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Abstract

Women's empowerment has been arguably a fundamental social change during the last century. The progress towards gender equality, the convergence in some of the life outcomes of women and men, and the changes in gender roles call for new approaches to research on gender. In this dissertation, I combine approaches from demography, social policy, sociology, and political science to propose new perspectives on various aspects of gender inequalities. I start with the most basic difference and ask if young women and men live in the same places. Then, I investigate how the progress towards gender equality has influenced political behaviour of women and men, and how political institutions have changed their approach to gender equality over the last 40 years.

In the first empirical chapter, I document the extent to which migration shapes national and subnational sex ratios among young adults. I analyse population data covering almost all countries of the world. I find that most countries have either rural or urban skewed sex ratios among young adults. I also find a strong log-linear relationship between sex ratios and population density in European subnational regions. I show that sex ratios among young adults are usually skewed due to migration.

In the second chapter, I study how local changes in relative social status of women and men influence voting behaviour. According to the social status threat hypothesis, men should feel threatened by the social changes and support right-wing populist candidates. I measure the changes in gender gaps in median income, college education, and labour force participation, as well as the share of women in managing positions in the last 15 years before Donald Trump's election. I combine county-level census data, electoral data, and a large-sample political survey (Cooperative Election Study). Although Trump has gained more votes in places were women's relative social status increased the most, I find no effect of the interaction between (male) gender and increasing relative social status.

In the third chapter, I ask how men's disadvantages are addressed within European Union's gender equality policies. I adapt the framework of policy target populations to analyse all gender equality strategies and annual reports of the European

Commission since 1982. In a qualitative and quantitative content analysis, I find that since mid 1990s, the Commission has included men as contributors to gender equality (‘problem solvers’). But men’s disadvantages in education and health were only addressed between 2006 and 2015. Later on, men’s problems have been essentially ignored, as they have been increasingly portrayed as a privileged group undeserving of European policies.

Introduction

Women's empowerment has been arguably a fundamental social change during the last century. In the beginning of the 20th century, women were allowed to vote only in a few countries. Nowadays, a growing number of countries have had a female head of state. In 1891, Marie Skłodowska-Curie migrated to France, because women were not allowed to study at universities in the Russian empire. Now, women have a substantial advantage in educational attainment.

The changes in social roles of women and men have been called the 'gender revolution.' Many gender gaps have been closed, substantially reduced or even reversed, like the gender gaps in education attainment and outcomes in developed countries. Both scholarly literature and public debate usually focus on what is yet to be done. In almost all countries of the world and at almost all levels of government, women are less numerous than men. Women earn less then men and are much less likely to achieve most prestigious positions.

As the evolution of gender roles is slower now than in previous decades, Paula England (England 2010) claims that the revolution has stalled due to men's low motivation to change their social roles as much as women have done it. In turn, Claudia (Goldin 2014) writes about the 'last chapter' of the gender revolution that should involve broader transformation of the economic system. According to Esping-Andersen et al. (2013), the current state is unstable and will further evolve into new, more gender egalitarian, equilibrium. In the same time, an opposition against the new norms, an anti-gender backlash, arises (Anduiza and Rico 2022; Rawłuszko 2021; Kosakowska-Berezecka et al. 2020).

The progress towards gender equality, the convergence in some of the life outcomes of women and men, and the changes in gender roles call for new approaches to research on gender. In this multidisciplinary dissertation, I combine approaches from demography, social policy, sociology, and political science. I contribute to various streams of literature on gender inequalities by acknowledging some of these changes. In three stand-alone chapters, I propose new perspectives on several aspects of gender inequalities. I start with the most basic difference and ask if young women and men live in the same places. In the second chapter, I ask how people

react to local changes in the relative social status of women and men. In the third chapter, I investigate how political institutions update their gender equality policies to reflect the evolving reality.

Chapter 1: Migration and Skewed Subnational Sex Ratios among Young Adults

In the first empirical chapter, already published in the *Population and Development Review*, I document the extent to which international and internal migration shape national and subnational sex ratios among young adults. Skewed sex ratios – conventionally defined as the proportion of men to women– can have diverse and potentially harmful consequences on a society. Extant literature has linked sex ratios to increased crime and violence and the spread of sexually transmitted diseases. The imbalance in available partners has been found to affect economic behaviour, development, well-being, bargaining power of women, as well as to shape gender roles and fertility decisions.

Sex ratio in a given age group is a product of three factors: sex ratios at birth, differential mortality, and sex-selective migration. Since sex ratios at birth are close to natural in most countries, and mortality is rarely substantially different between sexes among teenagers and young adults, the main driver of skewed subnational sex ratios is sex-selective migration. Already Ravenstein (1885) and Bourdieu (1962) noticed that women migrated much more often to cities than men in the UK and France, respectively. In particular, this may happen in more developed countries for two main reasons. First, the concentration of higher education opportunities in cities combines with the current tendency of women to dedicate more years to education. In 2010, more young women than men had a college degree in 139 countries, representing 86% of the global population (Esteve et al. 2016). Second, unequal inheritance norms, access to resources, employment opportunities, difference in preferences and unequal division of care, and household work, and better public services may also attract women to cities or force them to leave rural areas.

Previous literature suggests that culture, including differential upbringing of boys and girls, willingness to escape traditional gender role or stigmatization of migrant women may play a role in shaping sex-selectiveness of migration. However, despite the

changes in gender roles described above, I show that sex-selective migration has remained a common and rather stable phenomenon in the recent decades.

To show how common skewed sex ratios among young adults are, I analyse population data covering almost all countries of the world. Most importantly, I focus on the rural and urban sex ratios in the age group from 25 to 34 years. I find that, while 1 in 6 countries have significantly skewed country-level sex ratios, most countries have either rural or urban skewed sex ratios. In an analysis of European subnational regions, I find a strong log-linear relationship between sex ratios among young adults and population density.

Overall, this study offers the first global view on rural and urban SRYA and reveals the strong relationship between population density and sex ratios. Although the geographical analysis of sex ratios has been a basis for research on internal migration as early as in the 19th century (Ravenstein 1885), and still constitutes an important part of development studies, documenting sex ratios by age group has been rare and focused on individual countries or cities. My contribution consists in documenting the global extent and scale of SRYA imbalances, as well as the differences between continents, and identifying sex-selective migration as the most important cause. My study demonstrates that the analysis of sex ratios by age group can uncover much information about migration flows and their consequences.

Chapter 2: Women's Increasing Relative Social Status and Men's Vote for Trump

In the second chapter, I ask how local changes in the relative social status of women and men relates to their political behaviour. Already before the election of Donald Trump, Kimmel (2013) drew attention to "angry white men" who, felt "aggrieved entitlement." In his understanding, in reaction to the diminishing inequalities between genders and races, some white men were increasingly angry. Previous studies show that this feeling translated into domestic and public violence, as well as involvement in radical groups.

The supposed source of men's anger was the loss of relative status. According to social identity theory, when a group's status declines or is threatened, the members of that group are more likely to discriminate against other groups and their members. So far, the literature has focused on the subjective status of men. Most importantly, some studies show an association between men's relative status or decline in status and the gender gap in support for radical right parties or Brexit (Gidron and Hall 2017; Green and Shorrocks 2021).

In this chapter, I study how local women's increasing social social status (relative to men) affects men's vote in the United States of America. According to the social status threat hypothesis, people are more likely to vote for radical right parties if their social status is threatened. Yet, I do not find any evidence supporting this hypothesis. I measure the changes in gender gaps in median income, college education, and labour force participation, as well as the share of women in managing positions in the last 15 years before Donald Trump's election. I combine county-level census data, electoral data, and a large-sample political survey (Cooperative Election Study). Although Trump has gained more votes in places were women's relative social status increased the most, I find no effect of the interaction between (male) gender and increasing relative social status.

Chapter 3: Men in EU Gender Equality Policies

In the third chapter, accepted for publication the *Journal of European Social Policy* in a slightly modified form, I ask how men have been included in gender equality policies. The development of the EU Gender Equality Strategies (GESs) shows how the perception of gender inequalities has changed. Until 1995, gender inequality policies focused on women's labour force participation and unequal opportunities on the labour market and in decision-making. Then, the policies included the new goal of transforming men's roles to guarantee more equal involvement of men in housework and care. The scope of gender equality policies diverted from purely economic inequalities and expanded to new fields. In the most recent multiyear gender equality strategy of the European Commission, gender-based violence became the most highlighted topic.

The social changes that occurred in that time required new concepts and approaches. In mid 1990s, the Commission started using the word ‘gender’ and started implementing ‘gender mainstreaming.’ It meant to go beyond equal treatment and women’s perspective (positive action), by adding the ‘gender perspective.’ Equal treatment aims at ensuring equal rights and opportunities in the public sphere. Women’s perspective recognises women as a disadvantaged group, requiring special treatment. Gender perspective aims at transforming the organization of society, including a transformation of men’s roles. In theory, it should also take into account the feelings of resentment and alienation actions centred on women could spark among men (Booth and Bennett 2002).

Existing research on men in the gender equality agenda of the EU has mostly focused on men as ‘problem solvers’: addressing problems caused by men (e.g., violence), and men’s possibilities to contribute to gender equality. I ask whether men’s disadvantages have also been addressed by gender equality policies, i.e., whether men have been recognised as ‘problem holders.’

In this chapter, with a qualitative and quantitative analysis of all gender equality strategies (GESs) and annual reports (ARs), I document the U-turn in Commission’s approach over the years: men’s disadvantages –such as the gender gaps in life expectancy, occupational health, and educational attainment– were addressed as policy goals between 2006 and 2015. In that period, men were recognised as ‘problem holders.’ Since 2016, men’s disadvantages were no longer addressed.

To understand these changes, I study the evolution of deservingness of men. Men’s deservingness vanished in the final period, with the increasing attention to violence against women and its perpetrators, and to men’s disproportionate power. This reversal of attitude is even clearer when it comes to boys. While the Commission discussed concerns about the ‘failing boys’ and the ‘boys’ crisis,’ it only expected boys to use their power and contribute as ‘agents of change.’

In sum, the introduction of the ‘gender perspective’ in the 1990s allowed to construct men as problem solvers, and later, as problem holders. Until 2015, they were seen as deserving of public policies, particularly in the areas of education and health. However, the increasing focus on men’s and boys’ power and their potential to do

harm shifted the construction of men closer to both powerful and undeserving of benefiting from EU gender equality policies. Thus, legitimising policies for one group (women) and addressing the needs of a complementary group (men) proves difficult. Regardless of their social status, they have been portrayed as allies and agents of change, i.e., problem solvers. Men's disadvantages disappeared from GESs and ARs.

This chapter contributes to two literature streams: on gender equality policies and on European institutions. I define the concept of 'problem holders' to expose the surprising appearance and disappearance of men as a policy target population of gender equality policies. Unlike previous studies, I focus on men as a group rather than masculinity. These methodological and empirical contributions raise new questions about how narratives about men, women and gender equality are constructed, and about their influence on policy design and consequences of gender equality policies for men. They also suggest another likely mechanism by which the EU gender equality agenda can provoke the –predominantly male– combined backlash against gender equality policies and European integration.

References

Anduiza, Eva, and Guillem Rico. 2022. 'Sexism and the Far-Right Vote: The Individual Dynamics of Gender Backlash'. *American Journal of Political Science*, December, ajps.12759. https://doi.org/10.1111/ajps.12759.

Booth, Christine, and Cinnamon Bennett. 2002. 'Gender Mainstreaming in the European Union: Towards a New Conception and Practice of Equal Opportunities?' *European Journal of Women's Studies* 9 (4): 430–46. https://doi.org/10.1177/1350506802009004401.

Bourdieu, Pierre. 1962. 'Célibat et condition paysanne'. *Études rurales* 5 (1): 32–135. https://doi.org/10.3406/rural.1962.1011.

England, Paula. 2010. 'The Gender Revolution: Uneven and Stalled'. *Gender & Society* 24 (2): 149–66. https://doi.org/10.1177/0891243210361475.

Esping-Andersen, Gøsta, Diederik Boertien, Jens Bonke, and Pablo Gracia. 2013. 'Couple Specialization in Multiple Equilibria'. *European Sociological Review* 29 (6): 1280–94. https://doi.org/10.1093/esr/jct004.

Esteve, Albert, Christine R. Schwartz, Jan van Bavel, Iñaki Permanyer, Martin Klesment, and Joan García-Román. 2016. 'The End of Hypergamy: Global Trends and Implications: The End of Hypergamy: Global Trends and Implications'. *Population and Development Review* 42 (4): 615–25. https://doi.org/10.1111/padr.12012.

Gidron, Noam, and Peter A. Hall. 2017. 'The Politics of Social Status: Economic and Cultural Roots of the Populist Right'. *The British Journal of Sociology* 68 (S1): S57–84. https://doi.org/10.1111/1468-4446.12319.

Goldin, Claudia. 2014. 'A Grand Gender Convergence: Its Last Chapter'. *American Economic Review* 104 (4): 1091–1119. https://doi.org/10.1257/aer.104.4.1091.

Green, Jane, and Rosalind Shorrocks. 2021. 'The Gender Backlash in the Vote for Brexit'. *Political Behavior*, April. https://doi.org/10.1007/s11109-021-09704-y.

Kimmel, Michael S. 2013. *Angry White Men: American Masculinity at the End of an Era*. New York: Nation Books.

Kosakowska-Berezecka, Natasza, Tomasz Besta, Jennifer K. Bosson, Paweł Jurek, Joesph A. Vandello, Deborah L. Best, Anna Wlodarczyk, et al. 2020. 'Country-Level and Individual-Level Predictors of Men's Support for Gender Equality in 42 Countries'. *European Journal of Social Psychology* 50 (6): 1276–91. https://doi.org/10.1002/ejsp.2696.

Ravenstein, E. G. 1885. 'The Laws of Migration'. *Journal of the Statistical Society of London* 48 (2): 167–235. https://doi.org/10.2307/2979181.

Rawłuszko, Marta. 2021. 'And If the Opponents of Gender Ideology Are Right? Gender Politics, Europeanization, and the Democratic Deficit'. *Politics & Gender* 17 (2): 301–23. https://doi.org/10.1017/S1743923X19000576.

Chapter 1

Migration and Skewed Subnational Sex Ratios among Young Adults

Abstract

Skewed sex ratios have been found to increase crime and spread of diseases, as well as influence fertility decisions, gender roles, and economic development. I document the extent to which international and internal migration shape national and subnational sex ratios among young adults (SRYA). For this purpose, I analyse the data from the United Nations' Urban and Rural Population by Age and Sex and World Population Prospects, focusing on the cohort born between 1975 and 1985 in 200 countries. I find that, while 33 countries have significantly skewed country-level sex ratios, as many as 107 of the 200 investigated countries have either rural or urban skewed sex ratios among young adults in 2010. In order to identify the sources of sex ratio imbalances, I decompose country-level sex ratios into three factors: sex ratio at birth, relative probability of survival and sex-selective migration. I show that without sex-selective international migration, country-level SRYA would be balanced in almost all countries of the world. In the third part of the study, I use Eurostat data for European subnational regions. I find a strong log-linear relationship between sex ratios and population density i.e. relatively more women among young adults as population density increases. Moreover, I show that skewed sex ratios among young adults can be mainly attributable to sex-selective migration, rather than to imbalanced sex ratios at birth and differential mortality.

1. Introduction

Skewed sex ratios –conventionally defined as the proportion of men to women– can have diverse and potentially harmful consequences on a society. Both high and low sex ratios may increase crime and violence (Edlund et al. 2013, La Mattina 2017) and the spread of sexually transmitted diseases (Bien et al. 2013, Bertocchi and Dimico 2019). They affect economic behaviour (Wei and Zhang 2011), and the bargaining power of women and development (Stopnitzky 2017), shape gender roles in the long-term (Grosjean and Khattar 2019; Teso 2019), fertility decisions (Kesternich et al. 2020) and harm the health and well-being of the overrepresented sex (Zhou and Hesketh 2017). When men outnumber women –or vice versa–, finding a partner of the other sex becomes highly challenging. For instance, Jiang et al. (2016) estimate that in the coming decades, there will be between 1 and 3 excess men for 10 Chinese women. According to Guilmoto (2012), grooms in China and India will outnumber brides by at least 50%, if the sex ratio at birth (SRB) remains male-biased.

Although the consequences of skewed sex ratios among young adults (abbreviated as SRYA from now onwards) have often been studied, the analysis of their causes has been largely neglected. Skewed sex ratios at birth (SRB) have recently attracted attention: the phenomenon of “missing girls”, mostly caused by more frequent abortions of female fetuses, has been documented for 12 countries in the recent decades (Chao et al. 2019). In turn, the classical studies of sex ratios among adults (Ravenstein 1885; Bourdieu 1962) attributed skewed sex ratios to internal and international migration only. Moreover, besides SRB and sex-selective migration, differential probabilities of survival also shape SRYA. This suggests that skewed SRYA are a much more common and general phenomenon than skewed SRB. They are also not limited to exceptional situations highlighted by studies focusing on the consequences of skewed sex ratios, such as large scale sex-selective abortion, wars or slave trade.

In this study, I ask how common skewed SRYA are and how these imbalances arise. Since most people find their partners through direct contact, sex ratios come into play mainly at the local level (Becker 1981; Oppenheimer 1988; Noë 2017). So, beyond

national SRYA, I analyse the SRYA in urban and rural areas, and in subnational regions. I focus on the cohort born from 1975 to 1985. As in existing studies (e.g. Billari and Dalla-Zuanna 2013; Jiang et al. 2016), I focus on people aged around 30, i.e., in this case, between 25 and 34. In this age group, most people in most countries have already married (e.g. Hertrich 2017; Halim and Rivera 2020), and made their first decision to migrate or not (e.g. Bernard et al. 2014), while those who have not found partners yet, experience the marriage squeeze the most because the pool of potential partners has shrunk.

After a literature review on the causes of skewed sex ratios, the study comprises three empirical parts with different geographical levels of analysis. First, I show that subnational imbalances in SRYA are common in the world and occur in most countries. I use Urban and Rural Population by Age and Sex (URPAS) estimates by the United Nations Population Division (UNPD) to document the urban and rural SRYA for all 200 countries and territories with total population larger than 90 thousand (United Nations 2014a). I also show how sex ratios changed over time for the age group 25-34 and for the cohort born between 1980 and 1985. Second, I use World Population Prospects (WPP) data produced by the UNPD (2013), and decompose the sex ratios at age 30 at the national level into three factors: sex ratio at birth (SRB), probability of survival of men relative to women, and net international migration of men relative to women. In this way, I show that international migration is a crucial factor shaping SRYA imbalances. However, country-level SRYA are imbalanced only in 33 of the 200 countries under study. So, in the third part of the study, I provide evidence for the substantial and dominant role of sex-selective internal migration in skewing subnational SRYA. I focus on the European Union Nomenclature of Territorial Units for Statistics 3 (NUTS3) regions, using EU Census Hub data for 31 European countries, for the age group 25-34 in 2011 (European Statistical System 2011). This allows me to show that the local imbalance of SRYA in Europe is not related to SRB but to population density. Since the mortality rates among children and young adults in Europe are particularly low, this implies a large effect of internal migration. In almost all countries, relatively more men live in the least densely populated regions. Also, this part of the study shows that the

imbalances in SRYA do not depend on the definition of the binary division into rural and urban areas.

I argue that in comparison with SRB, migration –particularly internal migration– much more commonly has an impact of a similar, and in some cases even larger, magnitude on SRYA. If there was no sex-selective migration, national SRYA would be balanced in almost all countries of the world in the cohort under study. I find that urban or rural SRYA are imbalanced in most countries of the world, and that regional SRYA are strongly correlated with population density in Europe.

