. 465-498.

JAMIL R. (2017), *Drivers vs Uber—The limits of the Judicialization: Critical review of London's employment tribunal verdict in the case of Aaslam Y. & Farrar J. against Uber* in *Revue Interventions Économiques. Papers in Political Economy*, 58, retrieved from <http://journals.openedition.org/interventioneconomiques/3449>.

JEFFERY M. (1998), *Not really going to work? Of the directive on part-time work, 'atypical work' and attempts to regulate it* in *Industrial Law Journal*, 27(3), pp. 193-213.

JEFFERY M. (1995), *The Commission Proposals on Atypical Work: Back to the Drawing-Board... Again* in *Industrial Law Journal*, 24(3), pp. 296-299.

JENSEN M. C. and MECKLING W. H. (1976), *Theory of the firm: Managerial behavior, agency costs and ownership structure* in *Journal of financial economics*, 3(4), pp. 305-360.

JOHNSTON H. and LAND-KAZLAUSKAS C. (2018), *On Demand and Organized: Developing Collective Agency, Representation and Bargaining in the Gig Economy*, ILO Conditions of Work and Employment Series No. 94.

JOUMARD I. (2001), *Tax Systems in European Union Countries*, OECD Economics Working Paper, No. 301

KAGANER E., CARMEL E., HIRSCHHEIM R. and OLSEN T. (2013), *Managing the human cloud* in *MIT Papers*.

KAHN-FREUND O. (1972), *Labour and the Law*, London.

KAHN-FREUND O. (1967), *A note on status and contract in British labour law* in *Mod. L. Rev.*, 30(6), pp. 635-644.

KALLEBERG A. L. (2009), *Precarious work, insecure workers: Employment relations in transition* in *American Sociological Review*, 74(1), pp. 1-22.

KALLEBERG A. L. (2000), *Nonstandard employment relations: Part-time, temporary and contract work* in *Annual Review of Sociology*, 26(1), pp. 341-365.

KAMDAR A. (2016, February 19), *Why Some Gig Economy Startups are Reclassifying Workers as Employees*, retrieved from <https://goo.gl/m6oFJ4>.

KÄSSI O. and LEHDONVIRTA V. (2016), *Online Labour Index: Measuring the Online Gig Economy for Policy and Research*, Paper presented at Internet, Politics & Policy 2016, 22-23 September, Oxford, UK.

KATZ L. F. and KRUEGER A. B. (2016), *The rise and nature of alternative work arrangements in the United States, 1995-2015*, NBER Working Paper, No. 22667.

KATZ M. L. and SHAPIRO C. (1985), *Network externalities, competition, and compatibility* in *American Economic Review*, 75(3), pp. 424-440.

KATZ V. (2015), *Regulating the sharing economy* in *Berkeley Tech. LJ*, 30, pp. 1067-1126.

KAUFMAN B. E. (2008), *Paradigms in Industrial Relations: Original, Modern and Versions In-between* in *British Journal of Industrial Relations*, 46, pp. 314-339.

KELLER B. and SEIFERT H. (2005), *Atypical employment and flexicurity* in *Management Revue*, 16(3), pp. 304-323.

KENNEDY E. J. (2016), *Employed by an Algorithm: Labor Rights in the On-Demand Economy* in *Seattle UL Rev.*, 40(3), pp. 987-1048.

KENNEDY J. V. (2016), *Three Paths to Update Labor Law for the Gig Economy*, Information Technology & Innovation Foundation.

KENNEY M. and ZYSMAN J. (2016), *The rise of the Platform Economy in Issues in Science and Technology*, 32(3), pp. 61-69.

KESSLER S. (2017, July 13), *Forget the on-demand worker: Stanford researchers built an entire on-demand organization*, retrieved from <https://qz.com/1027606>.

KESSLER S. (2017, July 31), *Robots are replacing managers, too*, retrieved from <https://qz.com/1039981>.

KESSLER S. (2015, February 17), *The Gig Economy won't last because it's being sued to death*, retrieved from <https://goo.gl/LmtpKY>.

KEYNES J. M. (1930), *Economic possibilities for our grandchildren in Essays in Persuasion*, pp. 358-373.

KEZUKA K. (2017), *Crowdwork and the Law in Japan* in WAAS B., LIEBMAN W. B., LYUBARSKY A. and KEZUKA K. (Eds.), *Crowdwork—A Comparative Law Perspective*, Frankfurt, pp. 187-255.

KHAN L. (2017), *Amazon's Antitrust Paradox in Yale Law Journal*, 126(3), pp. 564–907.

KILLICK T. (1995), *The Flexible Economy*, London.

KIM P. T. (2017), *Data-driven discrimination at work in Wm. & Mary L. Rev.*, 58(3), pp. 857-936.

KINGSLEY S. C., GRAY M. L. and SURI S. (2014), *Monopsony and the crowd: Labor for lemons in Internet, Politics, & Policy 2014 Conference*, Oxford, UK, pp. 18-19.

KITTUR A., NICKERSON J. V., BERNSTEIN M., GERBER E., SHAW A., ZIMMERMAN J., LEASE M. and HORTON J. J. (2013), *The future of crowd work in Proceedings of the 2013 Conference on Computer Supported Cooperative Work*, pp. 1303-1321.

KLEIN B., CRAWFORD R. G. and ALCHIAN A. A. (1978), *Vertical integration, appropriable rents, and the competitive contracting process in Journal of Law and Economics*, 21(2), pp. 297-326.

KNIGHT W. (2016), *AI's unspoken problem in MIT Technology Review*, 19(5), pp. 28-37.

KOCH M. (2013), *Employment Standards in Transition: From Fordism to Finance-Driven*

Capitalism in KOCH M., FRITZ M. and HYMAN R. (Eds.), *Non-Standard Employment in Europe: Paradigms, Prevalence and Policy Responses*, London, pp. 29-45.

KÖRFER A. and RÖTHIG O. (2017), *Decent crowdwork—the fight for labour law in the digital age in Transfer: European Review of Labour and Research*, 23(2), pp. 233-236.

KOVÁCS E. (2017), *Regulatory Techniques for 'Virtual Workers' in Hungarian Labour Law E-Journal*, 2.

KRAFT P. (1999), *To Control and Inspire: U.S. Management in the Age of Computer Information Systems and Global Production* in WARDELL M., STEIGER T. L. and MEIKSINS P. (Eds.), *Rethinking the Labor Process*, Albany, pp. 17–36.

KUEK S. C., PARADI-GUILFORD C., FAYOMI T., IMAIZUMI S., IPEIROTIS P. G., PINA P. and SINGH M. (2015), *The global opportunity in online outsourcing*, Washington, DC.

LAGRANDEUR K. and HUGHES J. J. (Eds.) (2017), *Surviving the Machine Age: Intelligent Technology and the Transformation of Human Work*, London.

LAMOREAUX N. R., RAFF D. M. and TEMIN P. (2003), *Beyond markets and hierarchies: Toward a new synthesis of American business history in The American Historical Review*, 108(2), pp. 404-433.

LANDES D. S. (1969), *The unbound Prometheus: technological change and industrial development in Western Europe from 1750 to the present*, Cambridge, MA.

LANDES D. S., MOKYR J. and BAUMOL W. J. (Eds.) (2012), *The invention of enterprise: Entrepreneurship from ancient Mesopotamia to modern times*, Princeton, NJ.

LANG C., SCHÖMANN I. and CLAUWAERT S. (2013), *Atypical forms of employment contracts in times of crisis*, ETUI Working Paper No. 03, Brussels.

LANGILLE B. (1998), *Labour law is not a commodity in Industrial Law Journal*, 19(5), pp. 1002-1016.

LANGILLE B. A. and DAVIDOV G. (1999), *Beyond Employees and Independent Contractors: A*

View from Canada in *Comp. Lab. L. & Pol'y J.*, 21(1), pp. 7-46.

LAZERSON M. H. (1988), *Organizational Growth of Small Firms: An Outcome of Markets and Hierarchies?* in *American Sociological Review*, 53(3), pp. 330-342.

LEBERSTEIN S. and RUCKELSHAUS C. (2016), *Independent Contractor vs. Employee: Why independent contractor misclassification matters and what we can do to stop it*, NELP Policy Brief.

LECERF M. (2016), *What is 'Social Triple A'?*, At a glance, EPRS, European Parliamentary Research Service.

LEE E. (1996), *Globalization and employment: Is anxiety justified?* in *Int'l Lab. Rev.*, 135(5), pp. 485-497.

LEE G. (2017, August 7), *The number of people on zero hours contracts has quadrupled since records began*, retrieved from <https://goo.gl/3cb2Pm>.

LEE J. (2016), *Drivers and Consequences in Transforming Work Practices* in LEE J. (Ed.), *The Impact of ICT on Work*, Singapore, pp. 71-92.

LEHDONVIRTA V. (2018), *Flexibility in the gig economy: managing time on three online piecework platforms in New Technology, Work & Employment*, 33(1), pp. 13-29.

LEHNDORFF S., DRIBBUSCH H. and SCHULTEN T. (Eds.) (2017), *Rough waters: European trade unions in a time of crises*, Brussels.

LENAERTS K., BEBLAVY M. and KILHOFFER Z. (2017), *Government Responses to the Platform Economy: Where do we stand?*, CEPS Policy Insight No. 2017-30/July 2017.

LIEBMAN S. (2010), *Evaluate Labour Law* in CASALE G. and PERULLI A. (Eds.), *Compliance with labour legislation: its efficacy and efficiency*, ILO Working Document, No. 6.

LIEBMAN S. (2010), *Prestazione di attività produttiva e protezione del contraente debole fra sistema giuridico e suggestioni dell'economia* in *Giorn. dir. lav. rel. ind.*, 4, pp. 571-593.

LIEBMAN S. (1999), *Italy: Employment Situations and Workers' Protection*, ILO Nat'l Studies, available at <https://goo.gl/fCXLsg>.

LIEBMAN S. (1993), *Individuale e collettivo nel contratto di lavoro*, Milano.

LINDBECK A. and SNOWER D. J. (1988), *The insider-outsider theory of employment and unemployment*, Cambridge, MA.

LINDER M. (1999), *Dependent and Independent Contractors in Recent US Labor Law: An Ambiguous Dichotomy Rooted in Simulated Statutory Purposelessness* in *Comp. Lab. L. & Pol'y J.*, 21(1), pp. 187-230.

LINDER M. and HOUGHTON J. (1990), *Self-employment and the Petty Bourgeoisie: Comment on Steinmetz and Wright* in *American Journal of Sociology*, 96(3), pp. 727-735.

LYNSKEY O. (2017), *Regulating 'Platform Power'*, LSE Legal Studies Working Paper, No. 1/2017. Available at SSRN: <https://ssrn.com/abstract=2921021>.

LISO F. (2010), *Lo Statuto dei lavoratori, tra amarcord e prospettive del futuro* in *Lav. dir.*, 1, pp. 75-84.

LISO F. (1992), *La fuga dal diritto del lavoro in Industria e sindacato*, 28, pp. 1-9, now in GHERA E., PANICCIA U. and SABA V. (Eds.) (1998), *Dialoghi sul sistema. Le relazioni industriali in venti anni della rivista Industria e Sindacato (1977-1996)*, Milano.

LOBEL O. (2017), *The Gig Economy & The Future of Employment and Labor Law* in *University of San Francisco Law Review*, 51(1), pp. 64-71.

LOBEL O. (2016), *The law of the platform* in *Minn. L. Rev.*, 101(1), pp. 87-166.

LO FARO A. (2017), *Core and Contingent Work: a Theoretical Framework* in ALES E., DEINERT O. and KENNER J. (Eds.), *Core and contingent work in the European Union: a comparative analysis*, Oxford, UK, pp. 7-23.

LO FARO A. (2003), *Processi di outsourcing e rapporti di lavoro*, Milano.

LODIGIANI R. and MARTINELLI M. (2002), *Dopo la 'mass production'. Nuovi paradigmi e questioni aperte* in ID. (Ed.), *Dentro e oltre i post-fordismi. Impresa e lavoro in mutamento tra analisi teorica e ricerca empirica*, Milano.

LOI M. (2015), *Technological unemployment and human disenchantment in Ethics and Information Technology*, 17(3), pp. 201-210.

LOI P. (2017), *Il lavoro nella Gig economy nella prospettiva del rischio in Riv. giur. lav.*, 2, pp. 259-280.

LOI P. (1999), *L'analisi economica del diritto e il diritto del lavoro in Giorn. dir. lav. rel. ind.*, 4, pp. 547-585.

LOMBA C. (2005), *Beyond the debate over 'post-' vs 'neo-' Taylorism: the contrasting evolution of industrial work practices in International Sociology*, 20(1), pp. 1001-1074.

LÖRCHER K. and SCHÖMANN I. (2016), *The European Pillar of Social Rights: critical legal analysis and proposals*, ETUI Report, No. 139.

LORENZONI G. and ORNATI O. A. (1988), *Constellations of firms and new ventures in Journal of Business Venturing*, 3(1), pp. 41-57.

LUDEA-RUSZEL A. (2015), *Typical or Atypical: Reflections on the Atypical Forms of Employment Illustrated with the Example of a Fixed-Term Employment Contract-A Comparative Study of Selected European Countries in Comp. Lab. L. & Pol'y J.*, 37(2), pp. 407-445.

LUNARDON F. and TOSI P. (1998), *Subordinazione in Digesto IV edizione, Discipline privatistiche, Sezione Commerciale, XV*, p. 260.

LYON-CAEN G. (1990), *Le droit du travail non salarié*, Paris.

MACKENZIE R. and MARTÍNEZ LUCIO M. (2005), *The realities of regulatory change: beyond the fetish of deregulation in Sociology*, 39(3), pp. 499-517.

MACNEIL I. R. (1985), *Relational contract: What we do and do not know in Wis. L. Rev.*, (3), pp. 483-526.

MACNEIL I. R. (1984), *Bureaucracy and Contracts of Adhesion in Osgoode Hall LJ*, 22(1), pp. 5-28.

MACNEIL I. R. (1980), *Economic analysis of contractual relations: its shortfalls and the need for a rich classificatory apparatus in Nw. UL Rev.*, 75(6), pp. 1018-1063.

MACNEIL I. R. (1973), *The many futures of contracts in S. Cal. L. Rev.*, 47(3), pp. 691-816.

MAGGIOLINO M. (2017), *Personalized Prices in European Competition Law*, Bocconi Legal Studies Research Paper. Available at SSRN: <https://ssrn.com/abstract=2984840>.

MAGNANI M. (2016), *Autonomia, subordinazione, coordinazione in MAGNANI M., PANDOLFO A. and VARESI P. A. (Eds.), I contratti di lavoro*, Torino, pp. 1-22.

MALONE T. W. (2004), *The future of work: How the new order of business will shape your organization, your management style and your life*, Boston, MA.

MALONE T. W. and LAUBACHER R. J. (1999), *The Dawn of the E-Lance Economy in NÜTTGENS M. and SCHEER A. W. (Eds.), Electronic Business Engineering*, Heidelberg, pp. 13-24.

MALONE T. W., YATES J. and BENJAMIN R. I. (1987), *Electronic markets and electronic hierarchies, Communications of the ACM*, 30(6), pp. 484-497.

MANCINI F. (1957), *La responsabilità contrattuale del prestatore di lavoro*, Milano.

MANDL I. and CURTARELLI M. (2017), *Crowd Employment and ICT-Based Mobile Work—New Employment Forms in Europe in MEIL P. and KIROV V. (Eds.), Policy Implications of Virtual Work*, London.

MANGAN J. (2000), *Workers Without Traditional Employment*, Cheltenham, UK.

MANJOO F. (2016, March 23), *The Uber model, it turns out, doesn't translate*, retrieved from <https://nyti.ms/25ID8fY>.

MANTOUVALOU V. (2012), *Human rights for precarious workers: the legislative precariousness of domestic labor in Comp. Lab. L. & Pol'y J.*, 34(1), pp. 133-166.

MANYIKA J., CHUI M., MIREMADI M., BUGHIN J., GEORGE K., WILLMOTT P. and DEWHURST M. (2017), *A future that works: Automation, employment, and productivity*, McKinsey Global Institute, New York.

MANYIKA J., LUND S., BUGHIN J., ROBINSON K., MISCHKE J. and MAHAJAN D. (2016), *Independent work: Choice, necessity, and the gig*

economy, McKinsey Global Institute, New York.

MARAZZI C. (1998), *E il denaro va: esodo e rivoluzione dei mercati finanziari*, Torino.

MARGLIN S. (1974), *What Do Bosses Do?* in *Review of Radical Political Economics*, 6(2), pp. 60-112.

MARINELLI M. (2002), *Decentramento produttivo e tutela dei lavoratori*, Torino.

MARIUCCI L. (2016), *Culture e dottrine del giuslavorismo* in *Lav. dir.*, 4, pp. 585-644.

MARIUCCI L. (1979), *Il lavoro decentrato: discipline legislative e contrattuali*, Milano.

MARSDEN D. (2004), *The 'network economy' and models of the employment contract* in *British Journal of Industrial Relations*, 42(4), pp. 659-684.

MARTELLI A. (2017), *Essays on the Political Economy of Employment Polarization: Global Forces and Domestic Institutions*, LSE Working Papers.

MARTENS B. (2016), *An Economic Policy Perspective on Online Platforms*, Institute for Prospective Technological Studies Digital Economy Working Paper, No. 05.

MARVIT M. Z. (2014, February 5), *How Crowdworkers Became the Ghosts in the Digital Machine*, retrieved from <https://goo.gl/rJRXmA>.

MAZZOTTA O. (2009), *La dissociazione tra datore di lavoro e utilizzatore della prestazione* in VALLEBONA A. (Ed.), *I contratti di lavoro*, 1, pp. 915-958.

MAZZOTTA O. (1990), *Introduzione* in AA.VV., *Nuove tecnologie e rapporti fra imprese*, Milano, pp. 1-10.

MCAFEE A. and BRYNJOLFSSON E. (2017), *Machine, platform, crowd: Harnessing our digital future*, New York.

MCCANN D. (2008), *Regulating Flexible Work*, Oxford, UK.

MCGAUGHEY E. (2018), *Will Robots Automate Your Job Away? Full Employment, Basic Income, and Economic Democracy*, Centre for Business Research, University of Cambridge, Working Paper No. 496. Available at SSRN: <https://ssrn.com/abstract=3044448>.

MCGOOGAN C. (2017, March 6), *Tribunal to rule on Deliveroo riders' employment status*, retrieved from <https://goo.gl/d4whjY>.

MCKINSEY (2013, March), *Evolution of the networked enterprise: McKinsey Global Survey results*, retrieved from <https://goo.gl/HcuAEM>.

MCKEOWN T. (2016), *A consilience framework: Revealing hidden features of the independent contractor* in *Journal of Management and Organization*, 22(6), pp. 779-796.

MEANS B. and SEINER J. A. (2015), *Navigating the Uber Economy* in *U.C. Davis Law Review*, 49(4), pp. 1511-1546.

MEARDI G. (2014), *The (claimed) growing irrelevance of employment relations* in *Journal of Industrial Relations*, 56(4), pp. 594-605.

MÉDA D. (2016), *The future of work: The meaning and value of work in Europe*, ILO Research Paper, No. 18.

MENEGATTI E. (2018), *On-Demand Workers by Application: Autonomia o Subordinazione?* in ZILIO GRANDI G. and BIASI M. (Eds.), *Commentario Breve allo Statuto del Lavoro Autonomo e del Lavoro Agile*, Padova, pp. 93-111.