Overall, this study offers the first global view on rural and urban SRYA and reveals the strong relationship between population density and sex ratios. Although the geographical analysis of sex ratios has been a basis for research on internal migration as early as in the 19th century (Ravenstein 1885), and still constitutes an important part of development studies (see e.g. Chant and McIlwaine 2015), documenting sex ratios by age group has been rare and focused on individual countries (e.g. Edlund 2005 on Sweden) or cities (e.g. Rodríguez-Vignoli and Rowe 2018 on eight Latin American metropolitan areas). Relevant exceptions are the papers by Menashe-Oren and Stecklov (2018) on the relationship between demographic transitions and migration in Sub-Saharan Africa, and by Wiest et al. (2012) on the masculinization of rural Europe. My contribution consists in documenting the global extent and scale of SRYA imbalances, as well as the differences between continents, and identifying sex-selective migration as the most important cause. My study demonstrates that the analysis of sex ratios by age group can uncover much information about migration flows and their consequences.

2. Causes of Skewed Sex Ratios among Young Adults

Much of the current literature on sex ratios focuses on the SRB as the main driver of future SRYA or marriage squeeze (e.g. Guilmoto 2012; Tucker and Van Hook 2013; Jiang et al. 2016; Xiong 2022). The SRB usually varies around 1.05 (Chao et al. 2019). With the exception of a few –mostly African– countries, significantly more boys are born than girls. According to the WPP, in 1980, i.e. in the cohort under study, around 5.5% more boys than girls were born in the world. The SRB can be further

skewed as a result of parents' preferences and behaviours. Usually parents prefer to have both girls and boys or at least one son, although daughter-preference has appeared in some countries (Miranda et al. 2018; Marco-Gracia and Fourie 2021). Parents may fulfil their preferences by sex-selective abortion or by stopping childbearing when they achieve the desired number of sons or daughters (Bongaarts 2013).

The second factor influencing SRYA is differential mortality by sex. Girls have generally higher survival rates than boys (UN 2011). However, parents' preferences may distort these differentials. Parents may provide insufficient care or nutrition to girls or even commit infanticides (Kashyap 2019; Guilmoto et al. 2020), with differential impact between regions or rural and urban areas (Guilmoto et al. 2018). Among adults, mortality increases earlier for men than for women, making sex ratios decrease with age. Already among young adults, wars, homicides, suicides, and risky behavior may lead to higher mortality among men (Heuveline and Slap 2002), while maternal mortality may have the opposite effect. However, in this study, I show that this difference in survival rates does not have any strong influence on the SRYA in a vast majority of countries. This finding is consistent with the literature on the life expectancy gender gap, showing that the contemporary gap results from differences in mortality in older age groups (Zarulli et al. 2021).

The third factor leading to skewed SRYA is sex-selective migration. Already in 1885, analysing sub-national sex ratios, Ravenstein formulated a law of migration: "females are more migratory than males" (p. 199). More precisely, he found that women in the UK migrated more than men between different counties of the same kingdom, but less beyond their kingdom of birth. Typically, women prevailed in migration from rural to urban areas.

Sex-selective migration to cities among young adults exists in many countries, as I show in this study. In particular, women migrate to cities more than men in more developed countries for two main reasons. First, the concentration of higher education opportunities in cities combines with the current tendency of women to dedicate more years to education (e.g. Camarero and Sampedro 2008; Johansson 2016). In 2010, more young women than men had a college degree in 139 countries,

representing 86% of the global population (Esteve et al. 2016). Second, employment opportunities in rural and urban areas may differ by sex and this provides stronger incentives for women or men to move out (e.g. Bjarnason and Thorlindsson 2006; Costa et al. 2013). The gender gap in commuting –caused by labour market structures, difference in preferences and unequal division of care, and household work– further contributes to the higher propensity of women to live close to their workplace (Camarero and Sampedro 2008; Reuschke and Houston 2020). Also, cities typically have better public services that allow women to combine work with family life (Rauhut and Littke 2016).

While this phenomenon is prevalent among developed countries, Menashe-Oren and Stecklov (2018) provide convincing evidence that rural areas in Sub-Saharan Africa become more feminized during the early stages of the demographic transition due to predominantly male migration to cities. At later stages of the transition, the share of women among rural-to-urban migrants also increases.

The role of culture in sex-selective migration varies. Already Bourdieu (1962) realized that girls in France were brought up to leave rural areas, while boys were encouraged to stay. Also, the desire to escape traditional gender roles may encourage women to leave most conservative environments (Rauhut and Littke 2016; Ruyssen and Salomone 2018). On the other hand, migrant women may face stronger stigma when loosening ties with their family (Morokvaśic 1984; Hofmann and Buckley 2013). This is particularly true in developing countries. Women's domestic and reproductive roles in traditional societies constrain their migration opportunities, especially in Sub-Saharan Africa (Weinreb et al. 2020).

As regards international migrants, the share of women started rising in the first half of the 20th century (Gabaccia and Zanoni 2012; Donato and Gabaccia 2015) and was close to half of all migrants since 1960 (Zlotnik 2003). In 2015, men accounted for around 52% of all international migrants (Abel 2018). While some sex-selective migration flows –e.g. those driven by differential employment opportunities– distort sex ratios in the countries of origin and destination, others may equalize them. For instance, while men initially dominated in migration from Mexico to the US, women

often later followed other family members as family reunification migration (Cerrutti and Massey 2001).

3. Data and methods

In this study, I use complementary data sets for different geographical levels (listed in Table A1). Relying on data from the United Nations' Urban and Rural Population by Age and Sex (URPAS), I start with documenting that SRYA are skewed in almost all countries of the world. Population estimates based on censuses and population registers are provided in five-year intervals from 1980 to 2010 (and forecast for 2015) at the national level for 233 countries and territories, as well as for regions and subregions of the world. Here, I focus on 200 countries with population larger than 90 thousand. For the analysis of cross-national differences, I look at SRYA in 2010, the latest year available in the data set and the closest to the last available European censuses used in the third part of the study.

The UN uses the definitions of rural and urban areas provided by national statistical offices. Thus, the definitions of the urban and rural vary across countries and the interpretation and comparison of estimates for specific countries require caution. However, the national definitions may better reflect the local reality than a hypothetical global standard (Menashe-Oren and Bocquier 2021). For a more detailed discussion of the definitions of urban areas and data construction, see Buettner (2015). A list of data sources used to create estimates for each country is available in the UN World Urbanization Prospects documentation (United Nations 2014b).

In order to assess how many countries have substantially skewed SRYA, I set a benchmark based on the literature on SRB. There is a significant heterogeneity between regions, with reference levels estimated ranging from 1.031 in sub-Saharan Africa to 1.067 in Oceania. In fact, SRB have been historically excessive in 12 countries: Albania, Armenia, Azerbaijan, China, Georgia, Hong Kong, India, Republic of Korea, Montenegro, Taiwan, Tunisia, and Vietnam, reaching as much as 1.179 in China in 2005 (Chao et al. 2019). Among those countries, Tunisia has the lowest historical maximum SRB estimated as 1.085, which I set as an indicative benchmark

for imbalanced sex ratios. However, I also show what share of countries would be considered as characterised by skewed SRYA for any other thresholds (Figure A1).

In the second part of this study, I assess the impact of sex ratios at birth, relative survival probability, and sex-selective migration on SRYA. Following Billari and Dalla-Zuanna (2013), I use the WPP data to estimate the population of men and women aged 30 separately. The number of people aged 30 living in a given place is the result of multiplicative effects of: the number of people born 30 years before, the probability of survival of that cohort, and net migration between age 0 and age 30. Thus, I decompose the population aged 30 into those three factors, according to the following formula:

$$(1)\ P_{s,30,t+30} = B_{s,t} * p_{s,30,t} * m_{s,30,t+30},$$

where the subscript *s* takes the values of *m* for male and *f* for female and:

$P_{s,30,t+30}$ = population of people aged 30 at time *t*+30;

$B_{s,t}$ = number of people born at time *t*;

$p_{s,30,t}$ = probability of survival until the age of 30 for the cohort born at time *t*;

$m_{s,30,t+30}$ = 1 – net migration rate until the age of 30 for the cohort born at time *t*.

The migration factor is estimated by the inversion of the formula (1):

$$(2)\ m_{s,30,t+30} = P_{s,30,t+30} / (B_{s,t} * p_{s,30,t})$$

This approach implies that any measurement errors influence the estimates of migration. Since this method does not yield 1 for the world population, I divide the migration factor estimated for each country by the world-level migration factor. As long as the errors for a specific country or region have no different impact than those at the world level or are equal for both sexes, they do not affect my conclusions. In any case, so far, more precise methods of international migration estimation do not allow to estimate the number of female and male net migration separately (Abel and Cohen 2022). The purposes of this study would require an even more detailed disaggregation: by sex and age group.

I focus on the cohort born in the decade 1975-1985, starting and ending in July of each year, i.e., in the decade centred around 1980. The population born in 1980 is calculated as the sum of births in the periods 1975-1980 and 1980-1985 divided by 10. Similarly, I estimate the SRB in 1980 as the average of the sex ratios reported for the periods 1975-1980 and 1980-1985. Thus, it is the same cohort as in the first part of the study.

The probability of survival is estimated by multiplication of respective probabilities: for the age groups 0-1 and 1-4 in the years 1980-1985, for the age group 5-9 in the years 1985-1990, 10-14 in 1990-1995, etc. The population of people aged 30 in 2010 is calculated as the sum of people aged 25-34 in 2010 divided by 10. By dividing the formula (1) for men by the same formula for women, I get:

$$(3)\ P_{m,30,t+30} / P_{f,30,t+30} = (B_{m,t} / B_{f,t}) * (p_{m,30,t} / p_{f,30,t}) * (m_{m,30,t+30} / m_{f,30,t+30})$$

In this way, the sex ratio at age 30 is decomposed into the effects of SRB, relative probability of survival and sex-selective migration. Alternatively, one can think of this exercise as done for the cohort born between 1975 and 1985, and aged 25-34 in 2010, with the relative survival probability approximated by an estimate for the people born in 1980 and aged 30 in 2010. As a robustness check, I repeat the same computation procedure, but using the estimates of SRB by Chao et al. (2019). I provide the results in Table A5. They do not contradict the conclusions presented below.

Since the WPP datasets start in the years 1950-1955 and 1955-1960, the earliest available cohort is the one born in 1955. I repeat an analogous computation exercise to use it for an intertemporal comparison. I use the WPP version from 2012 because it served as the basis for URPAS. This choice allows for comparisons and guarantees coherence between those two parts of analysis. The results based on the newest version of WPP from 2019 are presented in the Table A6. Due to the lack of data on rural and urban probability of survival by sex, I cannot conduct a reliable decomposition at subnational level. Also, since the URPAS dataset starts with the period 1980-1985, I cannot provide similar estimations for earlier cohorts.

Finally, I analyse subnational regions of 31 European countries using the EU Census Hub data. The countries include 26 EU member states plus Iceland, Liechtenstein,

Norway, Switzerland, and the United Kingdom.[1] The member states of the EU and the European Free Trade Association are a good case to study for two reasons. First, detailed data at subnational level are reliable and comparable. NUTS3 regions are similar in terms of a number of inhabitants: from 150 000 to 800 000 inhabitants, with few exceptions. Second, Europe has a very low child and youth mortality and the son or daughter preferences do not play any roles at the macro scale (Miranda et al. 2018, Chao et al. 2019). This highlights the role of internal migration as a key factor underlying the observed SRYA.

I compare children (0-9 years old) and young adults (25-34 years old), merging two 5-year cohorts in each group to decrease volatility. The latter range comprises the average age at which residents in almost all EU countries marry for the first time. I relate sex ratios with population density, which is a variable commonly used to overcome the problems of the simple urban-rural divide: that a binary variable obscures the continuous nature of the relationship between population density and the variable of interest, and that countries differ in the definition of urban and rural areas (see e.g, Rees et al. 2017). Population density is chosen over population size for better comparability of regions between countries.

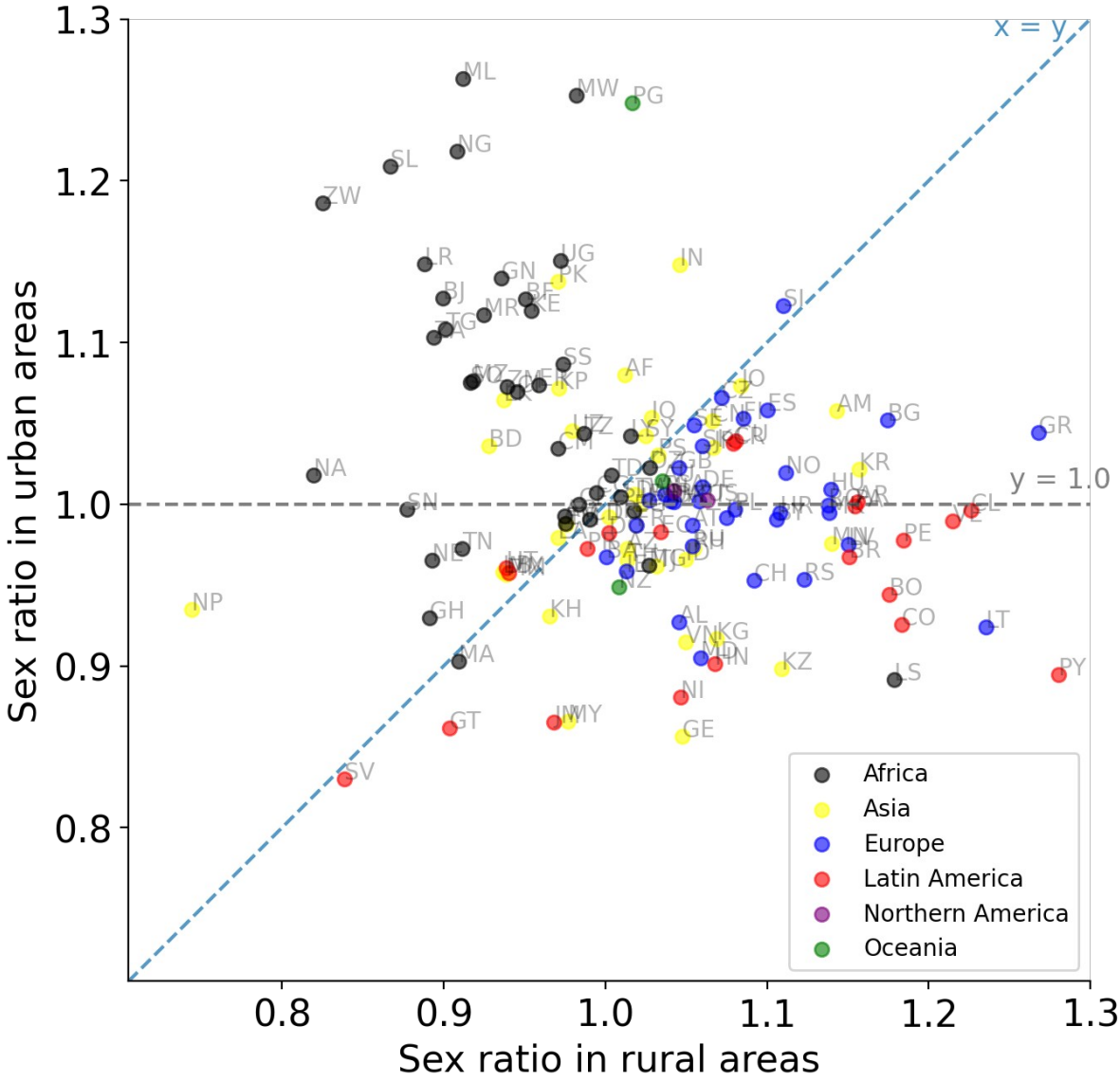
4. Results

4.1. Urban and rural sex ratios

How common are skewed urban and rural SRYA? I apply the threshold described above to identify countries with excessively high SRYA (1.085) and its mirror reflection for low sex ratios (1 / 1.085 = 0.9217). In this way, I find 39 countries with high urban SRYA and 24 countries with low urban SRYA in 2010. There are 48 countries with high rural SRYA and 32 countries with low rural SRYA. In total, 107 of 200 investigated countries have at least one of the SRYA beyond the chosen ranges. A simulation of the share of countries with imbalanced subnational SRYA for different thresholds is presented in Figure A1.

[1] The data for Finland are missing in the EU Census Hub, but I recover them from the National Statistical Service of Finland. I exclude Romania due to the lack of data in the Census Hub and low data reliability. According to the Census Hub dataset, data for Romania has been "severely overestimated by about 1.4 million."

Figure 1. Rural and urban sex ratios for the age group 25-34 in the 136 largest countries, 2010.



Data source: URPAS. Polities with less than 2 million inhabitants excluded for clarity. 13 outliers not included in Figure 3 are mentioned in the text. Country codes are explained in Table A2.

Figure 1 displays sex ratios for the age group 25-34 in 136 countries with total population above 2 million in 2010. Full numerical results for all 200 countries with population above 90 thousand are presented in Table A3.

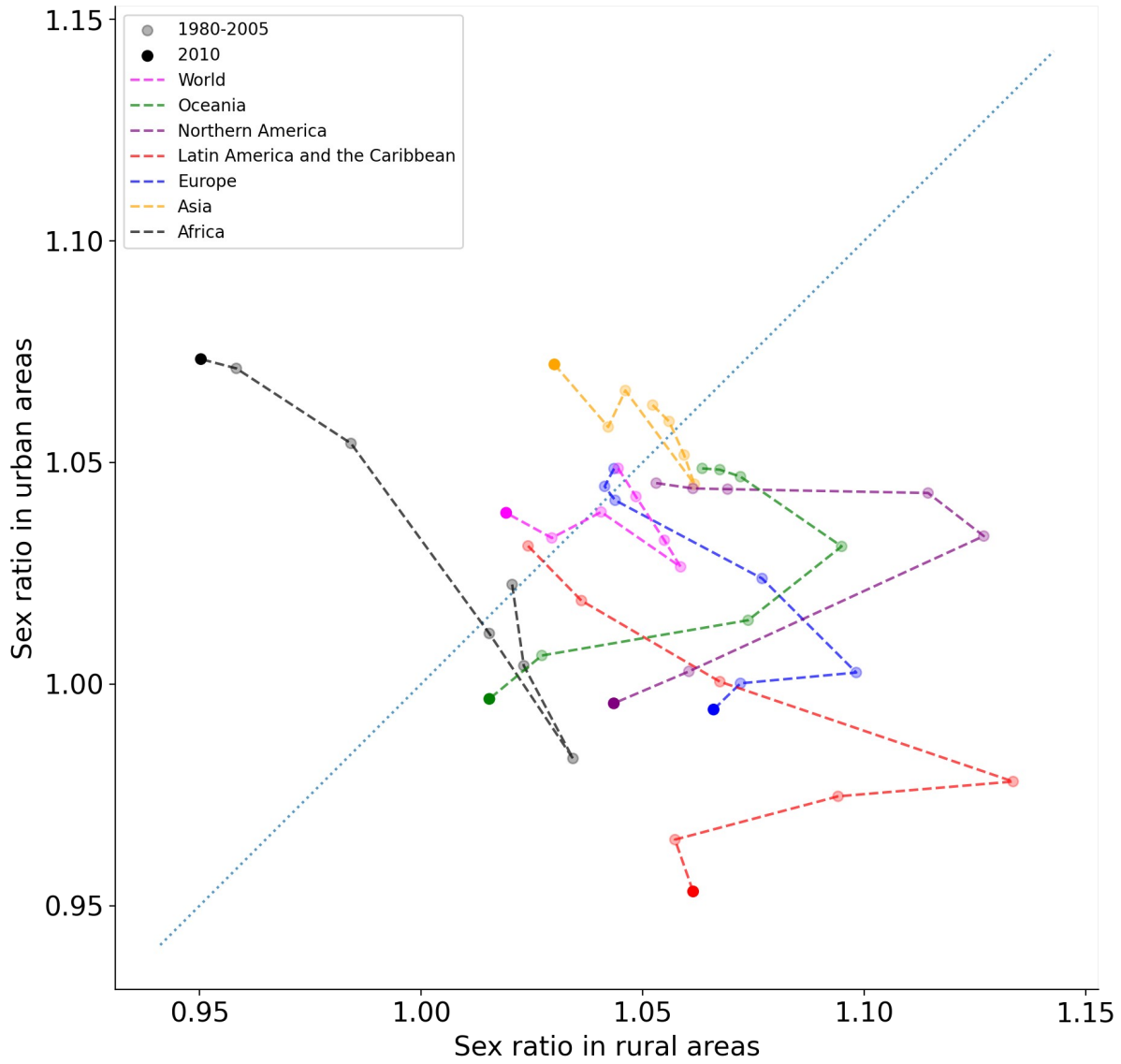
Generally, most African and some Asian countries stand out in that they have higher urban than rural sex ratios. Having relatively more young men in cities, these countries are currently a global exception. In contrast, countries in Europe, the

Americas and parts of Asia have relatively more young women in cities and more young men in rural areas. The world maps of rural and urban SRYA, and the ratio of the former to the latter are presented in Figures A2-A4.

The imbalances are large in many cases. For instance, the rural SRYA of 1.27 in Greece means that there are 27 more young men per every 100 women in rural areas, a phenomenon that has already been subject of qualitative studies (e.g. Kaberis and Koutsouris 2013). Some outliers with either rural or urban sex ratios beyond the range from 0.7 to 1.3 are not displayed on Figure 1, but presented in Table A3. First of all, they include the Gulf countries: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates, as well as Bhutan. Their sex ratios span from 1.3 to 4.0 with similar imbalances in rural and urban areas. In contrast, Mayotte is characterised by very low SRYA in both rural and urban areas (0.57 and 0.70, respectively), due to sex-selective international migration, as shown in the following section. Another group of outlying countries are Burundi, Rwanda, and Yemen with low overall urbanization rates but urban SRYA over 1.4 and rural SRYA much below 1.0. Similarly, the rural SRYA is over 1.4 and close to 1.0 in Uruguay.

Typically, the imbalance between the rural and urban SRYA (calculated as their ratio) is largest in Latin America on the one side, and in Africa, on the other (Figure A4). In countries like Peru, Venezuela, Bolivia, Chile, Colombia, Paraguay, and Uruguay, the SRYA in rural areas is between 20% and 45% larger than in urban areas. The situation is similar in the post-communist Georgia, Kazakhstan, Lithuania, but also Greece and Lesotho. In contrast, the opposite pattern is observed in sub-Saharan Africa: Botswana, Burundi, Gambia, Liberia, Malawi, Guinea-Bissau, Mali, Nigeria, Rwanda, Sierra Leone, and Zimbabwe. The ratio of rural SRYA to urban SRYA is below 0.8 also in Benin, Nepal, and Yemen.

Figure 2. Rural and urban sex ratios for the cohort born in 1980-1984, years 1980-2010.



Data source: URPAS. Each dot reflects one measurement year. Dots are connected in the order from 1980 to 2010. Darker dot for each colour marks year 2010. As explained in the methods section, the dataset starts in 1980. So, this figure represents only the younger half of the cohort under study.

These rural and urban imbalances in SRYA are not mainly driven by skewed SRB nor early childhood mortality. In fact, the sex ratios among children are close to equal in urban and rural areas on all continents for people born in the years 1980-1984 (Figure 2), i.e., the younger part of the cohort under study (due to lack of earlier data). Moreover, in Europe, North America and Oceania rural and urban sex ratios do not change for older children. They grow for young adults in rural areas and fall in urban areas. Since mortality is relatively low on those continents and national SRYA are not among the most imbalanced, the divergence of rural and urban areas can

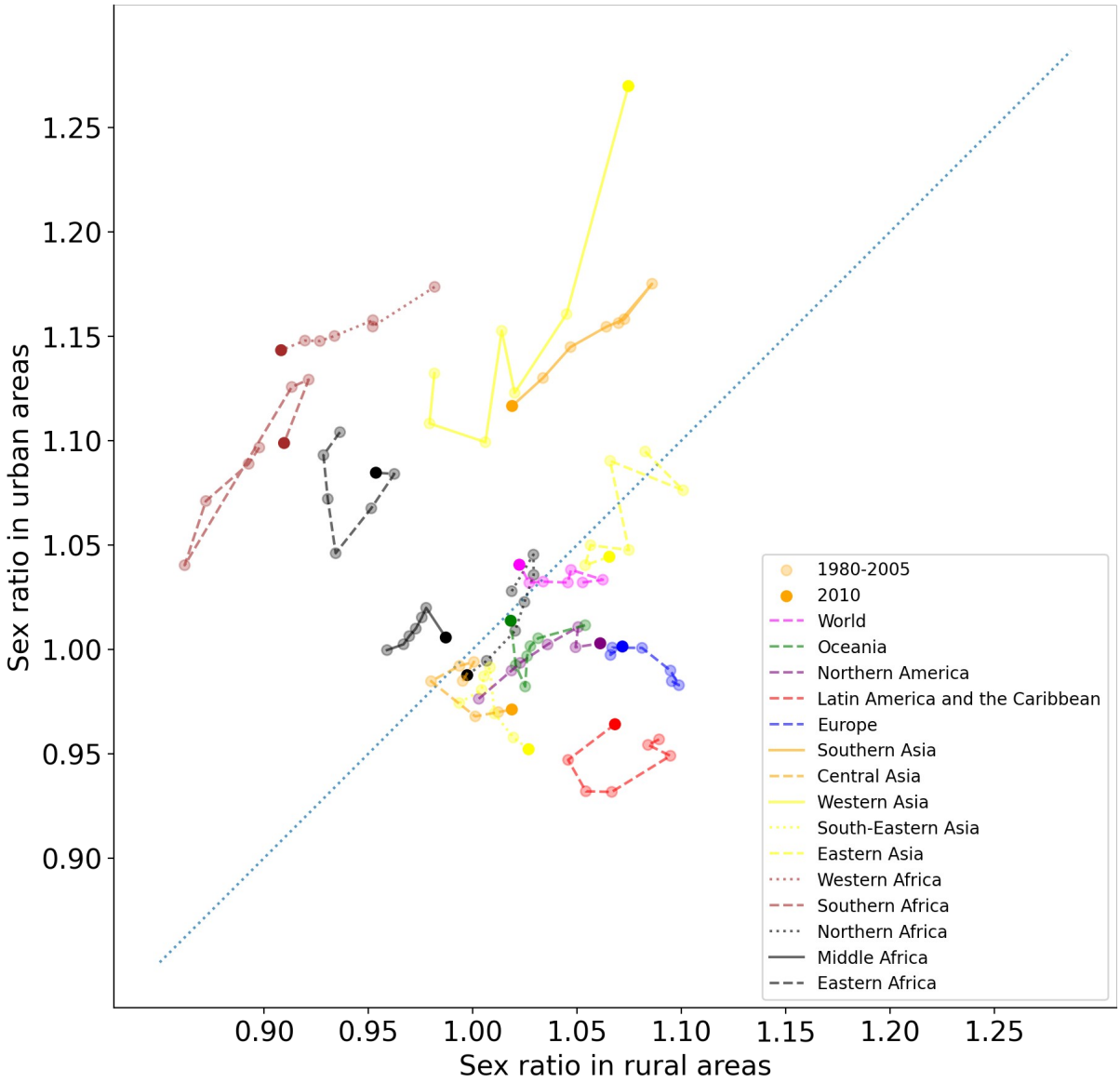
only be driven by sex-selective migration, i.e., more women than men migrate to cities. A very similar process, although starting already in childhood, occurs in Latin America. On the contrary, more men than women appear in urban areas in Africa and Asia. In the following sections, I provide further evidence showing that the changes occur primarily due to the sex-selective international and internal migration.

Are those discrepancies a new phenomenon? Since 1980, the global rural and urban SRYA remained relatively balanced, although a small shift should be noticed: from higher rural than urban SRYA in 1980 to the opposite in 2010 (Figure 3). This suggests that, on average, women in the world move to cities less often now than in 1980, relative to men, i.e., urbanization has become masculinized. However, in some regions, changes over time are large.

First, both urban and rural SRYA rose considerably in Western Asia, reflecting the immigration to the outlying Gulf countries mentioned above. A similar trend, though in a much smaller magnitude, occurred in Northern America. In contrast, the rural and urban SRYA in Northern Africa and Southern Asia decreased, starting from an abnormally high level in the latter case.

In Europe, I can observe a trend of increasing urban SRYA and decreasing rural SRYA, particularly in the 1980s and 1990s. The gap shrunk but it is still not negligible, as shown in more detail in the section 4.3. In 2010, there were 7% more young men than women in rural areas and nearly equal number of women and men in urban areas. The opposite has happened since the 2000s in South-Eastern Asia and Central Asia, where cities have become more feminized in contrast with rural areas, marking a divergence from balance. Rural SRYA decreased in Oceania (from over 1.05 to below 1.02), with urban SRYA first decreasing and then returning to the initial level.

Figure 3. Rural and urban sex ratios for the age group 25-34, regions and sub-regions of the world, years 1980-2010.



Data source: URPAS. Each dot reflects one measurement year. Dots are connected in the order from 1980 to 2010. Darker dot for each colour marks year 2010. The figure displays aggregate values for regions defined by the UN, with Asia and Africa divided into subregions.

In the period under study, rural SRYA decreased in Western Africa (from 0.98 to 0.91) with slowly decreasing urban SRYA, while an opposite trend can be seen in Middle Africa (from 0.96 to 0.99). The migration patterns in Africa are likely to change as a result of economic and social development (Menashe-Oren and Stecklov 2018). When education becomes more common and accessible to girls, it also affects the

gendered patterns of rural-to-urban migration. On the one hand, because migration is most accessible in cities, and, on the other hand, because education shapes migration aspirations (Schewel and Fransen 2018). As noted by studies focusing on countries like Ghana and Nigeria, women are already more or at least increasingly likely to migrate than men (Awumbila 2015; Lattof et al. 2018, Amare et al. 2021).

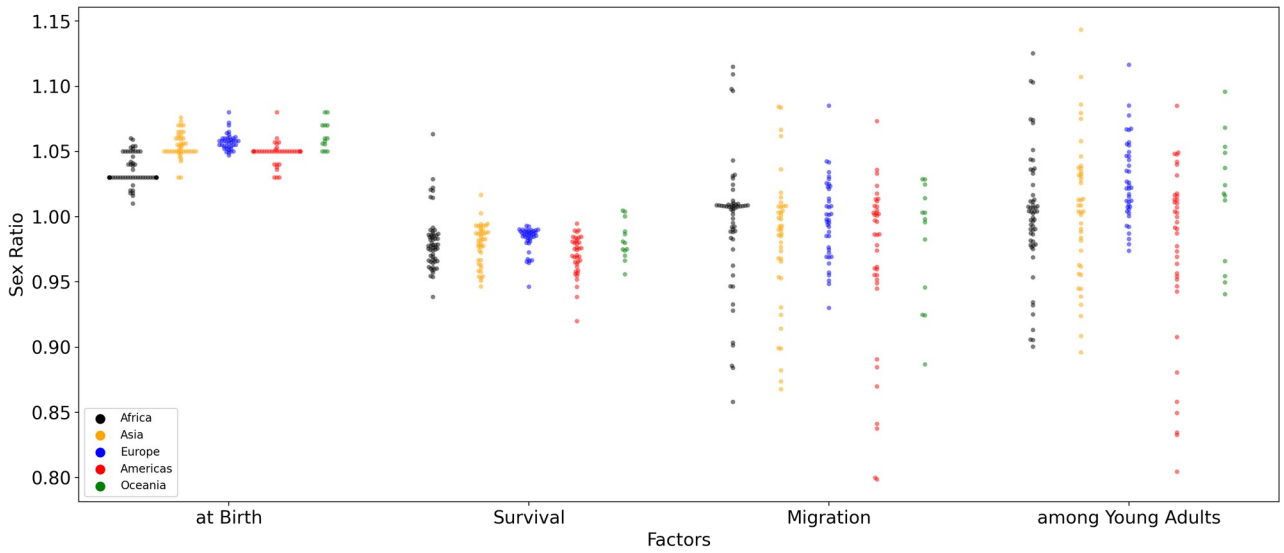
After a reversal of the feminizing trend in rural areas, Latin America has a similar distribution of young adults in 2010 as in 1980, with cities being feminized (on par with South-Eastern Asia, Central Asia and Europe) and rural areas being masculinized. The opposite is true for Eastern Africa and Southern Africa: cities remain masculinized and rural areas feminized. In other regions, the trends are not very clear.

In sum, although the global average SRYA are not very imbalanced, diverse regional processes occur. Most prominently, while there is an increasing number of men in Western Asia and North America (relative to women), the opposite happens in Western Africa. While rural and urban SRYA in Europe become more balanced, some regions remain imbalanced (Latin America, Eastern and Southern Africa) or even diverge from balance (Central Asia and South-Eastern Asia) between rural and urban areas.

4.2. Factors shaping country-level sex ratios

In order to assess to what extent SRYA are skewed by migration, and how much by births and deaths, I decompose SRYA in 200 countries with the total population of at least 90 thousand in 2010. Figure 4 presents the SRYA and its three components – SRB, relative probability of survival and relative net migration– at national level by region of the world. While there is not much variation in SRB and survival across countries, sex differentials in migration and resulting SRYA are highly diverse across countries even among those in the same world regions. National SRYA range from 0.65 in Mayotte to 3.95 in Qatar. The numerical results for all countries and territories with total population larger than 90 thousand (due to data availability) are presented in Table A4.

Figure 4. Decomposition of SRYA for the cohort born in 1980 by country and region.



Data source: WPP 2012, own estimation. 7 countries with SRYA above 1.3 and 4 countries with SRYA below 0.8 are excluded for clarity of the graph (see Table A4). In those cases, the impact of international net migration is strongest.

By adopting the same threshold as in the previous section, I find 16 countries with an excessively high SRYA in 2010. Most of those cases are driven by extremely sex-selective international migration. The Arab states of the Persian Gulf stand out with men outnumbering women almost four times in Qatar (3.95), followed by United Arab Emirates (3.32), Bahrain (2.26), Oman (1.84), Kuwait (1.82), and Saudi Arabia (1.43). They are followed by Western Sahara (1.10) in Africa, Bhutan (1.37), and Armenia (1.09) in Asia, and small islands around the world. In Europe, the outliers were Cyprus (1.14), Slovenia (1.12) and Greece (1.09) with high SRB contributing to high SRYA equally to migration. Importantly, those cases are followed by several European with SRYA between China's 1.06 and India's 1.08: Bulgaria, Czechia, Malta, and Spain, where the effects of mortality until 30 and migration roughly cancel out.

There are as many as 57 countries with an SRYA in 2010 lower than 0.984, which is the lowest SRB in the recorded history, found in Namibia in 1991 (Chao et al. 2019). If I apply the symmetrical thresholds (0.9217-1.0850), as in the previous section, I find 17 countries with excessively low sex ratios in 2010. The most extreme cases are Mayotte (0.65), Hong Kong (0.74), Martinique (0.78), and Nepal (0.78). Another

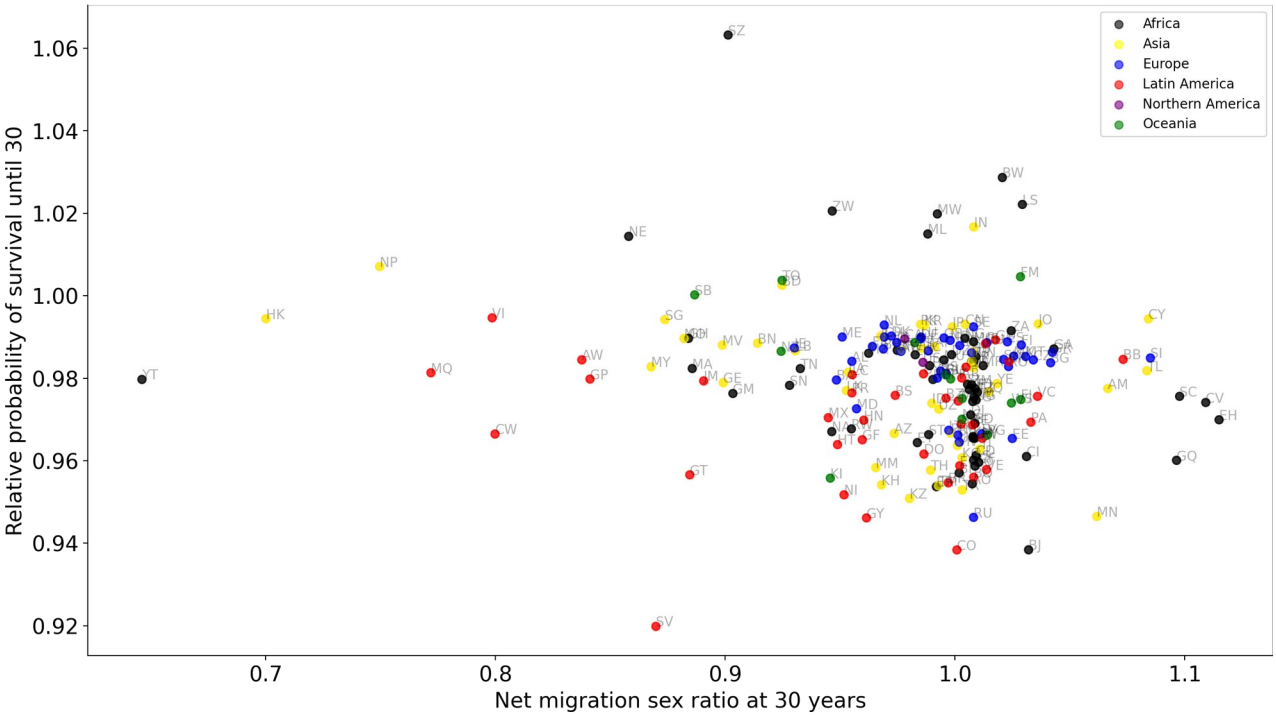
Asian country with low SRYA is Macao (0.91). Low SRYA of 0.90-0.91 also characterize several countries in Africa: Gambia, Ghana, Morocco, and Niger. In Latin America, only El Salvador (0.83), and Guatemala (0.88) fall below the benchmark, but Mexico (0.95) must be mentioned as the most populous country in the world with a relatively low SRYA, caused by a larger emigration of men (with net migration sex ratio of 0.92) and men's lower relative survival rates (0.97). This is in line with earlier studies of Mexican emigration (Cerrutti and Massey 2001; Raphael 2013). Again, extreme SRYA can be found on islands around the globe.

Importantly, the SRYA in Hong Kong is low, even though it is a country where the phenomenon of "missing girls" has been identified. This is because the excessively high SRB occurred in later cohorts. The relatively high SRB of 1.067 in 1980 was overturned by sex-selective international migration until 2010.

When mortality and migration factors are both close to 1.00 or cancel out, the SRYA is determined by the SRB. Where SRB is high, this results in high SRYA. This occurs in many European countries –like Finland, Iceland, Sweden– where SRB is relatively high, mortality is generally low and migration balanced between sexes, or where the slightly higher mortality of men is balanced by equally feminized emigration, like in post-communist countries including Czechia, Romania, and Slovakia. A similar situation occurred in countries as diverse as China, Costa Rica, Cuba, Fiji, Iraq, Mali, and Samoa.

Since the SRB are very well studied, I now focus on the two remaining factors, displayed on Figure 5. There is no reason to expect that relative probability of survival until 30 and sex-selective migration are systematically related. Indeed, there seems to be no association between those two variables.

Figure 5. Migration factor and relative probability of survival, regions of the world, 2010.