MENEGATTI E. (2017), *A fair wage for workers-on-demand via app*, Paper presented at the Fifteenth International Conference in commemoration of Professor Marco Biagi, Modena, Marco Biagi Foundation, 20-21 March 2017.

MENEGATTI E. (2016), *Mending the Fissured Workplace: The Solutions Provided by Italian Law* in *Comp. Lab. L. & Pol'y J.*, 37(1), pp. 91-120.

MENEGONI L. (2000), *Il contratto individuale di lavoro* in *Giorn. dir. lav. rel. ind.*, 2, pp. 181-200.

MENEGONI L. (1990), *L'influenza del diritto del lavoro sul diritto civile* in *Dir. rel. ind.*, 5, pp. 5-23..

MENEGONI L. (1971), *Lezioni sul contratto di lavoro*, Milano.

MHONE G. C. (1998), *Atypical forms of work and employment and their policy implications* in *Industrial Law Journal*, 19(2), pp. 197-214.

MILGROM P. and ROBERTS J. (1990), *The economics of modern manufacturing: Technology*,

strategy, and organization in *The American Economic Review*, 80(3), pp. 511-528.

MILLAND K. (2017), *Slave to the keyboard: the broken promises of the gig economy* in *Transfer: European Review of Labour and Research*, 23(2), pp. 229-231.

MILLAND K. (2016), *Crowd Work: the Fury and the Fear* in FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS), *The Digital Economy and the Single Market*, Brussels, Belgium, pp. 83-92

MISHEL L. and BERNSTEIN J. (1994), *The State of Working America 1994–1995*, Armonk, NY.

MITCHELL T. and BRYNJOLFSSON E. (2017), *Track how technology is transforming work* in *Nature*, 544, pp. 290-292.

MONTUSCHI L. (1993), *Il contratto di lavoro fra pregiudizio e orgoglio giuslavoristico* in *Lav. dir.*, 1, pp. 21-45.

MOKYR J., VICKERS C. and ZIEBARTH N. L. (2015), *The history of technological anxiety and the future of economic growth: Is this time different?* in *The Journal of Economic Perspectives*, 29(3), pp. 31-50.

MONDEN Y. (2011), *Toyota production system: an integrated approach to just-in-time*, Boca Raton, FL.

MOORE P. V. (2017), *The Quantified Self in Precarity: Work, Technology and What Counts*, Abingdon, UK.

MORETTI E. (2012), *The New Geography of Jobs*, Boston, MA.

MORIN M. L. (2005), *Labour law and new forms of corporate organization* in *International Labour Review*, 144(1), pp. 5-30.

MOSTACCI E. and SOMMA A. (2016), *Il caso Uber. La sharing economy nel confronto tra common law e civil law*, Milano.

MUEHLBERGER U. (2007), *Dependent Self-Employment: Workers on the Border between Employment and Self-Employment*, New York.

MUEHLBERGER U. (2005), *Hierarchies, relational contracts and new forms of outsourcing*, ICER Working Paper No. 22.

MUEHLBERGER U. and BERTOLINI S. (2007), *The organizational governance of work relationships between employment and self-employment* in *Socio-Economic Review*, 6(3), pp. 449-472.

MUNGER M. C. (2018), *Tomorrow 3.0: Transaction Costs and the Sharing Economy*, Cambridge, UK.

MURGIA A. (2014), *Representations of precarity in Italy: collective and individual stories, social imaginaries and subjectivities* in *Journal of Cultural Economy*, 7(1), pp. 48-63.

MURRAY F. (1983), *The decentralisation of production – the decline of the mass-collective worker?* in *Capital & Class*, 7(1), pp. 74-99.

NAPOLI M. (2005), *Riflessioni sul contratto a progetto* in AA.VV., *Diritto del lavoro: i nuovi problemi. L'omaggio dell'Accademia a Mattia Persiani*, Padova, pp. 1343-1359.

NAPOLI M. (1995), *Contratto e rapporti di lavoro, oggi* in AA.VV., *Le ragioni del diritto. Scritti in onore di Luigi Mengoni*, Milano, pp. 1057-1142.

NEILSON B. and ROSSITER N. (2008), *Precarity as a political concept, or, Fordism as exception* in *Theory, Culture & Society*, 25(7-8), pp. 51-72.

NEPI F. (2004), *I profili contrattuali dell'outsourcing* in CAMPANELLA P. and CLAVARINO A. (Eds.), *L'impresa dell'outsourcing*, Milano, pp. 47-71.

NEULANDS G., LUTZ C. and FIESELER C. (2017), *Power in the Sharing Economy, Report for the EU Horizon 2020 project Ps2Share: Participation, Privacy, and Power in the Sharing Economy*.

NICOLOSI M. (2012), *Il lavoro esternalizzato*, Torino.

NIELSEN R. (2013), *EU Labour Law*, Copenhagen.

NOGLER L. (2015), *La subordinazione nel d.lgs. n. 81 del 2015: alla ricerca dell'autorità del punto di vista giuridico*, WP C.S.D.L.E. "Massimo D'Antona".IT, 267.

NOGLER L. (2009), *The concept of "subordination" in European and comparative law*, Trento.

NOGLER L. (2002), *Ancora su «tipo» e lavoro subordinato nell'impresa* in *Arg. dir. lav.*, 1, pp. 109-153.

NOVITZ T., BOGG A. L., BALES K., FORD M. and RUSSEL R. (2018, February 27), *Why the idea of 'good work' in a gig economy remains a distant ideal*, retrieved from <https://goo.gl/6ZY3Sh>.

O'CONNOR S. (2017, November 14), *Deliveroo fends off couriers' demands for union recognition*, retrieved from <http://on.ft.com/2zCg30X>.

O'CONNOR S. (2017, April 18), *Gig economy workers want to ditch industrial-era shift patterns*, retrieved from <http://on.ft.com/2pfQZrT>.

O'CONNOR S. (2017, March 21), *The shifting borderline between employees and not-quite-employees*, retrieved from <http://on.ft.com/2nO7reD>.

O'CONNOR S. (2016, September 8), *When your boss is an algorithm*, retrieved from <https://on.ft.com/2cJHEUA>.

O'SULLIVAN M., TURNER T., LAVELLE J., MACMAHON J., MURPHY C., RYAN L., GUNNIGLE P. and O'BRIEN M. (2017), *The role of the state in shaping zero hours work in an atypical liberal market economy* in *Economic and Industrial Democracy*, 38(2), pp. 256-270.

OECD (2017), *Going Digital: Making the Transformation Work for Growth and Well-Being, Report for the Meeting of the OECD Council at Ministerial Level Paris, 7-8 June 2017*, Paris.

OECD (2017), *Science, Technology and Industry Scoreboard 2017: The digital transformation*, Paris.

OECD (2016), *New forms of work in the digital economy*, Digital Economy Papers No. 260.

OECD (2016), *Working Party on Measurement and Analysis of the Digital Economy, New forms of work in the digital economy*.

OECD (2015), *In It Together: Why Less Inequality Benefits All*, Paris.

OECD (2015), *OECD Labour Force Statistics 2014*, Paris.

OECD (2014), *OECD Employment Outlook 2014*, Paris.

OHNO T. (1993), *Lo spirito Toyota*, Torino.

ORLANDINI G. (2012), *Il rapporto di lavoro con elementi di internazionalità*, WP C.S.D.L.E. "Massimo D'Antona".IT, 137.

OUCHI W. G. and BARNEY J. B. (1981), *Efficient Boundaries in Working paper*, UCLA Graduate School of Management.

OWENS R. (2002), *Decent work for the contingent workforce in the new economy* in *Australian Journal of Labour Law*, 15(3), pp. 209-234.

PACELLA G. (2017), *Il lavoro nella gig economy e le recensioni on line: come si ripercuote sui e sulle dipendenti il gradimento dell'utenza?* in *Labour & Law Issues*, 3(1), pp. 3-34.

PACELLA G. (2017), *Lavoro e piattaforme: una sentenza brasiliana qualifica subordinato il rapporto tra Uber e gli autisti* in *Riv. it. dir. lav.*, 3, pp. 570-592.

PAJARINEN M. and ROUVINEN P. (2014), *Computerization threatens one third of Finnish employment* in *ETLA Brief*, 22(13).

PALLINI M. (2013), *Il lavoro economicamente dipendente*, Padova.

PÁRAMO P. and VEGA M. L. (2017), *New forms of work and labour inspection: the new compliance challenges* in *IUSLabor*, 2.

PARKER G., VAN ALSTYNE M. and CHOUDARY S. (2016), *Platform Revolution*, New York.

PASQUALE F. (2017), "A Silicon Valley Catechism". *Review of Machine, Platform, Crowd: Harnessing Our Digital Future*, by Andrew McAfee and Erik Brynjolfsson in *Issues in Science and Technology*, 34(1).

PASQUALE F. (2017), *Two Narratives of Platform Capitalism* in *Yale Law & Policy Review*, 35(1), pp. 309-319.

PAUL T. (2017, July 18), *The gig economy is nothing new – it was standard practice in the 18th century*, retrieved from <https://goo.gl/kxY1F1>.

PECK D. (2013, December), *They're Watching You at Work*, retrieved from <http://theatlntc/2IPTYUV>.

PECK J. and THEODORE N. (2012), *Politicizing Contingent Work: Countering Neoliberal Labor Market Regulation... from the Bottom Up?* in *South Atlantic Quarterly*, 111(4), pp. 741-761.

PEDERSINI R. and COLETTI D. (2009), *Self-employed workers: industrial relations and working conditions*, European Foundation for the of Living and Working Conditions, Dublin.

PEDRAZZOLI M. (2002), *La parabola della subordinazione: dal contratto allo status. Riflessioni su Barassi e il suo dopo* in *Arg. dir. lav.*, 2, pp. 263-287.

PEDRAZZOLI M. (1998), *Consensi e dissensi sui recenti progetti di ridefinizione dei rapporti di lavoro* in AA.VV., *Subordinazione e autonomia: vecchi e nuovi modelli*, Torino, pp. 9-32.