Data source: WPP 2012, own estimation. The figure does not include 7 countries with the most extreme net migration sex ratios (see Table A4). Country codes are explained in Table A2.

With a few exceptions, differential mortality plays a limited role. In Benin, Colombia, El Salvador, Guyana, Mongolia, and Russia the relative probability of survival is between 0.92 and 0.95. Only some of those countries have been affected by internal or international conflicts in the investigated period. In others, like Russia, alcohol consumption among men is a substantial risk factor. Importantly, less young men than women die in 13 of the 200 countries, mostly in sub-Saharan Africa, where maternal mortality and HIV prevalence are particularly high (Magadi 2011). Among those countries, only in Swaziland and Zimbabwe, the relative probability of survival is higher than SRB, but even so, the net migration counteracts those factors, producing the SRYA of 0.98.

In consequence, most countries with extreme SRYA are characterized by extreme gender differentials in migration patterns. Besides the Gulf countries and Bhutan, with SRYA above 1.3 and clearly determined by migration, I find the contribution of migration factor to skewed SRYA high in countries as diverse as Armenia, Barbados,

Cape Verde, Cyprus, Equatorial Guinea, Mongolia, Slovenia, Seychelles, Timor-Leste, and Western Sahara. In contrast, migration factors are lowest in the above enumerated countries characterized by low SRYA, which is not surprising. Since generally more boys than girls are born in all countries, low SRYA can be produced only by higher mortality of men or by migration.

In some cases, a combination of two factors leads to high sex ratios, e.g., migration and relatively high SRB in Cyprus, Greece and Slovenia. In many Latin American countries –like El Salvador, French Guiana, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua– the higher mortality of men and more frequent emigration of men contribute equally to the particularly low SRYA. Similar phenomena occur in Cambodia, Kiribati, Moldova, Myanmar, Namibia, and Rwanda.

In some countries, migration and mortality lead to more balanced SRYA by cancelling out a high SRB. For instance, in Montenegro, despite the SRB of 1.08, the SRYA is equal to 1.01 due to much higher net migration of women than men, with differential mortality playing a minor role. In contrast, the SRB of over 1.05 in post-Soviet Belarus, Kazakhstan, Kyrgyzstan and Ukraine is counterbalanced mostly by much higher relative mortality of men.

Importantly, without sex-selective international migration, SRYA would be balanced in almost all countries. If I multiply SRB and relative probability of survival, SRYA is excessively high only in Swaziland. It is also excessively high in India and Tonga if I take SRB from Chao et al. (2019) instead of WPP. In no country, SRYA is excessively low without sex-selective migration in the cohort born in 1980.

In sum, I identify 16 countries with excessively high SRYA and 17 countries with excessively low SRYA in 2010. Although SRB create a natural surplus of men in all countries of the world, the most important cause of skewed sex ratios at national level is international migration. Even a high SRB can be overturned by migration.

The global phenomenon of migration-induced skewed sex ratios is not unique to the cohort born in 1980. Applying the same benchmarks, I find 23 countries with excessively high SRYA and 18 countries with low SRYA in 1985, i.e., for the cohort born in 1955 (Table A4). Already then, the Gulf countries were marked by outstandingly high SRYA. In most cases, as in Seychelles and Bhutan, the SRYA

further increased until 2010. In China, Equatorial Guinea, India, Jordan, Western Sahara, the SRYA decreased in that period, but remained high. In Afghanistan, Côte d'Ivoire, French Polynesia, Guam, and Libya, the imbalance in SRYA fully disappeared. In some extreme cases – Bangladesh, Brunei Darussalam, French Guiana, Hong Kong, and Maldives– an opposite imbalance appeared. Instead of a surplus of young men, they are now characterized by a surplus of young women. Although in India and Maldives the relative survival probability of men notably decreased, the rapid changes in SRYA occur almost entirely as a consequence of shifting migration patterns. In contrast with the cohort born in 1980, in the cohort born in 1955, there were two cases where SRB and relative probability of survival alone led to excessively low SRYA: in Cambodia and El Salvador. This can be explained by the extreme mortality of young men in civil wars. In turn, in four countries, the SRYA would have been excessively high without sex-selective international migration: China, India, Jordan, and Maldives.

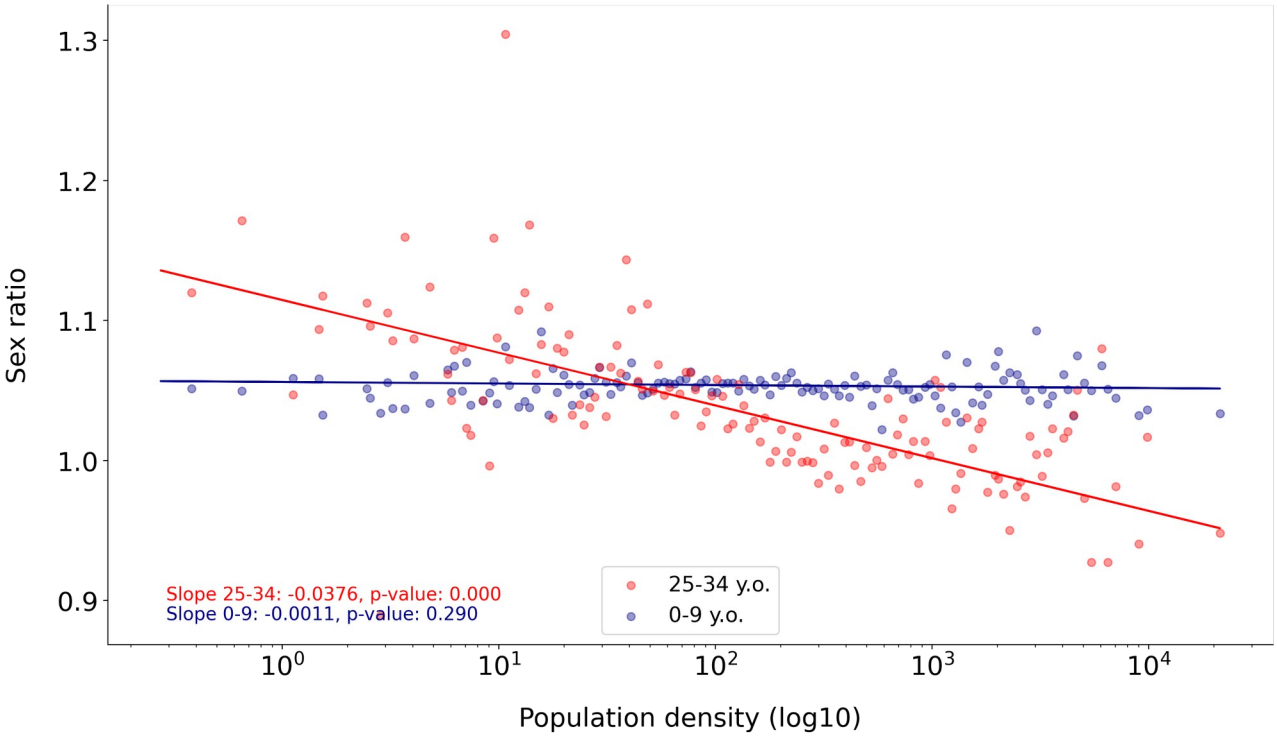
The countries with the lowest SRYA in 1985 were mostly in Sub-Saharan Africa – Burkina Faso, Guinea, Lesotho, Malawi, Namibia, Niger, and Swaziland– and small islands around the world. Four remaining cases were Cambodia, El Salvador, Lebanon, and Turkey. Although the SRYA grew in all of those countries but El Salvador and Martinique, the SRYA remained imbalanced until 2010 in six of them. In further ten of them, the SRYA was close to balanced in 2015, thanks to a less sex-selective migration. A change in mortality was the most important factor in Cambodia, and similar in magnitude to migration in Swaziland and Turkey. Interestingly, Cabo Verde and Lesotho turned from being among the most feminized countries in the world in terms of young adults in 1985 to some of the most masculinized in 2010, a change that can be attributed entirely to changing migration patterns.

The same exercise has been conducted with the estimations of SRB by Chao et al. (2019), and with the WPP from 2019. The results are presented in Tables A5 and A6. The replication code includes also with two alternative estimations of the population of young adults in 2010. They generally confirm the conclusions presented above.

4.3. Subnational sex ratios in Europe

In the previous section, I have shown that national SRYA are skewed in 33 countries, mostly due to international migration. However, rural or urban SRYA are skewed in 107 countries. I now go beyond the binary urban-rural divide and look at the relationship between population density and SRYA in the subnational (NUTS3) regions of 31 European countries. As expected, since sex-selective abortions are particularly rare in those countries, and mortality among children is low, the sex ratios among children are not related to population density (Figure 6).

Figure 6. Sex ratios in NUTS3 regions in 31 European countries, age groups 0-9 and 25-34, 2011.



Data source: EU Census Hub. Blue colour shows the age group 0-9, red colour shows the age group 25-34. NUTS3 regions are divided into 200 bins. Slopes come from OLS regressions of sex ratio on population density. Population density is logarithm of inhabitants per square kilometre. Data for Finland are obained from the National Statistical Service of Finland for 31.12.2010. The countries include 26 EU member states (without Romania), Iceland, Liechtenstein, Norway, Switzerland, and United Kingdom. The same plot without binning is included in the appendix (Figure A5a).

If there was no sex-selective migration, SRYA should be close to the European level of SRB around 1.055 (Chao et al. 2019) due to the low mortality. However, I find a notable divergence between regions: the SRYA tends to be higher in the least densely populated areas and lower in the most densely populated areas. Despite considerable variability, the relationship is close to log-linear: for population density 10 times larger, the SRYA is by 0.038 lower or, in other words, there are 3.8 p.p. less men in comparison to women. Hypothetically, this result may be driven by some differences between cohorts. However, as already shown in Section 4.1. (Figure 2), the divergence of rural and urban sex ratios in Europe occurs with life course transitions.

These results are not driven by specific outlying cities or countries with higher population density and lower sex ratios. In order to address the concern that this relationship may be related by differences in terms of population density, migration patterns or data quality between Eastern and Western Europe, I reproduce Figure 6 for those two parts of Europe. While the correlation is stronger in Eastern Europe, it is substantial and statistically significant within Western and Southern Europe as well, even after excluding Germany (Figures A5b and A5c).

Furthermore, Figures A6-A8 display the same comparison of age groups for each country separately. Despite considerable differences, the general pattern repeats in all countries except for the United Kingdom. Importantly, SRYA in Austria, Belgium, Denmark, France, Ireland, Italy, and the United Kingdom are lower than sex ratios among children for almost all population densities, reflecting an overall feminization of those societies. In those countries, rural areas are not masculinized. According to the decomposition results in Table A4, it is caused by a more positive net international migration of women. In contrast, there are many more young men than women in Finland, Germany, Greece, Norway, Spain, Sweden, and Switzerland, with extreme subnational regions registering as much as around 30% surplus of young men.

The German case provides the best evidence that the imbalances arise from internal migration. As already documented in the literature (e.g. Leibert 2016; Eckhard and Stauder 2018), I find a notable shortage of women in the East and a surplus of

women in the West (Figure A7). However, in both parts of the country, the relationship between population density and SRYA is similar: relatively more young women live in densely populated areas.

In Central and Eastern Europe (Figure A8), the pattern is similar and even more homogenous than in Western Europe. Relatively more men live in least densely populated areas, while largest cities attract many more women. The capitals are typically the places with more women. Warsaw has the most feminized young population, with almost 10% more young women than men. Budapest, Põhja-Eesti (including Tallinn), Riga, Vilnius County, and Zagreb have a surplus of women between 3% and 5%. The only exception – with SRYA above SRB in the capital – is Ljubljana. In Slovenia, SRYA is higher than SRB even in most densely populated areas. As shown in Section 4.1., it is driven by a more masculinized net international migration. However, even in Slovenia, the relationship between population density and SRYA holds.

In all investigated European countries but the United Kingdom, the relationship between population density and SRYA is negative and close to log-linear. In the United Kingdom, as in East Germany and Slovenia, SRYA are much above 1 for most densely populated areas. But men are not much more numerous than women in less densely populated areas. The outlying pattern makes the United Kingdom a particularly interesting case for further studies.

5. Conclusions

While only 12 countries have experienced imbalanced SRB in the recent decades (Chao et al. 2019), I find that 33 countries have imbalanced SRYA if I define a balanced sex ratio by the range from 0.9217 to 1.0850 –resulting from conservative estimates of what is considered an imbalanced SRB– and the SRYA as the proportion of men aged 30 to women in the same age. 17 of those 33 countries have a surplus of women and 16 of them have a surplus of men. Analysing subnational patterns, I find that most –107 out of 200– investigated countries with population larger than 90 thousand have rural, urban or both SRYA beyond those thresholds.

I show that SRYA are very different in urban and rural areas and the patterns vary among regions of the world (Figures 1-3 and A2-A4). In addition, SRYA are strongly dependent on population density (Figures 6 and A5-A8). Imbalances do not appear only in countries known for skewed SRB or gender inequality but also in developed countries where women are relatively free in their educational, occupational and migration choices. The European case strongly suggests that the main cause is internal migration of young adults: sex ratios among children are equal in less and more densely populated regions. The change in sex ratios occurs abruptly for young adults (Figure 2).

Importantly, in both cohorts under study, SRB and mortality alone produce a skewed SRYA only in a few countries. Therefore, without migration, SRYA would be almost always close to balanced. This is even more true for places with low SRYA: since SRB are almost always higher than 1.0, a surplus of women can be attributed only to migration or extraordinary mortality of men. The latter factor led to low SRYA only in Cambodia and El Salvador in the cohort born in 1955, and in no country in the cohort born in 1980.

The examples of several small countries including some larger countries like Bangladesh and China show that SRYA can remarkably change from one generation to another. However, skewed subnational SRYA –perhaps more than balanced SRYA– are a common condition both over space and time. In the investigated period urban SRYA were stably higher in most of Africa and Southern Asia, while rural areas had higher SRYA in Europe and the Americas. Although rural and urban SRYA in Europe become more balanced, they diverge in other regions (Central Asia and South-Eastern Asia). Thus, while the patterns observed by Ravenstein (1885) cannot be regarded as universal 'laws of migration,' Bourdieu's (1962) preoccupation with the men's singlehood caused by women's out-migration from rural areas has not gone out of date.

As in most research on migration, the quality and availability of data is a limitation. Due to a lack of regional data on mortality, it is not possible to decompose SRYA at a subnational level. I also cannot be sure whether subnational variation in SRYA is driven by sex-selective international or internal migration. It is possible that a

subnational imbalance occurs because women or men from rural areas migrate to cities, while people from cities move abroad, or that migrants move directly from rural areas without being involved in the process of internal urbanization. It is also not possible to distinguish between immigration and emigration. Moreover, by estimating migration as a residual, some measurement errors maybe mixed up with migration.

Notwithstanding these limitations, my study has key strengths. It is the first global assessment of sub-national SRYA and reveals a strong relationship between population density and sex ratios. It shows that local sex ratios –and, by extension, marriage markets– are commonly imbalanced. The global picture helps to realize how international and inter-regional migration flows influence sex ratios. I also propose a simple and informative way to analyse spatial distribution of population by relating population composition to population density.

The findings are consistent with the existing literature on feminization of migration in specific countries or regions, e.g., on the higher mobility of women in Western European (Alonso-Villar and Del Río 2008; Camarero and Sampedro 2008; Eckhard and Stauder 2018; Kaberis and Koutsouris 2013; Kröhnert and Vollmer 2012), post-communist (Leibert 2016; Stecklov et al. 2010) or Nordic countries (Edlund 2005; Wessel and Turner 2021), as well as the higher mobility of men in sub-Saharan Africa (Menashe-Oren and Stecklov 2018).

My findings set several paths for further research. The results show that sex-selective internal migration has been undervalued in comparison with the attention gained by the feminization of international migration and imbalanced SRB. The strong correlation of sex ratios with population density suggests a similar correlation between sex ratios and economic, cultural and political variables. Therefore, further research on consequences of sex ratios and imbalanced marriage markets must pay more attention to the geographical patterns, endogeneity and reversed causality.

Further studies should start with a more detailed static and dynamic description of the phenomenon in specific regions and countries. The static differences between countries and regions call for explanations. Why is the United Kingdom an outlier in Europe? Which cities and countries attract more women? How do sex ratios relate to patterns of urbanization and sub-urbanization or economic development and

peripheralization? The dynamics of changes in SRYA could be studied in countries where historical age-sex population decomposition of local population is available. Local estimations of mortality by age and sex can help to isolate the effects of gender differences in mortality, and internal and international migration influence local sex ratios. Moreover, microstates and, in particular, small islands deserve special attention. My study suggests that many of them suffer from SRYA imbalances and volatility due to changing patterns of sex-selective migration.

Furthermore, students and scholars of marriage markets may be interested in broader or older age groups. Here, another heterogeneity may arise and should be explained by further research. In some countries characterized by feminized migration to cities in the age group under study, women return to rural areas in larger numbers than men at the later stage of their life (see Johansson 2016 for Sweden). In other countries, sex ratios remain heavily skewed for older age groups (see Leibert 2016 for Germany).

Finally, my study can inform policy-makers. To my best knowledge, imbalanced SRYA and local marriage squeezes do not gain much attention of public institutions in most countries despite the fact that –as I find– most countries suffer from such phenomena, usually not due to the phenomenon of “missing girls.” My decomposition shows that sex-selective internal and international migration should be at the centre of public policies tackling rural depopulation, but also –based on the literature dedicated to the consequences of sex ratios– lower fertility, demographic decline, violence, and health.

References

Abel, Guy J. 2018. “Estimates of Global Bilateral Migration Flows by Gender between 1960 and 2015.” *International Migration Review* 52, no. 3: 809–52. https://doi.org/10.1111/imre.12327.

Abel, Guy J., and Joel E. Cohen. 2022. “Bilateral International Migration Flow Estimates Updated and Refined by Sex.” *Scientific Data* 9, no. 173. https://doi.org/10.1038/s41597-022-01271-z.

Alonso-Villar, Olga, and Coral Del Río. 2008. “Geographical Concentration of Unemployment: A Male–Female Comparison in Spain.” *Regional Studies* 42, no. 3: 401–12. https://doi.org/10.1080/00343400701291559.

Amare, Mulubrhan, Kibrom A. Abay, Channing Arndt, and Bekele Shiferaw. 2021. “Youth Migration Decisions in Sub-Saharan Africa: Satellite-Based Empirical Evidence from Nigeria.” *Population and Development Review* 47, no. 1: 151–79. https://doi.org/10.1111/padr.12383.

Awumbila, Mariama. 2015. “Women Moving Within Borders: Gender and Internal Migration Dynamics in Ghana.” *Ghana Journal of Geography* 7, no. 2: 132–45. https://doi.org/10.4314/gjg.v7i2.

Becker, Gary S. 1981. *A Treatise on the Family*. Cambridge, Mass: Harvard University Press.

Bernard, Aude, Martin Bell, and Elin Charles-Edwards. 2014. “Life-Course Transitions and the Age Profile of Internal Migration.” *Population and Development Review* 40, no. 2: 213–39. https://doi.org/10.1111/j.1728-4457.2014.00671.x.

Bertocchi, Graziella, and Arcangelo Dimico. 2019. “The Long-Term Determinants of Female HIV Infection in Africa: The Slave Trade, Polygyny, and Sexual Behavior.” *Journal of Development Economics* 140 (September): 90–105. https://doi.org/10.1016/j.jdeveco.2019.05.005.

Bien, Cedric H., Yong Cai, Michael E. Emch, William Parish, and Joseph D. Tucker. 2013. “High Adult Sex Ratios and Risky Sexual Behaviors: A Systematic Review.” *PLOS ONE* 8, no. 8: e71580. https://doi.org/10.1371/journal.pone.0071580.

Billari, Francesco C., and Gianpiero Dalla-Zuanna. 2013. “Cohort Replacement and Homeostasis in World Population, 1950-2100.” *Population and Development Review* 39, no. 4: 563–85. https://doi.org/10.1111/j.1728-4457.2013.00628.x.

Bjarnason, T., and T. Thorlindsson. 2006. “Should I Stay or Should I Go? Migration Expectations among Youth in Icelandic Fishing and Farming Communities.” *Journal of Rural Studies* 22, no. 3: 290–300. https://doi.org/10.1016/j.jrurstud.2005.09.004.

Bongaarts, John. 2013. “The Implementation of Preferences for Male Offspring.” *Population and Development Review* 39, no. 2: 185–208. https://doi.org/10.1111/j.1728-4457.2013.00588.x.

Bourdieu, Pierre. 1962. “Célibat et condition paysanne.” *Études rurales* 5, no. 1: 32–135. https://doi.org/10.3406/rural.1962.1011.

Buettner, Thomas. 2015. “Urban Estimates and Projections at the United Nations: The Strengths, Weaknesses, and Underpinnings of the World Urbanization Prospects.” *Spatial Demography* 3, no. 2: 91–108. https://doi.org/10.1007/s40980-015-0004-2.

Camarero, Luis, and Rosario Sampedro. 2008. “¿Por Qué Se van Las Mujeres? El Continuum de Movilidad Como Hipótesis Explicativa de La Masculinización Rural.” *Revista Española De Investigaciones Sociológicas (REIS)* 124, no. 1: 73–105.

Cerrutti, Marcela, and Douglas S. Massey. 2001. “On the Auspices of Female Migration from Mexico to the United States.” *Demography* 38. no. 2: 187–200. https://doi.org/10.1353/dem.2001.0013.

Chant, Sylvia, and Cathy McIlwaine. 2015. *Cities, Slums and Gender in the Global South: Towards a Feminised Urban Future*. Routledge.

Chao, Fengqing, Patrick Gerland, Alex R. Cook, and Leontine Alkema. 2019. “Systematic Assessment of the Sex Ratio at Birth for All Countries and Estimation of National Imbalances and Regional Reference Levels.” *Proceedings of the National Academy of Sciences* 116, no. 19: 9303–11. https://doi.org/10.1073/pnas.1812593116.

Costa, Cassiane da, José Marcos Froehlich, and Ricardo Howes Carpes. 2013. “Rural Masculinization: An Approach Based on the Regionalization of Agrarian Systems in Rio Grande Do Sul, Brazil.” *Revista Brasileira de Estudos de População* 30 (2): 465–83. https://doi.org/10.1590/S0102-30982013000200007.

Donato, Katharine M., and Donna Gabaccia. 2015. *Gender and International Migration*. Russell Sage Foundation.

Eckhard, Jan, and Johannes Stauder. 2018. “Migration and the Partner Market: How Gender-Selective Relocations Affect Regional Mating Chances in Germany.”

European Journal of Population 34, no. 1: 59–86. https://doi.org/10.1007/s10680-017-9422-8.

Edlund, Lena. 2005. “Sex and the City.” *The Scandinavian Journal of Economics* 107, no. 1: 25–44. https://doi.org/10.1111/j.1467-9442.2005.00393.x.

Edlund, Lena, Hongbin Li, Junjian Yi, and Junsen Zhang. 2013. “Sex Ratios and Crime: Evidence from China.” *The Review of Economics and Statistics* 95, no. 5: 1520–34. https://doi.org/10.1162/REST_a_00356.

Esteve, Albert, Christine R. Schwartz, Jan van Bavel, Iñaki Permanyer, Martin Klesment, and Joan García-Román. 2016. “The End of Hypergamy: Global Trends and Implications: The End of Hypergamy: Global Trends and Implications.” *Population and Development Review* 42, no. 4: 615–25. https://doi.org/10.1111/padr.12012.

European Statistical System. 2011. “European Census Hub.” https://ec.europa.eu/CensusHub2/.

Gabaccia, Donna, and Elizabeth Zanoni. 2012. “Transitions in Gender Ratios among International Migrants, 1820—1930.” *Social Science History* 36, no. 2: 197–221.

Grosjean, Pauline, and Rose Khattar. 2019. “It’s Raining Men! Hallelujah? The Long-Run Consequences of Male-Biased Sex Ratios.” *The Review of Economic Studies* 86. no. 2: 723–54. https://doi.org/10.1093/restud/rdy025.

Guilmoto, Christophe Z. 2012. “Skewed Sex Ratios at Birth and Future Marriage Squeeze in China and India, 2005–2100.” *Demography* 49, no. 1: 77–100. https://doi.org/10.1007/s13524-011-0083-7.

Guilmoto, Christophe Z., Fengqing Chao, and Purushottam M. Kulkarni. 2020. “On the Estimation of Female Births Missing Due to Prenatal Sex Selection.” *Population Studies* 74, no. 2: 283–89. https://doi.org/10.1080/00324728.2020.1762912.

Guilmoto, Christophe Z, Nandita Saikia, Vandana Tamrakar, and Jayanta Kumar Bora. 2018. “Excess Under-5 Female Mortality across India: A Spatial Analysis Using 2011 Census Data.” *The Lancet Global Health* 6, no. 6: e650–58. https://doi.org/10.1016/S2214-109X(18)30184-0.

Halim, Daniel, and Sergio Rivera. 2020. “Love, Marriage, and Development: 4 Observations.” World Bank Data Blog. 14 February 2020. https://blogs.worldbank.org/opendata/love-marriage-and-development-4-observations.

Hertrich, Véronique. 2017. “Trends in Age at Marriage and the Onset of Fertility Transition in Sub-Saharan Africa.” *Population and Development Review* 43, no. S1: 112–37. https://doi.org/10.1111/padr.12043.

Heuveline, Patrick, and Gail B Slap. 2002. “Adolescent and Young Adult Mortality by Cause: Age, Gender, and Country, 1955 to 1994.” *Journal of Adolescent Health* 30, no. 1: 29–34. https://doi.org/10.1016/S1054-139X(01)00329-9.

Hofmann, Erin Trouth, and Cynthia J. Buckley. 2013. “Global Changes and Gendered Responses: The Feminization of Migration From Georgia.” *International Migration Review* 47, no. 3: 508–38. https://doi.org/10.1111/imre.12035.

Jiang, Quanbao, Xiaomin Li, Shuzhuo Li, and Marcus W. Feldman. 2016. “China’s Marriage Squeeze: A Decomposition into Age and Sex Structure.” *Social Indicators Research* 127, no. 2: 793–807. https://doi.org/10.1007/s11205-015-0981-y.

Johansson, Mats. 2016. “Young Women and Rural Exodus – Swedish Experiences.” *Journal of Rural Studies* 43 (February): 291–300. https://doi.org/10.1016/j.jrurstud.2015.04.002.

Kaberis, Nikos, and Alex Koutsouris. 2013. “Under Pressure: Young Farmers In Marriage Markets – A Greek Case Study.” *Sociologia Ruralis* 53, no. 1: 74–94. https://doi.org/10.1111/soru.12001.

Kashyap, Ridhi. 2019. “Is Prenatal Sex Selection Associated with Lower Female Child Mortality?” *Population Studies* 73, no. 1: 57–78. https://doi.org/10.1080/00324728.2018.1442583.

Kesternich, Iris, Bettina Siflinger, James P. Smith, and Carina Steckenleiter. 2020. “Unbalanced Sex Ratios in Germany Caused by World War II and Their Effect on Fertility: A Life Cycle Perspective.” *European Economic Review* 130 (November): 103581. https://doi.org/10.1016/j.euroecorev.2020.103581.

Kröhnert, Steffen, and Sebastian Vollmer. 2012. “Gender-Specific Migration from Eastern to Western Germany: Where Have All the Young Women Gone?” *International Migration* 50, no. 5: 95–112. https://doi.org/10.1111/j.1468-2435.2012.00750.x.

La Mattina, Giulia. 2017. “Civil Conflict, Domestic Violence and Intra-Household Bargaining in Post-Genocide Rwanda.” *Journal of Development Economics* 124: 168–98. https://doi.org/10.1016/j.jdeveco.2016.08.001.

Lattof, Samantha R., Philomena Nyarko, Ernestina Coast, and Tiziana Leone. 2018. "Contemporary Female Migration in Ghana: Analyses of the 2000 and 2010 Censuses." *Demographic Research* 39, no. 44: 1181–1226. https://doi.org/10.4054/DemRes.2018.39.44.

Leibert, Tim. 2016. "She Leaves, He Stays? Sex-Selective Migration in Rural East Germany." *Journal of Rural Studies* 43 (February): 267–79. https://doi.org/10.1016/j.jrurstud.2015.06.004.

Magadi, Monica Akinyi. 2011. "Understanding the Gender Disparity in HIV Infection across Countries in Sub-Saharan Africa: Evidence from the Demographic and Health Surveys." *Sociology of Health & Illness* 33, no. 4: 522–39. https://doi.org/10.1111/j.1467-9566.2010.01304.x.

Marco-Gracia, Francisco J., and Johan Fourie. 2021. "The Missing Boys: Understanding the Unbalanced Sex Ratio in South Africa, 1894–2011." *Economic History of Developing Regions* 37, no. 2: 128–46. https://doi.org/10.1080/20780389.2021.1987212.

Menashe-Oren, Ashira, and Philippe Bocquier. 2021. "Urbanization Is No Longer Driven by Migration in Low- and Middle-Income Countries (1985–2015)." *Population and Development Review* 47, no. 3: 639–63. https://doi.org/10.1111/padr.12407.

Menashe-Oren, Ashira, and Guy Stecklov. 2018. "Rural/Urban Population Age and Sex Composition in Sub-Saharan Africa 1980–2015." *Population and Development Review* 44, no. 1: 7–35. https://doi.org/10.1111/padr.12122.

Miranda, Vitor, Johan Dahlberg, and Gunnar Andersson. 2018. "Parents' Preferences for Sex of Children in Sweden: Attitudes and Outcomes." *Population Research and Policy Review* 37, no. 3: 443–59. https://doi.org/10.1007/s11113-018-9462-8.

Morokvaśic, Mirjana. 1984. "Birds of Passage Are Also Women …" *International Migration Review* 18, no. 4: 886–907. https://doi.org/10.1177/019791838401800402.

Noë, Ronald. 2017. "Local Mating Markets in Humans and Non-Human Animals." *Behavioral Ecology and Sociobiology* 71, no. 10: 148. https://doi.org/10.1007/s00265-017-2376-3.

Oppenheimer, Valerie Kincade. 1988. "A Theory of Marriage Timing." *American Journal of Sociology* 94, no. 3: 563–91. https://doi.org/10.1086/229030.

Raphael, Steven. 2013. “International Migration, Sex Ratios, and the Socioeconomic Outcomes of Nonmigrant Mexican Women.” *Demography* 50, no. 3: 971–91. https://doi.org/10.1007/s13524-012-0189-6.

Rauhut, Daniel, and Helene Littke. 2016. “‘A One Way Ticket to the City, Please!’ On Young Women Leaving the Swedish Peripheral Region Västernorrland.” *Journal of Rural Studies* 43 (February): 301–10. https://doi.org/10.1016/j.jrurstud.2015.05.003.

Ravenstein, E. G. 1885. “The Laws of Migration.” *Journal of the Statistical Society of London* 48, no. 2: 167–235. https://doi.org/10.2307/2979181.

Rees, Philip, Martin Bell, Marek Kupiszewski, Dorota Kupiszewska, Philipp Ueffing, Aude Bernard, Elin Charles-Edwards, and John Stillwell. 2017. “The Impact of Internal Migration on Population Redistribution: An International Comparison.” *Population, Space and Place* 23, no. 6: e2036. https://doi.org/10.1002/psp.2036.

Reuschke, Darja, and Donald Houston. 2020. “Revisiting the Gender Gap in Commuting through Self-Employment.” *Journal of Transport Geography* 85 (May): 102712. https://doi.org/10.1016/j.jtrangeo.2020.102712.

Rodríguez-Vignoli, Jorge, and Francisco Rowe. 2018. “How Is Internal Migration Reshaping Metropolitan Populations in Latin America? A New Method and New Evidence.” *Population Studies* 72, no. 2: 253–73. https://doi.org/10.1080/00324728.2017.1416155.

Ruyssen, Ilse, and Sara Salomone. 2018. “Female Migration: A Way out of Discrimination?” *Journal of Development Economics* 130 (January): 224–41. https://doi.org/10.1016/j.jdeveco.2017.10.010.

Schewel, Kerilyn, and Sonja Fransen. 2018. “Formal Education and Migration Aspirations in Ethiopia.” *Population and Development Review* 44, no. 3: 555–87. https://doi.org/10.1111/padr.12159.

Stecklov, Guy, Calogero Carletto, Carlo Azzarri, and Benjamin Davis. 2010. “Gender and Migration from Albania.” *Demography* 47, no. 4: 935–61. https://doi.org/10.1007/BF03213734.

Stopnitzky, Yaniv. 2017. “No Toilet No Bride? Intrahousehold Bargaining in Male-Skewed Marriage Markets in India.” *Journal of Development Economics* 127 (July): 269–82. https://doi.org/10.1016/j.jdeveco.2017.04.003.

Teso, Edoardo. 2019. “The Long-Term Effect of Demographic Shocks on the Evolution of Gender Roles: Evidence from the Transatlantic Slave Trade.” *Journal of the European Economic Association* 17, no. 2: 497–534. https://doi.org/10.1093/jeea/jvy010.

Tucker, Catherine, and Jennifer Van Hook. 2013. “Surplus Chinese Men: Demographic Determinants of the Sex Ratio at Marriageable Ages in China.” *Population and Development Review* 39, no. 2: 209–29. https://doi.org/10.1111/j.1728-4457.2013.00589.x.

United Nations. 2011. “Sex Differentials in Childhood Mortality.” Department of Economic and Social Affairs, Population Division.

United Nations. 2013. “World Population Prospects.” Department of Economic and Social Affairs, Population Division. https://population.un.org/wpp/Download/Files/5_Archive/WPP2012-Excel-files.zip

United Nations. 2014a. “Urban and Rural Population by Age and Sex, 1980–2015.” Department of Economic and Social Affairs, Population Division. https://www.un.org/en/development/desa/population/publications/dataset/urban/URPAS_2014_ALL.xlsx.

United Nations. 2014b. “World Urbanization Prospects: The 2014 Revision. Sources for Urban Agglomerations and Capital Cities.” Department of Economic and Social Affairs, Population Division. https://population.un.org/wup/Download/Files/Archive/WUP2014-Excel-Files.zip

Wei, Shang-Jin, and Xiaobo Zhang. 2011. “The Competitive Saving Motive: Evidence from Rising Sex Ratios and Savings Rates in China.” *Journal of Political Economy* 119, no. 3: 511–64. https://doi.org/10.1086/660887.

Weinreb, Alexander, Guy Stecklov, and Aslihan Arslan. 2020. “Effects of Changes in Rainfall and Temperature on Age- and Sex-Specific Patterns of Rural-Urban Migration in Sub-Saharan Africa.” *Population and Environment* 42, no. 2: 219–54. https://doi.org/10.1007/s11111-020-00359-1.

Wessel, Terje, and Lena Magnusson Turner. 2021. “The Migration Pathway to Economic Mobility: Does Gender Matter?” *Population, Space and Place* 27, no. 4: e2419. https://doi.org/10.1002/psp.2419.

Wiest, Karin, Tim Leibert, Mats Johansson, Daniel Rauhut, Jouni Ponnikas, Judit Timár, Gabór Velkey, and Ildikó Győrffy. 2012. *SEMIGRA - Selective Migration and Unbalanced Sex Ratio in Rural Regions: Targeted Analysis 2013/15; Final Report; Main Report and Scientific Report. - [s.l.], ESPON. 118 S. Webseite*.

Xiong, Wanru. 2022. 'Dynamics between Regional Sex Ratios at Birth and Sex Ratios at Prime Marriageable Ages in China'. *Population and Development Review* n/a (n/a). https://doi.org/10.1111/padr.12476.

Zarulli, Virginia, Ilya Kashnitsky, and James W. Vaupel. 2021. "Death Rates at Specific Life Stages Mold the Sex Gap in Life Expectancy." *Proceedings of the National Academy of Sciences* 118, no. 20. https://doi.org/10.1073/pnas.2010588118.

Zhou, Xudong, and Therese Hesketh. 2017. "High Sex Ratios in Rural China: Declining Well-Being with Age in Never-Married Men." *Philosophical Transactions of the Royal Society B: Biological Sciences* 372, no. 1729: 20160324. https://doi.org/10.1098/rstb.2016.0324.

Zlotnik, Hania. 2003. "The Global Dimensions of Female Migration." *Migration Information Source*. https://www.migrationpolicy.org/article/global-dimensions-female-migration.

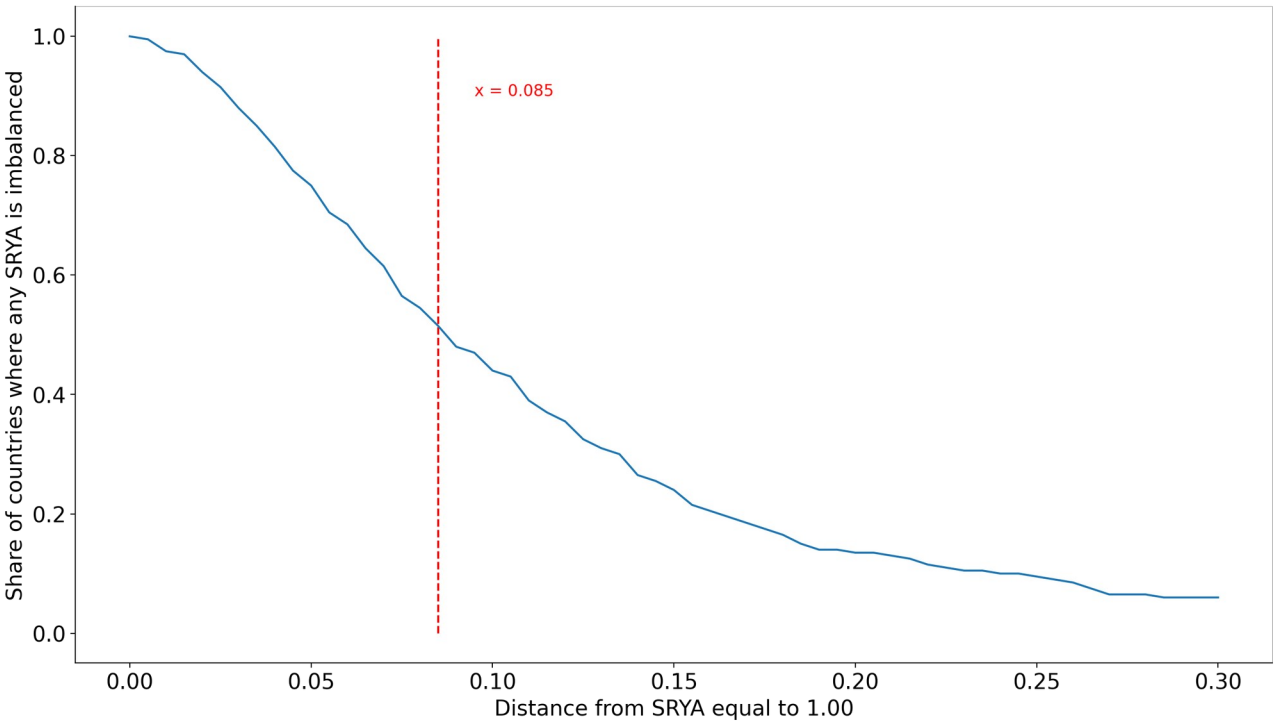
Supplemental Material

Appendix 1. (attached as an Excel file)

List of tables:

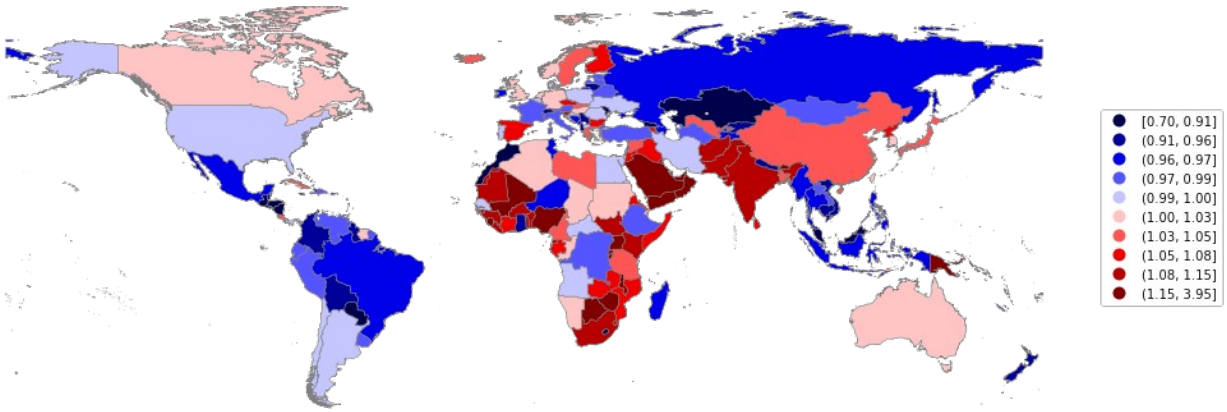
Appendix 2.