PEDRAZZOLI M. (1998), *Dai lavori autonomi ai lavori subordinati* in *Giorn. dir. lav. rel. ind.*, 3, pp. 509-565.

PEDRAZZOLI M. (1998), *Lavoro sans phrase e ordinamento dei lavori. Ipotesi sul lavoro autonomo* in *Riv. it. dir. lav.*, 1, pp. 49-104.

PEDRAZZOLI M. (1985), *Democrazia industriale e subordinazione: poteri e fattispecie nel sistema giuridico del lavoro*, Milano.

PEREZ C. (2009), *Technological revolutions and techno-economic paradigms* in *Cambridge Journal of Economics*, 34(1), pp. 185-202.

PERLINGIERI P. (1995), *Mercato, solidarietà e diritti umani* in *Rass. Dir. Civ.*

PERRAUDIN C., THEVENOT N. and VALENTIN J. (2013), *Avoiding the employment relationship: Outsourcing and labour substitution among French manufacturing firms, 1984–2003* in *International Labour Review*, 152(3-4), pp. 525-547.

PERRITT H. H. Jr. (2016), *Uber, Federal Express and the test for independent contractors status* in ID. (Ed.), *Employment Law Update*, New York, pp. 1-24.

PERSIANI M. (1966), *Contratto di lavoro e organizzazione*, Padova.

PERULLI A. (2017), *The theories of the firm between Economy and law* in PERULLI A. and TREU T. (Eds.), *Enterprise and Social Rights*, Alphen aan den Rijn, The Netherlands, pp. 351-378.

PERULLI A. (2017), *The Notion of 'Employee' in Need of Redefinition, A Thematic Working Paper for The Annual Conference of the European Centre of Expertise (ECE): The Personal Scope of Labour Law in Times of Atypical Employment and Digitalisation*.

PERULLI A. (2017), *Lavoro e tecnica al tempo di Uber* in *Riv. giur. lav.*, 1, pp. 195-218.

PERULLI A. (2017), *Il lungo viaggio del lavoro autonomo dal diritto dei contratti al diritto del lavoro, e ritorno* in *Lav. dir.*, 2, pp. 251-282.

PERULLI A. (2015), *Un Jobs Act per il lavoro autonomo: verso una nuova disciplina della dipendenza economica?* in *Dir. rel. ind.*, 1, pp. 109-139.

PERULLI A. (2007), *Diritto del lavoro e diritto dei contratti* in *Riv. it. dir. lav.*, 4, pp. 427-454.

PERULLI A. (2006), *La riforma del mercato del lavoro: bilancio e prospettive* in MARIUCCI L. (Ed.), *Dopo la flessibilità, cosa?*, Bologna, pp. 189-208.

PERULLI A. (2003), *Economically dependent/quasi-subordinate (parasubordinate) employment: legal, social and economic aspects*, Study for the European Commission, Brussels.

PERULLI A. (2003), *Tecniche di tutela nei fenomeni di esternalizzazione* in *Arg. dir. lav.*, 2, pp. 473-490.

PERULLI A. (2002), *Il potere direttivo dell'imprenditore. Funzioni e limiti* in *Lav. dir.*, 3, pp. 397-414.

PERULLI A. (2002), *Modificazioni dell'impresa e rapporti di lavoro: spunti per una riflessione* in LYON-CAEN A. and PERULLI A. (Eds.), *Trasformazione dell'impresa e rapporti di lavoro: atti del seminario dottorale internazionale, Venezia 17-21 giugno*, Padova, pp. 1-21.

PERULLI A. (1996), *Il lavoro autonomo: contratto d'opera e professioni intellettuali*, Milano.

PERULLI A. (1992), *Il potere direttivo dell'imprenditore*, Milano.

PESSI R. (2016), *Il tipo contrattuale: autonomia e subordinazione dopo il Jobs Act* in MAZZOTTA O. (Ed.), *Lavoro ed esigenze dell'impresa tra diritto sostanziale e processo dopo il Jobs Act*, Torino, pp. 31-46.

PETROPOULOS G. (2017, April 27), *Do we understand the impact of artificial intelligence on employment?*, retrieved from <https://goo.gl/Mui4Hd>.

PETROPOULOS G. (2017), *An economic review of the collaborative economy*, *Bruegel Policy Contribution*, No 5.

PFISTER U. (2008), *Craft guilds, theory of the firm, and early modern proto-industry* in EPSTEIN S. R. and PRAK M. (Eds.), *Guilds, innovation and the European economy, 1400–1800*, New York, pp. 25-51.

PIASNA A. (2017), *'Bad jobs' recovery? European Job Quality Index 2005-2015*, ETUI Working Paper, No. 06.

PICHIERRI A. (1982), *L'organizzazione del lavoro in edilizia* in *Inchiesta*, ottobre-dicembre, pp. 49-59.

PIETROBELLI C., RABELLOTTI R. and AQUILINA M. (2004), *An empirical study of the determinants of self-employment in developing countries* in *Journal of International Development*, 16(6), pp. 803-820.

PIETROGIOVANNI V. (2017), *Redefining the Boundaries of Labour Law: Is Double Alienness a Useful Approach for Crowdworkers?*, Paper presented at the LLRN 3rd Conference, Labour Law Research Network, Toronto 25-27 June 2017.

PIORE M. and SABEL C. (1984), *The second industrial divide*, New York.

POCHET P. (2017, October 17), *The European Pillar of Social Rights in historical perspective*, retrieved from <https://goo.gl/yRFDgy>.

PODOLNY J. M. and PAGE K. L. (1998), *Network forms of organization* in *Annual Review of Sociology*, 24(1), pp. 57-76.

POLANYI M. (2009), *The tacit dimension*, Chicago, IL.

POLIVKA A. E. (1996), *Contingent and alternative work arrangements, defined* in *Monthly Lab. Rev.*, 119(10), pp. 3-9.

POLLICINO O. and LUBELLO V. (2017), *Un monito complesso ed una apertura al dibattito europeo rilevante: Uber tra giudici e legislatori* in *AIC*, 2.

PONCE DEL CASTILLO A. (2017), *A law on robotics and artificial intelligence in the EU?*, *ETUI Foresight Briefs*, No. 2.

POO A. (2017), *Out from the shadows: domestic workers speak in the United States* in GAROFALO GEYMONAT G., MARCHETTI S. and KYRITSIS P. (Eds.), *Domestic workers speak a global fight for rights and recognition*, London, pp. 20-26.

POPMA J. (2013), *The Janus face of the 'New Ways of Work': Rise, risks and regulation of nomadic work*, ETUI Working Paper, No. 07.

PORTER M. E. (2008), *Competitive advantage: Creating and sustaining superior performance*, New York.

POSNER E. A. (2000), *Agency models in law and economics*, *John M. Olin Program in Law and Economics Working Paper No. 92*.

POSNER E. A. and WEYL E. G. (2018), *Radical Markets: Uprooting Capitalism and Democracy for a Just Society*, Princeton, NJ.

POWELL W. W. (2001), *The capitalist firm in the 21st century: emerging patterns* in DIMAGGIO P. J. (Ed.), *The 21st Century Firm: Changing Economic Organization in International Perspective*, Princeton, NJ, pp. 33-68.

POWELL W. W. (1990), *Neither market nor hierarchy: network form of organization* in STAW B. M. and CUMMINTS L. L. (Eds.), *Research in Organizational Behavior*, 12, pp. 295-336.

PRAHALAD C. K. and HAMEL G. (1990), *The Core Competence of the Corporation* in *Harvard Business Review*, 68(3), pp. 79-91.

PRASSL J. (2018), *Humans as a service*, Oxford, UK.

PRASSL J. (2015), *The concept of the employer*, Oxford, UK.

PRASSL J. and RISAK M. (2017), *The Legal Protection of Crowdworkers: Four Avenues for Workers' Rights in the Virtual Realm* in MEIL P. and KIROV V. (Eds.), *Policy Implications of Virtual Work*, London, pp. 273-295.

PRASSL J. and RISAK M. (2016), *Uber, Taskrabbit, and Co.: Platforms as Employers – Rethinking the Legal Analysis of Crowdwork in Comp. Lab. L. & Pol'y J.*, 37(3), pp. 619-652.

PRUIJT H. (2000), *Repainting, modifying, smashing Taylorism* in *Journal of Organizational Change Management*, 13(5), pp. 439-451.

PURCELL K. (2000), *Changing Boundaries in Employment and Organizations* in EAD. (Ed.), *Changing Boundaries in Employment*, Bristol, pp. 3-30.

PURCELL K. and PURCELL J. (1998), *In-sourcing, outsourcing, and the growth of contingent labour as evidence of flexible employment strategies* in *European Journal of Work and Organizational Psychology*, 7(1), pp. 39-59.

QUADRI G. (2004), *Processi di esternalizzazione: tutela del lavoratore e interesse dell'impresa*, Napoli.

RAMIOUL M. and VAN HOOTEGEM G. (2015), *Relocation, the restructuring of the labour process and job quality* in DRAHOKOUPIL J. (Ed.), *The outsourcing challenge*, Brussels, pp. 91-115.

RANCHORDÁS S. (2017), *On Sharing and Quasi-Sharing: The Tension Between Sharing-Economy Practices, Public Policy and Regulation* in ALBINSSON P. A. and PERERA Y. (Eds.), *The Sharing Economy: Possibilities, Challenges, and the Way Forward*, Santa Barbara, CA.

RANZINI G., ETTER M., LUTZ C. and VERMEULEN I. E. (2017), *Privacy in the sharing economy, Report for the EU Horizon 2020 project Ps2Share: Participation, Privacy, and Power in the Sharing Economy*.

RASNAČA Z. (2017), *Bridging the gaps or falling short? The European Pillar of Social Rights and what it can bring to EU-level policymaking*, ETUI Working Paper, No. 05.