Figure A1. Share of countries with imbalanced urban or rural SRYA in 2010 for different thresholds.



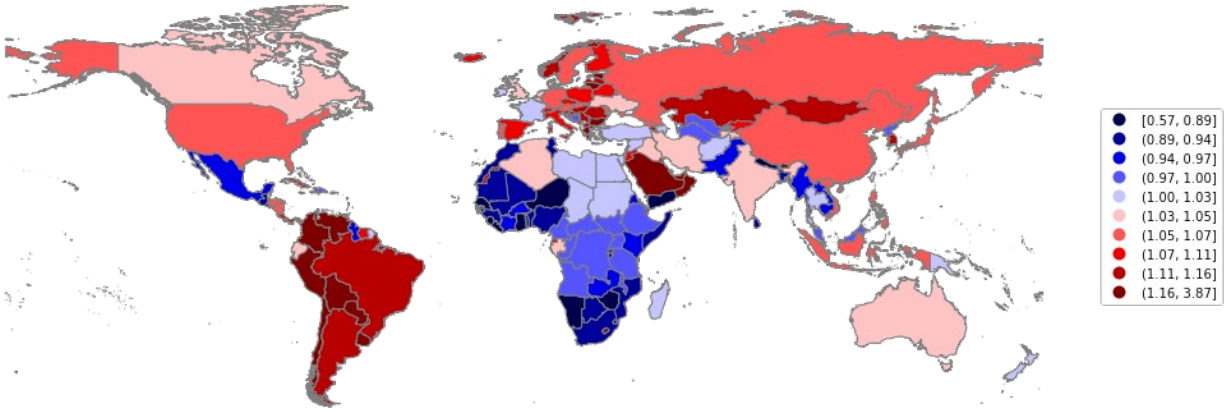
Data source: URPAS, own calculations. The threshold for excessively low sex ratios is calculated as 1 / (1 + x).

Figure A2. Map of the world, urban SRYA in 2010.



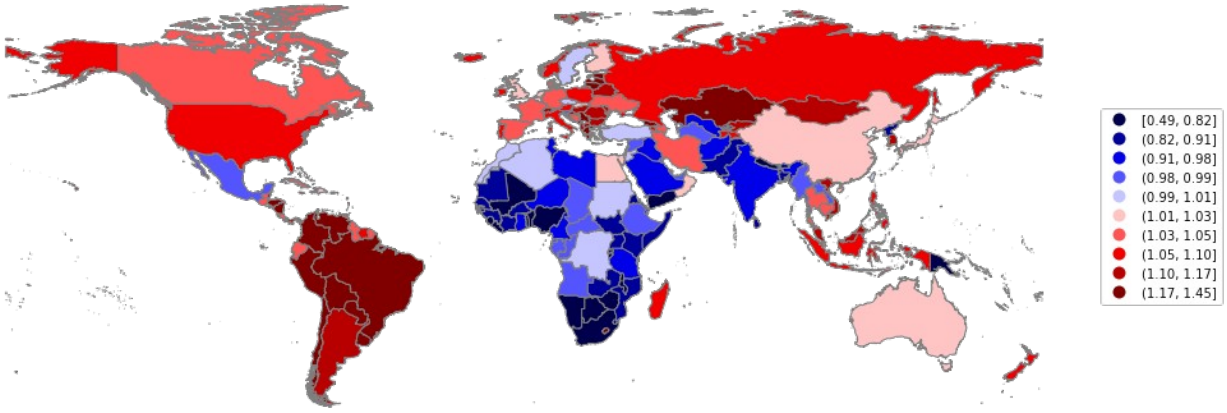
Data source: URPAS, own calculations.

Figure A3. Map of the world, rural SRYA in 2010.



Data source: URPAS, own calculations.

Figure A4. Map of the world, ratio of rural SRYA to urban SRYA in 2010.



Data source: URPAS, own calculations.

Figure A5a. Sex ratios in NUTS3 regions in 31 European countries, age groups 0-9 and 25-34, 2011.

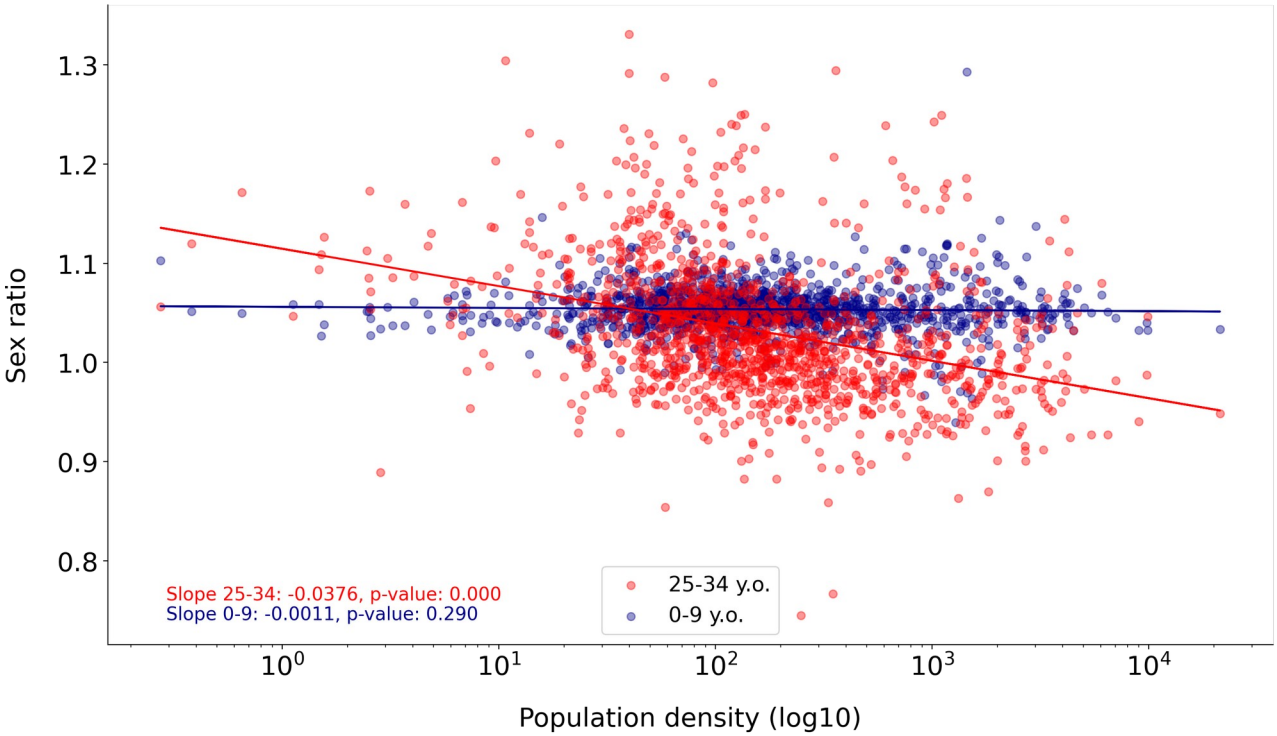


Figure A5b. Sex ratios in NUTS3 regions in Western and Southern European countries, without Germany, age groups 0-9 and 25-34, 2011.

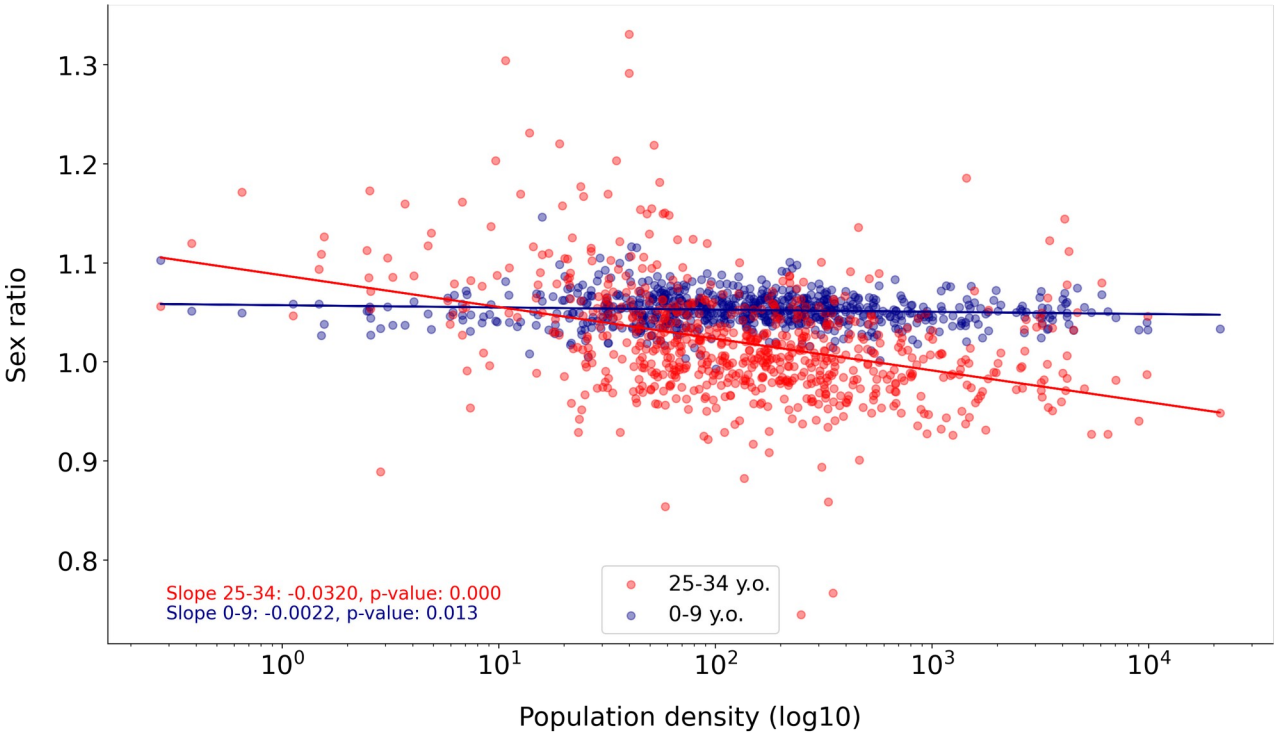
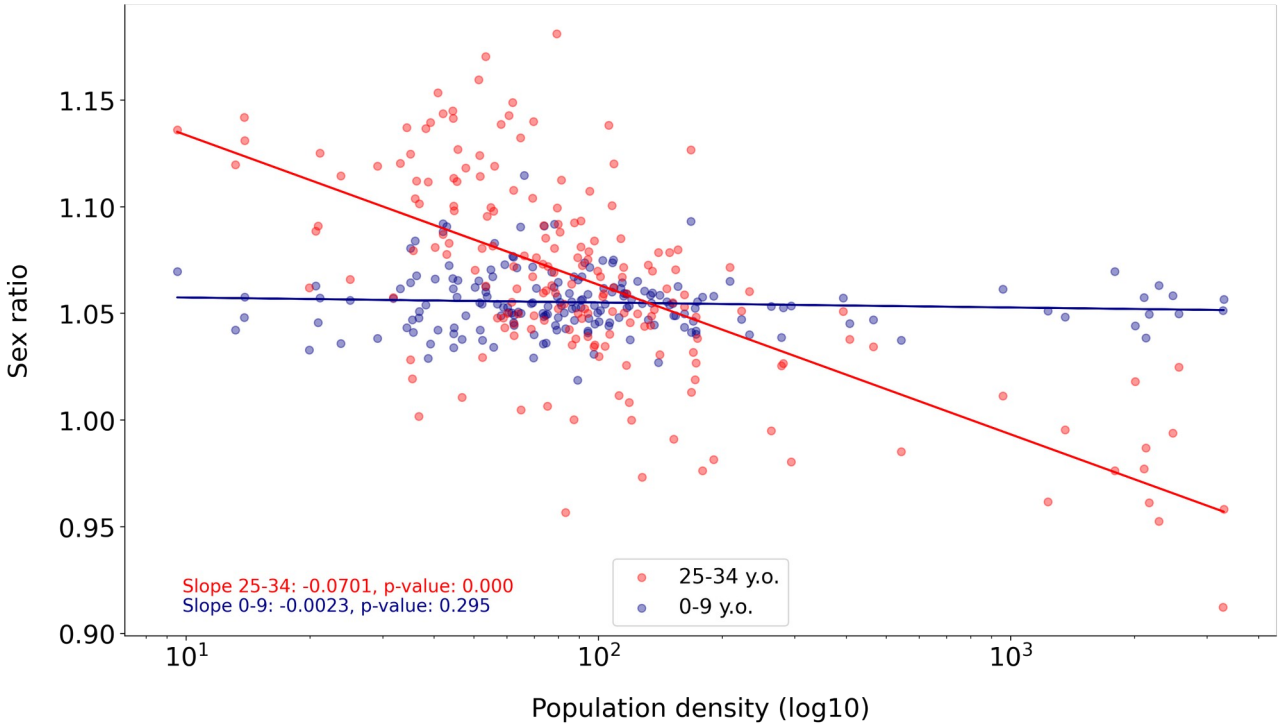


Figure A5c. Sex ratios in NUTS3 regions in Central and Eastern European countries, age groups 0-9 and 25-34, 2011.



Data source: EU Census Hub. Blue colour shows the age group 0-9, red colour shows the age group 25-34. Unlike in FIGURE 6, each dot represents one region. Slopes come from OLS regressions of sex ratio on population density. Population density is logarithm of inhabitants per square kilometre. Data for Finland are recovered from the National Statistical Service of Finland for 31.12.2010. The countries include 26 EU member states (without Romania), Iceland, Liechtenstein, Norway, Switzerland, and United Kingdom. The division into Western, Southern, and Central and Eastern Europe is the same as in Figures A6 and A8.

Figure A6a. Sex ratios in NUTS3 regions in Western and Southern European countries, age groups 0-9 and 25-34, 2011.

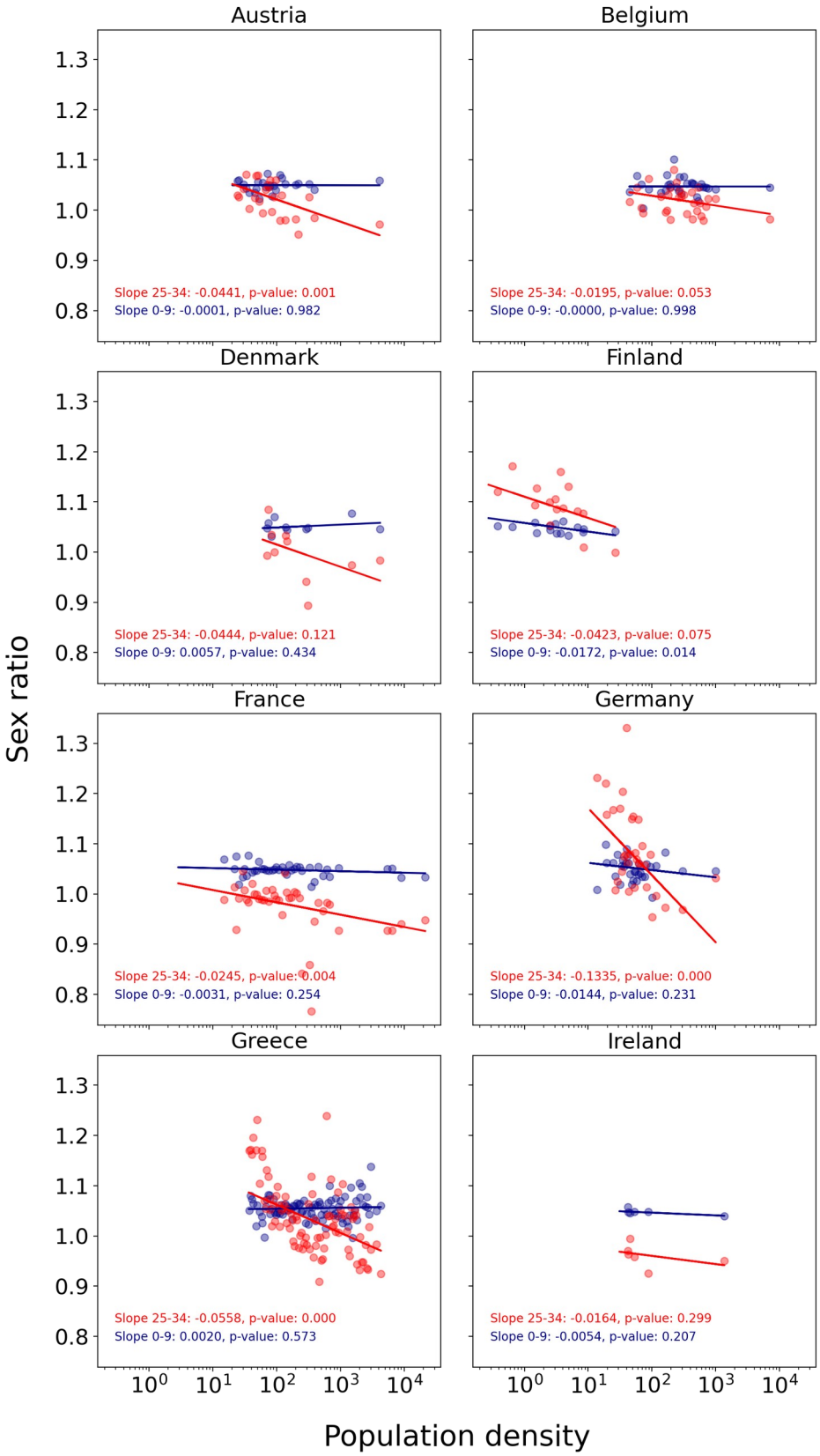
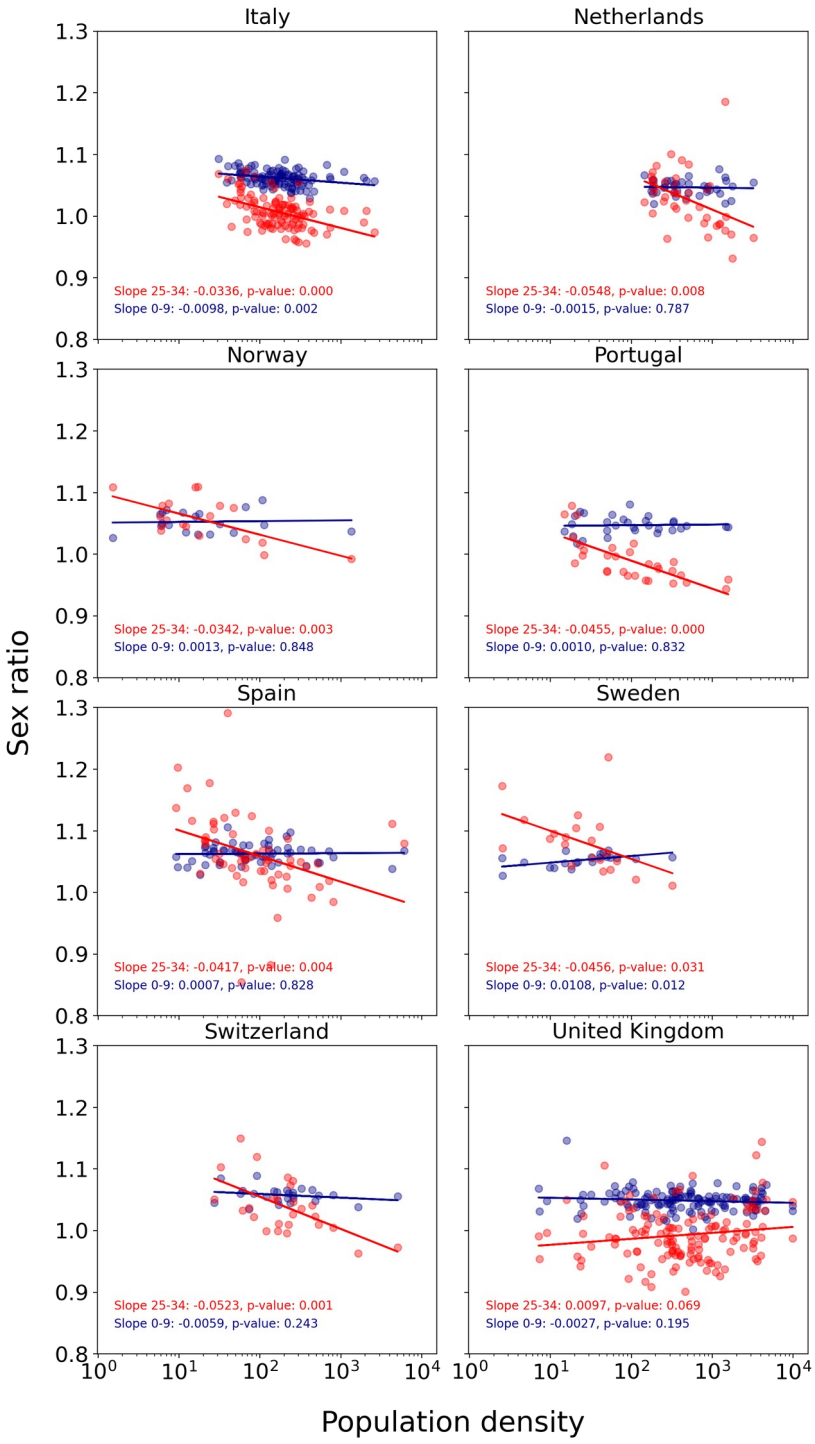
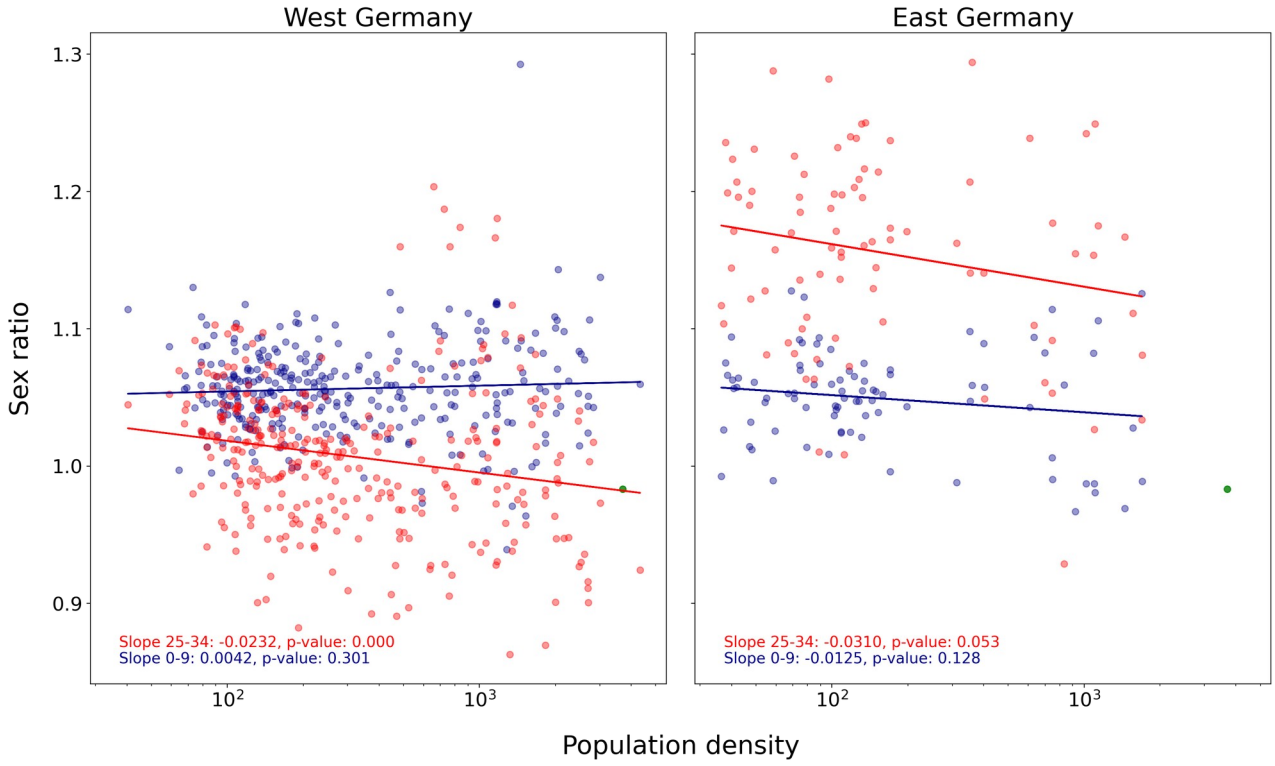


Figure A6b. Sex ratios in NUTS3 regions in Western and Southern European countries, age groups 0-9 and 25-34, 2011.



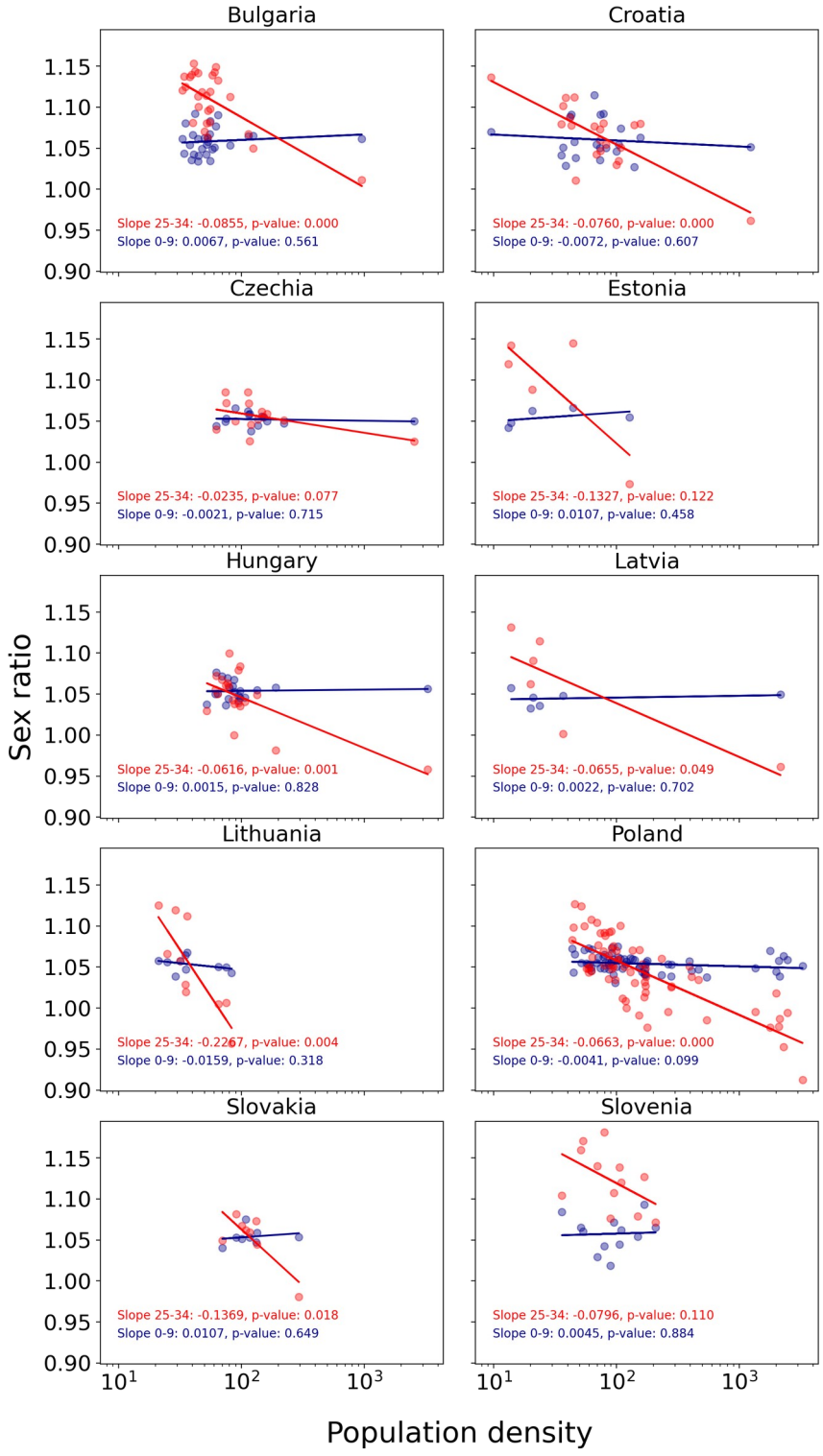
Data source: EU Census Hub. Blue colour shows the age group 0-9, red colour shows the age group 25-34. NUTS3 regions are divided into 200 bins. Slopes come from OLS regressions of sex ratio on population density. Population density is logarithm of inhabitants per square kilometre. Data for Finland are recovered from the National Statistical Service of Finland for 31.12.2010. Cyprus, Iceland, Liechtenstein, Luxembourg and Malta are not displayed because they are divided in only 1 or 2 NUTS3 regions.

Figure A7. Sex ratios in NUTS3 regions in West and East Germany, age groups 0-9 and 25-34, 2011.



Data source: EU Census Hub. Blue colour shows the age group 0-9, red colour shows the age group 25-34. NUTS3 regions are divided into 200 bins. Slopes come from OLS regressions of sex ratio on population density. Population density is logarithm of inhabitants per square kilometre. The green dots on both graphs represent Berlin (age group 25-34), which was divided between East and West Germany. It is not included in the regressions.

Figure A8. Sex ratios in NUTS3 regions in Central and Eastern European countries, age groups 0-9 and 25-34, 2011.



Data source: EU Census Hub. Blue colour shows the age group 0-9, red colour shows the age group 25-34. NUTS3 regions are divided into 200 bins. Slopes come from OLS regressions of sex ratio on population density. Population density is logarithm of inhabitants per square kilometre.

Chapter 2

Women's Increasing Relative Social Status and Men's Vote for Trump

Abstract

'Angry White Men' have been long seen as a politically radicalizing group because of their declining relative social status. Yet, there is little evidence for the impact of real changes in women's socio-economic status on gender gaps in voting behavior. In this chapter, I investigate the association between the local decline in men's real social status (relative to women) and their vote for Donald Trump in 2016. Following the social status threat hypothesis, I expect men to vote more often for Trump where their relative status declined the most. This should be particularly true for white men without college education. I use county-level data on gender gaps in median income, labor force participation, and college education, as well as share of women among managers to operationalize changes in women's and men's relative social status. I combine them with county-level electoral data and a large-scale electoral survey. I do not find any evidence supporting the hypothesis that that men are more likely to vote for Trump in places where their relative status declined the most.

1. Introduction

According to Donald Trump, 'it is a very scary time for young men in America.' 'Angry White Men' have been seen as a politically radicalizing group even before Trump appeared on the political scene (Ford and Goodwin, 2010; Kimmel, 2017). However, while many studies have been dedicated to the backlash of white and working class voters objectively affected by globalization, immigration, and local changes in racial composition (e.g., Colantone and Stanig, 2019; Maggio, 2021; Mutz, 2018), the political reaction of men to changes in the real relative social status of women and men remains mostly unknown.

In order to explain men's support for Donald Trump, I adopt the social status threat hypothesis. White men without college education are particularly likely to feel that their status is threatened by the socio-economic and cultural developments, and to support radical right politicians (Gidron and Hall, 2017). Yet, it has not been empirically shown that the objectively declining status of men relative to women is associated with men's voting behavior.

The existing studies on gender gaps in political behavior focus on the subjective social status decline (Gidron and Hall, 2017) or national levels of (instead of changes in) gender equality (Donovan, 2023; Parth, 2022). Unlike the existing literature, I investigate the association between the vote for Trump in 2016 and the local decline in men's socio-economic advantage. The 2016 election is of particular interest because Trump shifted the Republican Party's focus from the economic to the cultural dimension of political competition (see, e.g., Mutz, 2018). He also competed against a woman, Hillary Clinton. If the social status threat hypothesis can explain the gender gap in the support for radical right, it should be particularly true in this case.

I take inspiration from studies on the local effects of immigration (Dancygier et al., 2022; Dinas et al., 2019) and changes in ethnic composition (Maggio, 2021) on voting behavior. I use county-level aggregates based on the US Census and American Community Survey (Ruggles et al., 2023) to measure the local change in the status of women rela-

tive to men. I operationalize women's relative social status (WRSS) as a change in the gender gaps measured by four indicators: (i) ratio of male to female median income, (ii) difference between the share of men and women with a college degree, (iii) labor force participation, and (iv) share of men among managers.

First, I use electoral data (MIT Election Data And Science Lab, 2018) to show the correlation between the change in WRSS and higher increase in support for Trump. Then, I use a large-sample political survey, Cooperative Election Study (Kuriwaki, 2023), to study if male respondents living in regions where WRSS had increased the most were more likely to support Trump in 2016. As I am most interested in the "Trump effect," rather than a simple correlation between changing WRSS and overall support for the Republicans, I control for the vote for Mitt Romney in 2012 both at the individual and county level. I expect the less educated white men to adopt more anti-feminist attitudes and vote more often for Trump where their relative status declined the most. To test this hypothesis, I repeat the same analysis, but using only the subsample of white non-college educated women and men.

I contribute to the literature by testing whether local changes in the social status of women relative to men (change in WRSS) affect men's vote. In this way, this chapter among the first to study the political consequences of one of the most important social changes of the recent decades. By focusing on "the angry white men's" status vis-à-vis women in their local environment, I develop a new perspective on the social status threat hypothesis.

2. Theoretical background

Already before the election of Donald Trump, Kimmel (2017) drew attention to "angry white men" who felt "aggrieved entitlement." In his understanding, in reaction to the diminishing inequalities between genders and races, some white men were increasingly angry. This feeling translated into domestic and public violence (Mills et al., 2020), as well as men's involvement in radical groups. Similarly, Ford and Goodwin (2010)

explained white men's support for the British National Party with their anger.

The supposed source of men's anger was loss of relative status. The relative rather than absolute economic decline of a group may be more relevant for explaining support for right-wing populist parties (Kurer, 2020; Weisstanner, 2023; Ciccolini, 2023). Compared with their parents, and potential expectations formed in childhood, women enjoyed higher socio-economic gains than men. The perceived loss of status is more pronounced among men and it has a stronger effect on voting for populist radical right than among women (Kurer and Staalduinen, 2022).

According to social identity theory, when a group's status declines or is threatened, the members of that group are more likely to discriminate against other groups and their members (Tajfel and Turner, 2004). In an influential study, Mutz (2018) argues that threats to the status of the white working class –immigration and international trade– were key in the election of Donald Trump. Maggio (2021) finds that it is also the white working class that is the most likely to react to changes in the racial composition of the local population with voting for Donald Trump.

The political reaction to the change in relative social status can be also studied from the perspective of relative deprivation, understood as "the judgment that one is worse off compared to some standard accompanied by feelings of anger and resentment" (Smith et al., 2012). Runciman (1966) distinguishes between egoistic and fraternal relative deprivation. In the case of men, the egoistic relative deprivation refers to a situation when individual men would feel unfairly deprived in comparison to other people. Such deprivation could be related to their gender (e.g., if they personally experienced gender-based discrimination) or not (if they cannot achieve the social status they feel entitled to for any reason they consider unfair). In turn, fraternal relative deprivation would occur if men believed that men as a group are unfairly deprived. Fraternal relative deprivation in particular may be related to protest behavior, such as voting for populist parties, but the empirical results do not uniformly confirm this thesis (Smith and Ortiz, 2002; Schmitt et al., 2010). Indeed, Monteith and Hildebrand (2020) show that "male Trump supporters perceived greater gender discrimination toward men than

male Clinton supporters."

The main research question of this paper is not whether people's (or women's and men's separately) socio-economic status or status change as such makes them vote for a radical right populist candidate (as in the case of Gidron and Hall, 2017). This question has been studied in various ways. Descriptively, white working class was the electoral basis of Trump Morgan and Lee (2018). For instance, Mutz (2018) and Morgan (2018) contrast the subjective status threat (measured by "support for international trade, support for immigration, and whether the US relationship with China is a threat or an opportunity") with the individual economic conditions (changes in and subjective perceptions of family income and employment status). In an ethnographic and interview-based study, Koenig (2022) argues that what matters is not only perceived or real social status loss, but also the perceived injustice and Manza and Crowley (2017) find that regional economic distress did not contribute to Trump's success in primary elections. However, local effects of international trade increased Trump's share of votes Autor et al. (2020) and economic insecurity generally increase support for populists (see literature review by Scheiring et al. (2024)).

In contrast, I am interested in the consequences of changing relations between women and men. In the Runciman's (1966) framework, one may understand the diminishing socio-economic advantage of men over women as relative deprivation. The threatened masculinity theory provides an explanation for why the comparison between women and men may be particularly important for voting behavior. Traditional masculinity relies on the economic advantage of men over women. The increasing social status of women raises new obstacles for men to "do their gender" understood as "the activity of managing situated conduct in light of normative conceptions of attitudes and activities appropriate for one's sex category" (West and Zimmerman, 1987). Men who do not achieve the standards of traditional masculinity by earning more than their wives may be inclined to reassert their masculinity in other ways (Brines 1994), one of which may be the vote for a candidate or party who embodies those masculinity standards, like Donald Trump (DiMuccio and Knowles, 2020; Carian and Sobotka, 2018; Smirnova,

2018). At a high level of aggregation, the frequency of Google searches related to men's anxieties (e.g. in sexual life), correlates with votes for Trump in 2016 (DiMuccio and Knowles, 2021). In general, men whose masculinity is threatened, i.e., their ability to fulfil a traditional men's role is questioned, are less likely to support gender equality (Kosakowska-Berezecka et al., 2016).

As Gidengil and Stolle (2021) write, "gender identity conditions the extent to which white men experience societal transformations as threats to their masculinity and respond by acting to preserve their dominant status. Because femininity is less susceptible to threat, gender identity will have a smaller impact on women." They show that women and men who identify as most feminine and masculine, respectively, are most likely to support Trump. The effect of gender identity is substantially stronger among men. This is because men can reassert their masculinity by rejecting femininity and behavior considered as female (Brines, 1994; Vandello and Bosson, 2013) and Donald Trump gave an opportunity for such an anti-feminine behavior.