RASNAČA Z. (2017, November 17), *(Any) Relevance of the European Pillar of Social Rights*

for EU Law?, retrieved from <https://goo.gl/icbDcs>.

RASNAČA Z. (2017, January 23), *The European Pillar of Social Rights: What is being proposed and the challenges ahead*, retrieved from <https://goo.gl/j6ecyk>.

RATTI L. (2016), *Precarious Digital Work and the Role of Online Platforms – The Inefficacy of Traditional Tests and the Need for an Indirect Approach*, paper presented at the ReMarkLab Conference, Stockholm, 19-20 May 2016.

RATTI L. (2008), *Agency work and the idea of dual employership: A comparative perspective* in *Comp. Lab. L. & Pol'y J.*, 30(4), pp. 835-874.

RAZZOLINI O. (2014), *La nozione di subordinazione alla prova delle nuove tecnologie* in *Dir. rel. ind.*, 4, pp. 974-998.

RAZZOLINI O. (2010), *The Need to Go Beyond the Contract: Economic and Bureaucratic Dependence in Personal Work Relations* in *Comp. Lab. L. & Pol'y J.*, 31(2), pp. 267-304.

REGALIA I. (Ed.) (2006), *Regulating new forms of employment: local experiments and social innovation in Europe*, London and New York.

RETELNY D. et al. (2014), *Expert crowdsourcing with flash teams* in *Proceedings of the 27th annual ACM symposium on User interface software and technology*.

REYNOLD F. and HENDY J. (2012), *Reserving the Right to Change Terms and Conditions: How Far Can the Employer Go?* in *Industrial Law Journal*, 41(1), pp. 79-92.

RICARDO D. (1921), *On the Principles of Political Economy and Taxation*, London.

RICHARDSON G. B. (1972), *The organisation of industry* in *The Economic Journal*, 82(327), pp. 883-896.

RIFKIN J. (2000), *The Age of Access*, New York.

RIFKIN J. (1994), *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era*, New York.

RISAK M. (2018), *Fair Working Conditions for Platform Workers: Possible Regulatory Approaches at the EU level*, Berlin.

RISAK M. (2017), *The scope of working time directive: perspective and challenges*, A Thematic Working Paper for The Annual Conference of the European Centre of Expertise (ECE): *The Personal Scope of Labour Law in Times of Atypical Employment and Digitalisation*.

RITZER G. and JURGENSON N. (2010), *Production, consumption, prosumption: The nature of capitalism in the age of the digital 'prosumer'* in *Journal of Consumer Culture*, 10(1), pp. 13-36

ROBERTSHAW S. (2015), *The collaborative economy impact and potential of Collaborative Internet and Additive Manufacturing*, EPRS, Scientific Foresight Unit.

ROBERTSON D. H. (1923), *The Control of Industry*, London.

ROBINSON P. (1999), *Explaining the Relationship between Flexible Employment and Labour Market Regulation* in FELSTEAD A. and JEWSON N. (Eds.), *Global Trends in Flexible Labour*, London, pp. 84-99.

ROCCELLA M. (2008), *Lavoro subordinato e lavoro autonomo*, oggi in *Quaderni di Sociologia*, 46, pp. 71-112.

ROCHET J. C. and TIROLE J. (2006), *Two-sided markets: a progress report* in *Rand. J. Econ.*, 37(3), pp. 645-667.

RODGERS G. (1989), *Precarious work in Western Europe: The state of the debate* in RODGERS G. and RODGERS J. (Eds.), *Precarious jobs in labour market regulation: the growth of atypical employment in Western Europe*, Geneva, Switzerland, pp. 1-16.

RODGERS L. (2016), *Labour Law, Vulnerability and the Regulation of Precarious Work*, Cheltenham, UK.

RODGERS L. (2012), *Vulnerable Workers, Precarious Work and Justifications for Labour Law: a Comparative Study* in *E-Journal of International and Comparative Labour Studies*, 1(3-4), pp. 87-113.

RODOTÀ S. (1997), *Tecnopolitica. La democrazia e le nuove tecnologie della comunicazione*, Roma and Bari.

ROGERS B. (forthcoming), *Fissuring, Data-Driven Governance, and Platform Economy Labor*

Standards in DAVIDSON N., FINCK M., INFRANCA J. (Eds.), *Cambridge Handbook of Law and Regulation of the Sharing Economy*, Boston, MA.

ROGERS B. (2017), *People Analytics and Labor Standards*, Paper presented at the LLRN 3rd Conference, Labour Law Research Network, Toronto 25-27 June 2017.

ROGERS B. (2016), *Employment Rights in the Platform Economy: Getting Back to Basics* in *Harvard Law & Policy Review*, 10(2), pp. 479-520.

ROGERS B. (2016), *Redefining Employment for the Modern Economy*, Issue Brief, The American Constitution Society (ACS), available at <https://goo.gl/8qJYm3>.

ROGERS B. (2015), *The social costs of Uber* in *U. Chi. L. Rev. Dialogue*, 82(1), pp. 85-102.

ROMAGNOLI U. (2003), *Il diritto del lavoro nell'età della globalizzazione* in *Lav. dir.*, 4, pp. 569-580.

ROMAGNOLI U. (1985), *Alle origini del diritto del lavoro: l'età preindustriale* in *Riv. it. dir. lav.*, 4, pp. 514-527.

ROMAGNOLI U. (1967), *La prestazione di lavoro nel contratto di società*, Milano.

ROMÁN C., CONGREGADO E. and MILLÁN J. M. (2011), *Dependent self-employment as a way to evade employment protection legislation* in *Small Business Economics*, 37(3), pp. 363-392.

ROMEI R. (2016), *Il diritto del lavoro e l'organizzazione dell'impresa* in PERULLI A. (Ed.), *L'idea di diritto del lavoro oggi*, Padova, pp. 507-524.

ROMEI R. (1999), *Cessione di ramo di azienda e appalti* in *Giorn. dir. lav. rel. ind.*, 2/3, pp. 325-383.

ROSENBLAT A. (2015, September 10), *The Future of Work: for Uber drivers, data is the boss*, retrieved from <https://goo.gl/QfYKek>.

ROSENBLAT A. and STARK L. (2016), *Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers* in *International Journal of Communication*, 10(27), pp. 3758-3784.

ROSIORU F. (2014), *Legal Acknowledgement of the Category of Economically Dependent Workers*

in *European Labour Law Journal*, 5(3-4), pp. 279-305.

ROSIORU F. (2013), *The changing concept of subordination*, Adapt Working Paper.

ROSS S. A. (1973), *The economic theory of agency: The principal's problem in The American Economic Review*, 63(2), pp. 134-139.

RUBERY J. (2015), *Re-regulating for inclusive labour markets*, Conditions of Work and Employment Series No. 65, Geneva, Switzerland.

RUBERY J. and GRIMSHAW D. (2005), *Inter-capital relations and the network organization: redefining the issues concerning work and employment in Cambridge Journal of Economics*, 29(6), pp. 1027-1051.

RUBERY J. and WILKINSON F. (1981), *Outwork and segmented labour markets* in WILKINSON F. (Ed.), *The Dynamics of Labour Market Segmentation*, London, pp. 115-132.

RUCKELSHAUS C., SMITH R., LEBERSTEIN S. and CHO E. (2014), *Who's the boss: Restoring accountability for labor standards in outsourced work*, National Employment Law Project Report, available at <https://goo.gl/TrJwEr>.

RULLANI E. (1988), *La teoria dell'impresa nei processi di mondializzazione* in *Democrazia e Diritto*, 1, pp. 25- 85.

SACHS B. (2016, October 26), *What the UK Decision Implies for Uber Drivers in the U.S.*, retrieved from <https://goo.gl/4PqULs>.

SACHS B. (2015, June 22), *A New Category of Worker for the On-Demand Economy?*, retrieved from <https://goo.gl/gyGwnt>.

SALENTO A. (2017), *Industria 4.0 ed economia delle piattaforme: spazi di azione e spazi di decisione* in *Riv. giur. lav.*, 2, pp. 30-39.

SALENTO A. (2003), *Postfordismo e ideologie giuridiche: nuove forme d'impresa e crisi del diritto del lavoro*, Milano.

SALTSMAN E. (2017), *A free market approach to the rideshare industry and worker classification: The Consequences of Employee Status and a Proposed Alternative* in *J. L. Econ. & Pol'y*, 13(2), pp. 209-242.

SANTORO-PASSARELLI G. (2017), *Lavoro eterorganizzato, coordinato, agile e il telelavoro: un puzzle non facile da comporre in un'impresa in via di trasformazione*, WP C.S.D.L.E. "Massimo D'Antona".IT, 327.

SANTORO-PASSARELLI G. (2013), *Falso lavoro autonomo e lavoro autonomo economicamente debole ma genuino: due nozioni a confronto* in *Riv. it. dir. lav.*, 1, pp. 103-122.

SANTORO-PASSARELLI G. (2004), *Trasferimento d'azienda e rapporto di lavoro*, Torino.

SANTORO-PASSARELLI G. (1999), *Attualità della fattispecie lavoro subordinato* in AA.VV., *Le trasformazioni del lavoro. La crisi delle subordinazione e l'avvento di nuove forme di lavoro*, Milano.

SCARPELLI F. (1999), *Esternalizzazioni e diritto del lavoro: il lavoratore non è una merce* in *Dir. rel. ind.*, 3, pp. 351-368.

SCARPETTA S. (2016, November 16), *The Future of Work*, retrieved from <https://goo.gl/KCuk8Q>.

SCHILLER B. (2017, August 4), *You are being exploited by the opaque, algorithm-driven economy*, retrieved from <https://buff.ly/2huYtnG>.

SCHMIDT F. A. (2017), *Digital Labour Markets in the Platform Economy, Mapping the Political Challenges of Crowd Work and Gig Work*, Berlin.

SCHMID-DRÜNER M. (2016), *The situation of workers in the collaborative economy*, *European Parliament: In-Depth Analysis*.

SCHNEIDER H. (2017), *Creative Destruction and the Sharing Economy: Uber as Disruptive Innovation*, Cheltenham, UK.

SCHNEIDER H. (2017), *Uber: Innovation in Society*, New York.

SCHOR J. (2016), *Debating the sharing economy* in *Journal of Self-Governance & Management Economics*, 4(3), pp. 7-22.

SCHOUKENS P. and BARRIO A. (2017), *The changing concept of work: When does typical work become atypical?* in *European Labour Law Journal*, 8(4), pp. 306-332.

SCHOLZ T. (2015, April), *Think outside the boss*, retrieved from <https://goo.gl/Y7e8XC>.

SCHOLZ T. (Ed.) (2013), *Digital Labor: The Internet as Playground and Factory*, New York.

SCHULER R. S. and JACKSON S. E. (2007), *Human resource management in context* in BLANPAIN R. (Ed.) *Comparative labour law and industrial relations in industrialized market economies*, The Hague, pp. 95-133.

SCHWARZ J. A. (2017), *Platform Logic: An Interdisciplinary Approach to the Platform-Based Economy in Policy & Internet*, 9(4), pp. 374-394.

SCHWARTZ O. (2016, February 29), *Humans pretending to be computers pretending to be humans*, retrieved from <https://goo.gl/MCbNFE>.

SCIARRA S. (2007), *EU Commission Green Paper 'Modernising labour law to meet the challenges of the 21st century'* in *Industrial Law Journal*, 36(3), pp. 375-382.

SCIARRA S. (2004), *The Evolution of Labour Law (1992-2004)*, General Report. Project for the European Commission.

SCIARRA S. (1998), *How "Global" is Labour Law? The Perspective of Sociale Rights in the European Union* in WILTHAGEN T. (Ed.), *Advancing Theory in Labour Law and Industrial Relations in a Global Context*, Amsterdam, pp. 99-116

SCOGNAMIGLIO R. (2007), *La natura non contrattuale del lavoro subordinato* in *Riv. it. dir. lav.*, 4, pp. 379-425.

SCOGNAMIGLIO R. (1978), *Il lavoro nella Costituzione italiana* in AA.VV., *Il lavoro nella giurisprudenza costituzionale*, Milano, pp. 13-55.

SCOTT M. (2017, May 11), *Uber Suffers Bloody Nose in Its Fight to Conquer Europe*, retrieved from <https://nyti.ms/2pAaM0U>.

SELLONI D. (2017), *New Forms of Economies: Sharing Economy, Collaborative Consumption, Peer-to-Peer Economy* in EAD., *CoDesign for Public-Interest Services*, Milano, pp. 15-26.

SENNETT R. (1998), *The corrosion of character: The personal consequences of work in the new capitalism*, New York and London.

SETTIS B. (2016), *Fordismi: Storia politica della produzione di massa*, Bologna.

SHOOK E. and KNICKREHM M. (2017), *Harnessing Revolution: Creating The Future Workforce – Today*, retrieved from <https://goo.gl/vgRxs7>.

SILBERMAN M. S. and HARMON E. (2017), *Rating Working Conditions in Digital Labor Platforms* in *Proceedings of 15th European Conference on Computer-Supported Cooperative Work – Exploratory Papers, Reports of the European Society for Socially Embedded Technologies*.

SILBERMAN M. S. and IRANI L. (2016), *Operating an Employer Reputation System: Lessons from Turkoipcon, 2008-2015* in *Comp. Lab. L. & Pol'y J.*, 37(3), pp. 505-542.

SIMITIS S. (1997), *Il diritto del lavoro ha ancora un futuro?* in *Giorn. dir. lav. rel. ind.*, 4, pp. 609-641.

SIMITIS S. (1987), *Juridification of Labor Relations* in TEUBNER G. (Ed.), *Juridification of Social Spheres*, Berlin and New York, pp. 113-162.

SIMON H. A. (1951), *A formal theory of the employment relationship* in *Econometrica*, 19(3), pp. 293-305.

SIMPSON I. H. (1999), *Historical patterns of workplace organization: from mechanical to electronic control and beyond* in *Current Sociology*, 47(2), pp. 47-75.

SMITH R. and LEBERSTEIN S. (2015), *Rights on demand: ensuring workplace standards and worker security in the on-demand economy*, *National Employment Law Project Report*, available at <https://goo.gl/TxZfNt>.

SMITH V. (1997), *New forms of work organization* in *Annual Review of Sociology*, 23(1), pp. 315-339.

SMITH Y. (2016, December 5), *Can Uber ever deliver? Understanding that unregulated monopoly was always Uber's central objective*, retrieved from <https://goo.gl/1Rqajb>.

SMORTO G. (forthcoming), *Regulating (and self-regulating) the sharing economy in Europe: an*

overview in BRUGLIERI M. (Ed.), *Multi-disciplinary design of sharing services*, Milano.

SMORTO G. (2017), *Critical assessment of European Agenda for the collaborative economy*, Directorate General For Internal Policies, In-Depth Analysis, available at: <https://goo.gl/FXnZkm>.

SMORTO G. (2014), *Dall'impresa gerarchica alla comunità distribuita: Il diritto e le nuove forme di produzione collaborativa* in *Orizzonti del Diritto Commerciale*, 3, pp. 1-40.

SÖDERQVIST F. (2017), *A Nordic approach to regulating intermediary online labour platforms in Transfer: European Review of Labour and Research*, 23(3), pp. 349-352.

SÖDERQVIST F. (2016, July 5), *The dawn of the platform based labour market*, retrieved from <https://goo.gl/ev4X39>.

SORGE S. (2009), *German Law on Dependent Self-Employed Workers: A Comparison to the Current Situation Under Spanish Law* in *Comp. Lab. L. & Pol'y J.*, 31(2), pp. 249-252.

SPAGNUOLO VIGORITA L. (1967), *Subordinazione e diritto del lavoro. Profili storico-critici*, Napoli.

SPASOVA S., BOUGET D., GHAILANI D. and VANHERCKE B. (2017), *Access to social protection for people working on non-standard contracts and as self-employed in Europe: A study of national policies*, European Social Policy Network, European Commission, Brussels.

SPENCE M. (1974), *Market Signaling: Informational Transfer in Hiring and Related Processes*, Cambridge, MA.

SPENCER D. A. (2018), *Fear and hope in an age of mass automation: debating the future of work in New Technology, Work and Employment*, 33(1), pp. 1-12.

SPEZIALE V. (2017), *Il lavoro subordinato tra rapporti speciali, contratti "atipici" e possibili riforme*, WP C.S.D.L.E. "Massimo D'Antona".IT, 51.

SPEZIALE V. (2010), *Il datore di lavoro nell'impresa integrata* in *Giorn. dir. lav. rel. ind.*, 1, pp. 1-86.

SPEZIALE V. (2004), *Il contratto commerciale di somministrazione di lavoro* in *Dir. rel. ind.*, 2, pp. 295-341.

SPITZ-OENER A. (2006), *Technical Change, Job Tasks, and Rising Educational Demands: Looking outside the Wage Structure* in *Journal of Labor Economics*, 24(2), pp. 235-270.

SPRAGUE R. (2015), *Worker (Mis)Classification in the Sharing Economy: Square Pegs Trying to Fit in Round Holes*, Presented at the Academy of Legal Studies in Business Annual Conference, Philadelphia, PA, August 6-10, 2015.

SPRAGUE R. (2007), *From Taylorism to the Omniscipicon: Expanding employee surveillance beyond the workplace* in *J. Marshall J. Computer & Info. L.*, 25(1), pp. 1-36.

SRNICEK N. (2016), *Platform capitalism*, New York.

STAFFORD B. E. (2016), *Riding the Line between Employee and Independent Contractor in the Modern Sharing Economy* in *Wake Forest L. Rev.*, 51(5), pp. 1223-1254.

STAGLIANÒ R. (2018), *Lavoretti: così la Sharing Economy ci rende tutti più poveri*, Torino.

STAGLIANÒ R. (2016), *Al posto tuo: così web e robot ci stanno rubando il lavoro*, Torino.

STANDING G. (2014), *The precariat in Contexts*, 13(4), pp. 9-10.

STANDING G. (1999), *Global labour flexibility: Seeking distributive justice*, Basingstoke and London.

STANFORD J. (2017), *The resurgence of gig work: Historical and theoretical perspectives* in *The Economic and Labour Relations Review*, 28(3), pp. 382-401.

STEWART A. and STANFORD J. (2017), *Regulating work in the gig economy: What are the options?* in *The Economic and Labour Relations Review*, 28(3), pp. 420-437.

STONE K. V. W. (2017), *Gigs, On-Demand, and Just-in-Time Workers: What Can Unions Do?*, Paper presented at the LLRN 3rd Conference, Labour Law Research Network, Toronto 25-27 June 2017.

STONE K. V. W. (2017, February 21), *Unions in the Precarious Economy*, retrieved from <https://goo.gl/WSZ815>.

STONE K. V. W. (2006), *Rethinking Labor Law: Employment Protection for Boundaryless Workers* in DAVIDOV G. and LANGILLE B. (Eds.), *Boundaries and Frontiers of Labour Law: Goals and means in the regulation of work*, Oxford, UK and Portland, OR, pp. 155-179.

STONE K. V. W. (2005), *Flexibilization, globalization and privatization: The three challenges to labor rights in our time* in Osgoode Hall L. J., 44(1), pp. 77-104.

STONE K. V. W. (2004), *From widgets to digits: Employment regulation for the changing workplace*, Cambridge, MA and New York.

STONE K. V. W. (1993), *Policing employment contracts within the nexus-of-contracts firm* in *University of Toronto Law Journal*, 43(3), pp. 353-378.

STONE K. V. W. and ARTHURS H. (2013), *The transformation of employment regimes: A worldwide challenge* in ID. (Eds.), *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment*, New York, pp. 1-20.

STONE K. V. W., DAGNINO E. and MARTÍNEZ FERNÁNDEZ S. (Eds.) (2017), *Labour in the 21st Century: Insights into a Changing World of Work*, Cambridge, UK.

STONE P. et al. (2016), *Artificial Intelligence and Life in 2030. One Hundred Year Study on Artificial Intelligence: Report of the 2015-2016 Study Panel*.

STROWEL A. and VERGOTE W. (2016), *Digital Platforms: to regulate or not to regulate?*, Document for the EU Internal Market Sub-Committee, House of Lords, available at <https://goo.gl/av8hh1>.

SUNDARARAJAN A. (2017), *The Collaborative Economy: Socioeconomic, Regulatory and Policy Issues*, Directorate General for Internal Policies Policy Department, Economic and Scientific Policy, Brussels.

SUPIOT A. (2001), *Beyond employment: Changes in Work and the Future of Labour Law in*

Europe, Report prepared for the European Commission, Oxford, UK.

SUPIOT A. (1994), *Critique du droit du travail*, Paris.

SUPPIEJ G. (1982), *Il rapporto di lavoro (costituzione e svolgimento)*, Padova.

SUROWIECKI J. (2004), *The wisdom of crowds*, New York.

SUSSKIND R. and SUSSKIND D. (2015), *The future of the professions: How technology will transform the work of human experts*, Oxford, UK.

SYDOW J. and HELFEN M. (2016), *Production as a service Plural network organisation as a challenge for industrial relations*, Friedrich-Ebert-Stiftung Study.

SYLOS-LABINI P. (1964), *Precarious employment in Sicily* in *Int'l. Lab. Rev.*, 89(3), pp. 268-285.

TAYLOR F. W. (1911), *Principles of Scientific Management*, New York and London.

TEALDI C. (2012), *Typical and atypical employment contracts: the case of Italy*, MPRA Paper No. 39456.

TELLES R. Jr. (2016), *Digital Matching Firms: A New Definition in the "Sharing Economy"*, Space, Economics and Statistics Administration Issue Brief, 1.

THE EUROPEAN HOUSE AMBROSETTI (2017), *Tecnologia e Lavoro: Governare il Cambiamento*, Milano.

THE WORLD BANK (2016), *World Development Report 2016: Digital Dividends*, Washington, DC.

THOMPSON D. (2015, July/August), *A world without work*, retrieved from <http://theatlntc/2qsVCM3>.

THOMPSON P. and WARHURST C. (1998), *Hands, hearts and minds: changing work and workers at the end of the century* in ID. (Eds.), *Workplaces of the Future*, London, pp. 1-24.

THORNLEY C., JEFFERYS S. and APPAY B. (Eds.) (2010), *Globalization and precarious forms of production and employment: Challenges for workers and unions*, Cheltenham, UK and Northampton, MA.

THÖRNQUIST A. (2015), *False Self-Employment and Other Precarious Forms of Employment in the 'Grey Area' of the Labour Market* in *Int'l J. Comp. Lab. L. & Ind. Rel.*, 31(4), pp. 411-429.

TICINETO CLOUGH P., GREGORY K., HABER B. and SCANNELL R. J. (forthcoming), *The Datalogical Turn*, available at <https://goo.gl/V4n73Q>.

TIPPETT E. C. (forthcoming), *Employee Classification in the Sharing Economy* in DAVIDSON N., FINCK M., INFRANCA J. (Eds.), *Cambridge Handbook of Law and Regulation of the Sharing Economy*, Boston, MA.

TIRABOSCHI M. (2017), *Il lavoro agile tra legge e contrattazione collettiva: la tortuosa via italiana verso la modernizzazione del diritto del lavoro*, WP C.S.D.L.E. "Massimo D'Antona".IT, 335.

TIRABOSCHI M. (2015), *Labour Law and Industrial Relations in Recessionary Times: The Italian Labour Relations in a Global Economy*, Modena.

TIRABOSCHI M. (2005), *Esternalizzazione del lavoro e valorizzazione del capitale umano: due modelli inconciliabili?* in *Dir. rel. ind.*, 2, pp. 379-408.

TIRABOSCHI M. (2005), *The Italian Labour Market after the Biagi Reform* in *Int'l J. Comp. Lab. L. & Indus. Rel.*, 21(2), pp. 149-192.

TODOLÍ-SIGNES A. (2017), *The 'gig economy': employee, self-employed or the need for a special employment regulation?* in *Transfer: European Review of Labour and Research*, 23(2), pp. 193-205.

TODOLÍ-SIGNES A. (2017), *The End of the Subordinate Worker? The OnDemand Economy, the Gig Economy, and the Need for Protection for Crowdworkers* in *Int'l J. Comp. Lab. L. & Indus. Rel.*, 33(2), pp. 241-268.

TOFFLER A. (1980), *The Third Wave*, New York.

TOMASSETTI J. (2016), *Does Uber redefine the firm? The postindustrial corporation and advanced information technology* in *Hofstra Lab. & Emp. L. J.*, 34(1), pp. 1-78.

TOMASSETTI J. (2015), *From Hierarchies to Markets: FedEx Drivers and the Work Contract as Institutional Marker* in *Lewis & Clark Law Review*, 19(4), pp. 1083-1152.

TON Z. (2014), *The good jobs strategy: How the smartest companies invest in employees to lower costs and boost profits*, Boston, MA.

TOSI P. (1991), *Le nuove tendenze del diritto del lavoro nel terziario* in *Giorn. dir. lav. rel. ind.*, 4, pp. 613-632.

TOUMIEUX C. (2014), *Implications of Council Directive 91/533/EEC for new forms of employment*, Keynote Paper presented at the 7th Annual Legal Seminar European Labour Law.

TOURAINÉ A. (2009), *Libertà, uguaglianza, diversità*, Milano.

TREU T. (2017), *Rimedi, tutele e fattispecie: riflessioni a partire dai lavori della Gig economy* in *Lav. dir.*, 3-4, pp. 367-406.

TREU T. (2014), *Labour law in Italy*, 4ed., Alphen aan den Rijn, The Netherlands.

TREU T. (2012), *Trasformazioni delle imprese: reti di imprese e regolazione del lavoro* in *Mercato Concorrenza Regole*, 1, pp. 7-38.

TREU T. (1992), *Labour flexibility in Europe* in *Int'l. Lab. Rev.*, 131(4-5), pp. 497-512.

TRONTI L. (Ed.) (1997), *Ristrutturazione industriale e struttura verticale dell'impresa*, Milano.

TUCKER D. (2002), *'Precarious' non-standard employment: A review of the literature*, Labour Market Policy Group of Department of Labour, New Zealand.

TULLINI P. (2016), *Digitalizzazione dell'economia e frammentazione dell'occupazione. Il lavoro instabile discontinuo informale: tendenze in atto* in *Riv. giur. lav.*, 4, pp. 748-763.

TULLINI P. (2016), *Economia digitale e lavoro non-standard* in *Labour & Law Issues*, 2(2), pp. 3-15.

TULLINI P. (2003), *Identità e scomposizione della figura del datore di lavoro (una riflessione sulla struttura del rapporto di lavoro)* in *Arg. dir. Lav.*, 1, pp. 85-101.

UNI GLOBAL UNION (2017, December 11), *Global Union Sets new Rules for the Next Frontier of Work: Ethical AI and Employee Data Protection*, retrieved from <https://goo.gl/HMR24A>.

US DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE (1966), *Report of the National Commission on Technology, Automation, and Economic Progress*, Washington.

U.S. DEPARTMENT OF LABOR, WAGE AND HOUR DIVISION (WHD), *Misclassification of Employees as Independent Contractors*, available at <https://goo.gl/u25qxG>.

UZZI B. (1996), *The sources and consequences of embeddedness for the economic performance of organizations: The network effect in American sociological review*, 61(4), pp. 674-698.

VALDES DAL-RE F. (2002), *Decentralisation productive et desorganisation du droit du travail in LYON-CAEN A. and PERULLI A. (Eds.) (2002), Trasformazione dell'impresa e rapporti di lavoro: atti del seminario dottorale internazionale, Venezia 17-21 giugno*, Padova, pp. 53-71.

VALENDUC G. (2017), *Les travailleurs indépendants économiquement dépendants*, Working Paper, Université Catholique de Louvain.

VALENDUC G. and VENDRAMIN P. (2017), *Digitalisation, between disruption and evolution in Transfer: European Review of Labour and Research*, 23(2), pp. 121-134.

VALENDUC G. and VENDRAMIN P. (2016), *Work in the digital economy: sorting the old from the new*, WP ETUI, No. 3.

VALENDUC G. and VENDRAMIN P. (1999), *Technology-induced Atypical Work-Forms*, Working document for the STOA Panel.

VALENTINI S. (2004), *Gestire l'outsourcing. I passi fondamentali per avere successo in un processo di ottimizzazione*, Milano.

VALLAS S. P. (1999), *Rethinking Post-Fordism: The Meaning of Workplace Flexibility in Sociological Theory*, 17(1), pp. 68-101.

VALLAURI M. L. (2002), *Outsourcing e rapporti di lavoro in Dig. disc. priv., sez. comm.*, p. 722.

VALLEBONA A. (2005), *La nullità dei contratti di lavoro «atipici» in Arg. dir. lav*, 2, pp. 527-549.

VAN ALSTYNE M. W., PARKER G. G. and CHOUDARY S. P. (2016), *Pipelines, Platforms, and the New Rules of Strategy in Harvard Business Review*, 94(4), pp. 54-62.

VAN DE CASTEELE M. (2017, January 5), *Un chauffeur VTC (LeCab) requalifié en salarié: quel impact pour le modèle Uber?*, retrieved from <https://goo.gl/SAj3xw>.

VAN DOORN N. (2017), *Platform labor: on the gendered and racialized exploitation of low income service work in the 'on-demand' economy in Information, Communication & Society*, 20(6), pp. 898-914.

VARDARO G. (1986), *Tecnica, tecnologia e ideologia della tecnica nel diritto del lavoro in GAETA L., MARCHITELLO A. R. and PASCUCCI P. (Eds.) (1989), Itinerari*, Milano, pp. 231-308.

VAUGHAN R. and DAVERIO R. (2016), *Assessing the size and presence of the collaborative economy in Europe*, PwC UK, *Impulse paper for the European Commission*.

VELTZ P. (2017), *La société hyper-industrielle. Le nouveau capitalisme productif*, Seuil.

VENEZIANI B. (2009), *The Employment Relationship in HEPPLER B. and VENEZIANI B., The transformation of labour law in Europe: a comparative study of 15 countries, 1945-2004*, Oxford, UK and Portland, OR, pp. 115-121.

VERHULP E. (2017), *The Notion of 'Employee' in EU-Law and National Laws, A Thematic Working Paper for The Annual Conference of the European Centre of Expertise (ECE): The Personal Scope of Labour Law in Times of Atypical Employment and Digitalisation*.

VICARI S. (2002), *L'outsourcing come strategia per la competitività in DE LUCA TAMAJO R. (Ed.), I processi di esternalizzazione. Opportunità e vincoli giuridici*, Napoli, pp. 71-81.

VISCO I. (2015), *For the times they are a-changin'...*, Lecture at the London School of Economics Institute of Global Affairs, London, 11 November 2015.

VITKOVIĆ D. (2016), *The Sharing Economy: Regulation and the EU Competition Law in Global Antitrust Review*, 9, pp. 78-118.

VIVARELLI M. (2007), *Innovation and Employment: a Survey*, IZA Discussion papers.

VOSKO L. F. (2011), *Precarious Employment and the Problem of SER-Centrism in Regulating for Decent Work* in LEE S. and MCCANN D. (Eds.), *Regulating for Decent Work: New Directions in Labour Market Regulation*, London and Geneva, pp. 58-90.

VOSKO L. F. (2010), *Managing the margins: Gender, citizenship, and the international regulation of precarious employment*, Oxford, UK.

VOZA R. (2017), *Il lavoro e le piattaforme digitali: the same old story?*, WP C.S.D.L.E. "Massimo D'Antona".IT, 336.

VOZA R. (2017), *Il lavoro reso mediante piattaforme digitali tra qualificazione e regolazione* in *Riv. giur. lav.*, 2, pp. 71-81.

WAAS B. (2017), *Crowdwork in Germany* in WAAS B., LIEBMAN W. B., LYUBARSKY A. and KEZUKA K., *Crowdwork – A Comparative Law Perspective*, Frankfurt, pp. 142-186.

WAAS B. (2017), *Introduction* in WAAS B., LIEBMAN W. B., LYUBARSKY A. and KEZUKA K., *Crowdwork – A Comparative Law Perspective*, Frankfurt, pp. 13-23.

WAAS B. (2010), *The Legal Definition of the Employment Relationship* in *Eur. Lab. LJ*, 1, pp. 45-58.

WARIN R. (2017), *Dinner For One? A Report on Deliveroo Work in Brighton* in *Autonomy*, 1.

WEBER L. (2017, February 2), *The End of Employees*, retrieved from <http://on.wsj.com/2lndKEK>.

WEBER M. (1946), *Class, status, party* in GERTH H. H. and WRIGHT MILLS C. (Eds.), *From Max Weber: Essays in Sociology*, New York, pp. 180-195.

WEDDERBURN L. (1990), *The Italian Workers' Statute – Some British Reflections* in *Industrial Law Journal*, 19(3), pp. 154-191.

WEIL D. (2015), *Afterword: Learning from a Fissured World-Reflections on International Essays*

regarding the Fissured Workplace in *Comp. Lab. L. & Pol'y J.*, 37(1), pp. 209-222.

WEIL D. (2014), *The Fissured Workplace: why work became so bad for so many and what can be done to improve it*, Cambridge, MA and London.

WEIMER J. and PAPE J. (1999), *A taxonomy of systems of corporate governance* in *Corporate Governance: An International Review*, 7(2), pp. 152-166.

WEINBERGER M. (2017, June 20), *Uber will finally let its drivers accept tips*, retrieved from <https://read.bi/2rRAaQU>.

WEISS M. (2016), *Digitalizzazione: sfide e prospettive per il diritto del lavoro* in *Dir. rel. ind.*, 3, pp. 651-663.

WEISS M. (2009), *Re-Inventing Labour Law?* in DAVIDOV G. and LANGILLE B. (Eds.), *The idea of Labour Law*, Oxford, UK, pp. 43-56.

WEISS M. (2006), *The Implications of the Services Directive on Labour Law: A German Perspective* in BLANPAIN R. (Ed.), *Freedom of services in the European Union: labour and social security law: the Bolkestein initiative*, The Hague, pp. 77-89.

WEISS M. (1999), *The evolution of the concept of subordination: the German experience* in AA.VV., *Le trasformazioni del lavoro. La crisi delle subordinazione e l'avvento di nuove forme di lavoro*, Milano.

WELLS K., CULLEN D. and ATTOH K. (2017, August 8), *The work lives of Uber drivers. Worse than you think*, retrieved from <https://goo.gl/cwoCsN>.

WENT R., KREMER M. and KNOTTNERUS A. (2015), *Mastering the Robot, The Future of Work in the Second Machine Age*, The Hague.

WESTREGÅRD A. (2016), *The notion of "employee" in Swedish and European Union Law. An exercise in harmony or disharmony?* in EDSTRÖM Ö., CARLSON L. and NYSTRÖM B. (Eds.), *Globalisation, Fragmentation, Labour and Employment Law*, Uppsala, Sweden, pp. 185-206.

WEXLER M. N. (2011), *Reconfiguring the sociology of the crowd: exploring crowdsourcing in*

International Journal of Sociology and Social Policy, 31(1/2), pp. 6-20.

WHITFORD W. C. (2004), *Relational Contracts and the New Formalism in Wis. L. Rev.*, 2004(2), pp. 631-644.

WIECKI J. (2017, September), *Robocalypse not. Everyone think that automation will take away our jobs. The evidence disagrees*, retrieved from <https://goo.gl/CV3DmP>.

WIEWIÓROWSKA-DOMAGALSKA A. (2017), *Online Platforms: How to Adapt Regulatory Framework to the Digital Age?*, Internal Market and Consumer Protection Brief.

WILKINSON F. (Ed.) (2013), *The dynamics of labour market segmentation*, Amsterdam.

WILLIAMSON O. E. (1996), *Economics and Organization: A Primer in Cal. Mgmt. Rev.*, 38(2), pp. 131-146.

WILLIAMSON O. E. (1996), *The Mechanisms of Governance*, Oxford, UK and New York.

WILLIAMSON O. E. (1985), *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, London.

WILLIAMSON O. E. (1981), *The economics of organization: The transaction cost approach in American Journal of Sociology*, 87(3), pp. 548-577.

WILLIAMSON O. E. (1979), *Transaction-cost economics: the governance of contractual relations in The Journal of Law and Economics*, 22(2), pp. 233-261.

WILLIAMSON O. E., WACHTER M. L. and HARRIS J. E. (1975), *Understanding the employment relation: The analysis of idiosyncratic exchange in The Bell Journal of Economics*, 6(1), pp. 250-278.

WOIROL G. R. (1996), *The Technological Unemployment and Structural Unemployment Debates*, Westport, CT.

WOMACK J. P., JONES D. T. and ROOS D. (1990), *The machine that changed the world*, New York.

WOOD S. (Ed.) (1989), *The transformation of work? Skill, flexibility and the labor process*, Boston, MA.

WORLD TRADE ORGANIZATION (2017), *World Trade Report: Trade, technology and jobs*, Geneva, Switzerland.

YARAGHI N. and RAVI S. (2017), *The Current and Future State of the Sharing Economy*, Brookings Impact Series, No. 03.

YUNG J. (2005), *Big Brother is watching: how employee monitoring in 2004 brought Orwell's 1984 to life and what the law should do about it in Seton Hall L. Rev.*, 36, pp. 163-222.

ZANELLI P. (1985), *Impresa, lavoro e innovazione tecnologica*, Milano.

ZAPPALÀ L. (2009), *I lavori flessibili in CARUSO B. and SCIARRA S. (Eds.), Il lavoro subordinato, Trattato di diritto privato dell'Unione Europea*, Torino, pp. 309-389.

ZAPPALÀ L. (2006), *Tra diritto ed economia: obiettivi e tecniche della regolazione sociale dei contratti di lavoro a termine in Riv. giur. lav.*, 1, pp. 171-214.

ZATZ N. (2016, February 1), *Is Uber Wagging the Dog With Its Moonlighting Drivers?*, retrieved from <https://goo.gl/A9MRmC>.

ZATZ N. (2016), *Does Work Law have a future if the Labor Market does not? in Chicago-Kent Law Review*, 91, pp. 1081-1114.

ZATZ N. (2011), *The Impossibility of Work Law in DAVIDOV G. and LANGILLE B. (Eds.), The Idea of Labour Law*, Oxford, UK, pp. 234-255.

ZENO-ZENCOVICH V. and GIANNONE CODIGLIONE G. (2016), *Ten legal perspectives on the "Big Data revolution" in Concorrenza e Mercato*, 23, pp. 29-57.

ZITTRAIN J. (2009, July 12), *The Internet creates a new kind of sweatshop*, retrieved from <https://goo.gl/UBUfjs>.

ZOLI C. (1997), *Subordinazione e poteri dell'imprenditore tra organizzazione, contratto e contropotere in Lav. dir.*, 2, pp. 241-260.

ZUBOFF S. (2015), *Big Other: Surveillance Capitalism and the Prospects of an Information Civilization in Journal of Information Technology*, 30(1), pp. 75-89.

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