Economic outcomes are key to the achievement of masculinity. Traditional masculinity involves at least the ability to provide for family if not an economic advantage of men over women. While Inglehart and Norris (2016)[p. 3] ascribe men's electoral reaction to a 'sense' of resentment caused by the "displacement of familiar traditional norms," Gidengil and Stolle (2021) make it clear that personal experiences and real conditions may be crucial: "There are good reasons to expect that many white men in America have been experiencing masculinity threat, whether as a result of job loss and economic insecurity or changes in cultural values and practices." Men are particularly likely to experience masculinity threat if they are being outperformed by women (Dahl et al., 2015). Carian and Sobotka (2018) use vignettes with data on expected changes in female and male unemployment to elicit masculinity threat in laboratory conditions. They find that men whose masculinity is threatened are more likely to desire a more masculine (even if not necessarily male) president, such as Trump. Similarly, Off et al. (2022) show that European men are more likely to perceive women's rights as a threat to men if they reside in areas with higher unemployment.

So far, the literature has focused on the subjective status of men (in general or relative to women). Most importantly, Gidron and Hall (2017) show that working class men's subjective status declined relative to women. They find an association between men's relative status or decline in status and the gender gap in support for radical right parties. Green and Shorrocks (2023) argue that working class men's status decline leads them to support Brexit, *inter alia*, due to their perception of discrimination against men. There is a similar relationship between hostile or modern sexism and vote for Trump (Schaffner et al., 2018; Ratliff et al., 2019; Schaffner, 2022). The association between sexism and vote for Trump is exclusive to or particularly strong among white voters (Frasure-Yokley, 2018; Hickel and Deckman, 2022), although not necessarily stronger among men than among women (Bracic et al., 2019; Hanley, 2021; Setzler and Yanus, 2018). Importantly, shaped voting behavior in 2016, but not necessarily in earlier US presidential elections (Valentino et al., 2018). The vote for Brexit was also associated with the 'traditional nostalgia,' defined, among others, by the statement that 'more women working' makes life worse (Richards et al., 2020).

According to Pease (2020), although "white men's experiences are an outcome of neoliberalism and economic restructuring, they often face what they feel is a crisis in their masculinity." Thus, they perceive the social status threat and are more susceptible to populist rhetoric. However, subjective social status may be less relevant than widely believed (Richards et al., 2021). There are only a few studies relating the objective changes in the relative social status of women and men with voting behavior. Thus, in contrast with the white people's anger, the objective grounds of men's anger have been hardly studied. Donovan (2023) finds a smaller gender gap in support for radical right parties in Western European countries characterized by higher levels of gender inequality. He explains it by men feeling less threatened. Consistently, the far right gender gap is larger in those European countries where more women sit in parliaments and on boards (Parth, 2022). Barros and Santos Silva (2019) find that labor market shocks affecting men more than women increase support for Bolsonaro, while the support for him decreases when women are hit harder.

In the literature on other predictors of political behavior and attitudes, studies on subjective perceptions usually appear in parallel to the research on objective changes that affect voters. For instance, while Mutz (2018) and Morgan and Lee (2019) study migration attitudes, Maggio (2021) calculates the changes in local ethnic composition. While Gidron and Hall (2017) investigate subjective social status, Morgan and Lee (2018) are interested in the share of white working class population. While Mutz (2018) and Morgan (2018) are interested in attitudes toward international trade, Autor et al. (2020) show the impact of objective local trade exposure on Trump support. Similarly, the influence of changing gender relations can be measured not only by modern sexism (including questions on whether women's claims for equality are still justified) or perceptions and experience of discrimination, but also by objective measures, which I hereby propose.

Similarly to studies on migration (Maggio, 2021) or economic conditions (Autor et al., 2020; Off et al., 2022), I assume that the objective changes in local relative social status may have impact on individual opportunities and experiences or at least make the considerations on gender inequalities more salient. Rather than on individual voters' features -like masculinity or gender attitudes- I focus on the regional factors. The larger the local social change, the larger the masculinity threat and the more likely men should be to vote for Trump.

Basing on this literature, I formulate two hypotheses:

H1: Women's local improvement in status relative to men should be associated with men being more likely than women to vote for Donald Trump.

H2: In particular, the association between women's local improvement in relative status and vote for Donald Trump should be stronger among the least educated men than among other men.

3. Data and methods

In this chapter, I study the relationship between the behavior of individual voters and the changes in their local (county-level) context. I use county-level electoral data from the MIT Election Lab (MIT Election Data And Science Lab, 2018). The data on individual voters' behavior come from a large-scale survey, the Cooperative Election Study (CES) with over 40 thousand respondents in every electoral year (Kuriwaki, 2023). Although the question about the vote in 2016 was asked also in the following years, I restrict my analysis to those who replied in 2016, after the election, because they were also asked about their vote in 2012. For the same reason, I exclude voters younger than 22 who did not have the right to vote in 2012.

The data on 3117 counties come from the IPUMS database and are based on the US Census from 2000, and on the American Community Survey (ACS) covering the years 2011-2015 (Ruggles et al., 2023). I match individuals with the counties based on the county code included in the CES data. I exclude Alaska because the electoral data in this state are published only for electoral districts that do not correspond to counties.

Income, education, and occupation are the most commonly used indicators of social status. They also coincide with some of the gender gaps most commonly discussed in politics and scholarly literature. However, for instance, the Gender Inequality Index created by the United Nations, includes maternal health, gender gap in the labor force participation rates, and share of women in the parliament. Thus, I include the gender gap in the labor force participation rates. Maternal health is a measure of life conditions rather than of social status. Thus, I do not include it as a dependent variable. Although the increasing share of women in political positions is an important measure of women's relative social status change, I cannot use it for this research. There are no data on women's descriptive political representation in the US local politics (Holman, 2017; Kellogg et al., 2019).

Taking this into account, I operationalize the social status of men relative to women in four ways, as:

a) gender gap in the median personal income,

b) gender gap in the share of population aged 25 and more with a college degree,

c) gender gap in the labor force participation of population aged 16 and more,

d) share of men among managers.

The gender gap in income (a) is calculated as a ratio of men's to women's income. The gender gaps in education (b) and labor force participation (c) are calculated as the difference in percentage points between the levels for men and women. Thus, positive or larger numbers imply an advantage of men. A similar operationalization has been already proposed for a cross-sectional analysis by Mills et al. (2020). The change in women's empowerment is the difference between the level in 2000 and the level in 2015. So, a positive change shows improving relative outcomes for women, i.e., declining status of men. A positive coefficient in regressions would mean that increasing women's status is associated with higher support for Donald Trump.

The selected 15-year time span is generally consistent with studies on political effects of demographic composition change. Most importantly, using the same data sets on local contexts (Census and ACS), Newman et al. (2018), Reny et al. (2019), Maggio (2021) compare the 2000 Census with the 2010-2014 ACS. I chose the timespan 2011-2015 to include the last year before the election of 2016.

In the first part of the analysis, I present descriptive statistics of the dependent, independent and control variables. I show how much the relative social status of women changed and how it correlates with county-level support for Donald Trump. In the second part, I test the main hypothesis with (random intercept) multi-level models. In accordance with the social status threat hypothesis, I expect a positive interaction between respondent's male gender and living in a county that experienced a larger increase in women's relative social status.

The core of my analysis are multi-level logit regressions, following the formula:

$$V_i = \alpha + \beta_1 * s_i + \beta_2 * WRSS_p + \beta_3 * (s_i * WRSS_p) + \gamma * X_i + \delta * Z_p + e_i$$

where V_i is a binary variable taking the value of 1 for individuals voting for Trump in 2016. This variable is based on the question in CES: "In the election for U.S. President, who did you vote for?". $WRSS_p$ is the change in women's relative social status in the region *p*. First, I conduct the analysis for each of the four measures separately. Then, in a separate set of regressions, I include all four measures jointly. X_i and Z_p are sets of control variables at the individual and county level, respectively. They are similar to previous studies and, as shown in Table A1 and discussed later correlate with both the dependent and independent variables. The county-level control variables include: initial gender equality level (measured by the same indicator as the main independent variable in a given model), logarithm of median income, share of population with at least an associate's degree, share of people aged 16 or more who are in the labor force, logarithm of the population size, share of population born outside of the US, share of Black population, share of Hispanic population, share of working people employed in agriculture, share of working people employed in manufacturing, share of men in population aged 25-34 (as a measure of sex-selective migration), and unemployment of women and men at the beginning and end of the period. I also add a fixed effect (dummy) for states. The individual-level controls include: employment status, marital status, race, age centered at 40, age squared and education level. For the multi-level regressions, I use the *melogit* function in Stata. The tables present exponentiated coefficients, i.e., odds ratios.

The key coefficient of interest is β_3, showing the interaction effect of being a man (s_i equal to 1) and change in women's empowerment. In accordance with the social status threat hypothesis, the coefficient should be positive, i.e., men living in places where women improve their relative status the most should be more likely to vote for Trump than women.

As this study focuses on Donald Trump's increased support, rather than the general support for Republican candidates, I also control for whether the individual voted for Mitt Romney in 2012 and support for Romney at the county level. In this way, I show if Donald Trump attracted new voters, and men in particular, in the areas where women's

relative social status increased the most. As an alternative approach, I change the dependent variable to whether the respondent switched from non-voting or voting for another candidate to Donald Trump.

In the third part, I focus on the white non-Hispanic less educated men. Based on the existing literature, I expect white men without college education to be the group most affected by the social status threat. Thus, in the next step, I focus on this intersectionally limited group of voters who lose social status relative to non-college educated women (Gidron and Hall, 2017) and face more severe consequences related to globalization (Autor et al., 2019). I run multi-level regressions, as described above, but restrict the sample to white non-Hispanic women and men without college education. Finally, I check whether the results persisted until 2020.

4. Results

4.1. Support for Trump at the county level

The changes in WRSS were non-neglible in the period under study (A7). The average male-to-female income ratio at the county level decreased from 1.70 in 2000 to 1.54 in 2015. While men and women (aged 25 and more) had the same college education rates in 2000, a "reversed gender gap" of 3.9 percentage points emerged due to notably higher educational attainment of women in younger generations. The average gender gap in labor force participation rate decreased from 12.7 to 9.3 percentage points, and the share of men among managers decreased from 67.9% to 64.1%. The Tables A2 and A3 show summary statistics for counties in 2000 and 2015, and individuals in 2016.

The concentration of support for the Republicans in the center of the country (Figure A5) and the increase in support for Trump compared with Romney in the North-East (Figure A6) are well known. Importantly, the change in WRSS is not as geographically concentrated (Figures A1-A4).

The correlations between various measures of WRSS are positive and statistically sig-

nificant (Table A1). This is reassuring and allows to believe that they really capture an observable social change. However, the correlations are not strong as the coefficients vary from 0.050 (between the college education gender gap and share of men among managers) to 0.225 (between the labor force participation gender gap and share of men among mangers).

Women's status improved more where their initial relative status was the lowest. The change in WRSS was larger in places with larger initial gender gaps for all the four measures (Figure A8, Table A1). As already said, in further regressions, I control for the initial level of gender gaps. In almost all cases, the changes in WRSS are only weakly correlated with the initial levels of college education, median income, labor force participation, population structure or employment structure or unemployment. The exceptions suggest that WRSS increased least in the agricultural areas and most in the areas with high levels of employment in manufacturing. WRSS measured by gaps in median income and college education increased the most in most populated counties. The median income gender gap decreased the most in places with high levels of unemployment in 2000. I control for all those variables.

I run an OLS regression to show the correlation between the change in WRSS and Trump's electoral gains at the county level (Table 1). It is statistically significant at the 5% level for WRSS measured by college education, labor force participation, and share of women among managers, but not for the median income gender gap. Yet, the effects are rather small. A decrease in the gender gap in college education by 1 (100 percentage points) is associated with an increase in the share of votes for Trump by 3.5 percentage points (controlling for Romney's support in 2012). However, the mean gender gap in college education decreased only by 0.037 (3.7 percentage points, see Table A2). Thus, a mean change in the college education gender gap is associated with Trump's gains of around 0.13 percentage point. The estimates for mean changes in labor force participation and share of women among managers and labor force participation, amount to 0.07 and 0.05, respectively. In the following subsection, I focus on the question whether the association between the change in WRSS and support for

Trump at the county-level is gendered.

Table 1. Support for Donald Trump in 2016 at the county level and women's relative social status (OLS).

	(1) Median income	(2) College education	(3) Labor force participation	(4) Managers
WRSS change	0.000976	0.0353**	0.0219**	0.0120**
	(0.00224)	(0.0140)	(0.0107)	(0.00568)
Observations	3107	3108	3108	3107
County controls	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

4.2. Men's support for Trump

Table 2 shows the main results, i.e., the multi-level logit regressions of vote on Trump in 2016 on the change in WRSS, with interaction of WRSS and gender. All individual-level and county-level controls are included. In Tables A4-A7, I present various specifications of the model: without covariates, only individual-level covariates, and only county-level covariates. All models include individual and county-level support for Mitt Romney in 2012.

Men are more likely to vote for Trump, even though I control for the (declared) vote in 2012. The odds of voting for Trump are between 22.3% and 39.4% higher for men than for women, depending on the model (Table 2). The evidence for the association between the change in WRSS and individual support for Trump in 2016 is less consistent than at the county level. It is statistically significant at the 5% level for the changes in median income and share of managers, and at the 10% level for the change in labor force participation, but not for the change in college education (Table 2).

Most importantly, I do not find any evidence for the hypothesized gendered association between women's increasing relative social status on support for Trump for women and men. The coefficients are not statistically significant. They have also opposite sign than expected. The interaction term between male gender and change in WRSS is smaller than 1 (Table 2).

To corroborate these findings, I repeat the same regressions with an alternative de-

pendent variable. Instead of predicting the vote for Trump, while controlling for the for Romney, I treat swinging to Trump (from any other choice) as the binary dependent variable. The results association between the change in WRSS and vote is no longer statistically significant. Similarly, the interaction with gender is not significant (Table A9).

In Table A8, I show the same regression with all measurements of the WRSS change (and initial levels of gender gaps) included. Again, the interactions between WRSS change and gender are not statistically significant. When all control variables are included, only the coefficient at change in median income gender gap is statistically significant at the 10% level.

Table 2. Support for Donald Trump in 2016 and women's relative social status.

	(1) Median income	(2) College education	(3) Labor force participation	(4) Managers
Vote for Trump 2016				
Male=1	1.394***	1.223**	1.384***	1.351***
	(0.0719)	(0.110)	(0.0713)	(0.0559)
WRSS change	1.598**	0.218	7.641*	3.517**
	(0.355)	(0.324)	(8.692)	(2.123)
Male=1 × WRSS change	0.664	5.275	0.151	0.366
	(0.172)	(10.63)	(0.205)	(0.295)
Observations	40207	40207	40207	40207
County controls	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

In the next step, I repeat the regressions for a subsample of white non-Hispanic voters without college education. The remaining number of observations (7356) is still larger than in typical nationally representative surveys. Also in this subsample, men are more likely to vote for Trump. However, there is no statistically significant relationship between the change in WRSS and support for Trump. Thus, I do not find any evidence that where women gain social status relative to men, white non-Hispanic men without college education are more likely to vote for Trump than similar women.

Table A10 shows estimations of the same model as Table 2, but with voting for Donald Trump in 2020 as the dependent variable. In this case, I cannot control for the vote for Mitt Romney in 2012. The respondents were asked only about their choice in 2016.

Table 3. Support for Donald Trump in 2016 among white voters without college education and women's relative social status.

	(1) Median income	(2) College education	(3) Labor force participation	(4) Managers
Vote for Trump 2016				
Male=1	1.608***	1.136	1.307**	1.239**
	(0.191)	(0.204)	(0.154)	(0.108)
WRSS change	1.716	0.0221	8.070	1.309
	(0.688)	(0.0589)	(15.47)	(1.322)
Male=1 × WRSS change	0.354*	58.40	2.150	10.69
	(0.197)	(237.8)	(6.142)	(16.82)
Observations	7356	7356	7356	7356
County controls	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

I control for the individual and county-level support for Trump in 2016. Even controlling for the choices in 2016, men were more likely to vote for Trump than women. However, there is no statistically significant relationship between the change in WRSS (from 2000 to 2015) and probability of switching to (or away from) Trump between 2016 and 2020. In most models, the interaction term is not statistically significant. Only the change in median income gender gap is associated with lower men's likelihood of voting for Trump. Again, it is contrary to my prediction. If anything, men are less likely to vote for Trump where women's relative income increases. Thus, I can conclude that the impact of the increasing WRSS materialized in 2016, and, most likely, did not play additional role in 2020. Again, there is no evidence of male backlash against women's increasing social status.

5. Conclusions

In this chapter, I ask whether men were more likely to vote for Donald Trump in 2016 if they lived in places where women's relative social status (WRSS) increased the most. To answer this question, I estimate multi-level models with an interaction between the county-level change in WRSS and gender. I operationalize the increase in WRSS as the change in four measures of gender gaps: male-to-female median income ratio, difference between the share of men and women aged 25 and more with at least an

associate's degree, difference between men's and women's labor force participation rate, and the share of men among managers.

Previous theoretical and empirical studies predict a male backlash against women's increasing social status. Yet, I do not find any evidence supporting the thesis that the backlash against local gender equality is particularly male; not even among the white population without college education. The evidence for a general backlash, of both women and men, is mixed. The change in WRSS is significantly associated with vote for Trump (controlling for earlier vote for Romney) at the individual and county level, but holds only for some operationalizations. This association requires further studies, as there are several potential explanations. For instance, women may enter the labor market at higher rates if a single-earner family model is no longer feasible due to low wages or high living costs. Although I control for median income levels in 2000 and 2015, and for the initial gender gap, the dynamics may be more complex.

This study has several limitations. It focuses on only one election and timespan. There are other aspects of increasing women's social status that may lead to men's backlash, such as women's political representation or election pledges made by parties. Furthermore, studies on the local effects of economic conditions (Dülmer and Klein, 2005) and immigration (Weber, 2019) showed that similar processes measured at different levels of observation may suggest different results. My earlier attempts at the research included in this chapter showed similar effects at the higher level of aggregation (for 1078 consistent public-use microdata areas, constructed for the purposes of the US census). At the country level, Gidron and Hall (2017) show an association between men's declining (subjective) social status and gender gap in radical right support. Also, my study is based on the assumption that if men were to react to the objective advancement of women, they would compare women and men in their entirety as two social groups. Future studies may analyse, whether changes within subgroups (e.g., relative mobility of women and men from families of low social status) matter for the representatives of those subgroups. The data on voting behavior do not include information about past migration of the respondents. Thus, I do not know to what extent my

results can be driven by out-migration of (potentially more progressive) women from initially more conservative places. However, I adjust for local sex-ratios among young adults, which are a close proxy of the scale of sex-selective migration.

My study opens new directions for further research. It refocuses the debate about the relationship between gender equality and voting on its dynamic, rather than static, aspect. The findings of this study should be corroborated with more causal methods, looking at exogenous factors influencing the relative socio-economic outcomes of women and men. Panel data would allow to track citizens' changing behavior without the doubt about credibility of their recalled voting from four years before, and migration. More detailed surveys could shed more light on the mechanisms underlying men's and women's reactions. They could also reconcile my findings with the existing experimental and survey research, which does not take space into account. Future studies should link the real-life changes in women's and men's social status with their perceptions of that reality. Finally, the results of this study do not exclude that changes in gender relations have an impact on men's (and women's) likelihood of voting for radical right parties. It is possible that the perceived threat, rather than the really and locally observed scale of changes matter spark a political backlash (see, e.g., Engler and Weisstanner, 2021).

References

Autor, D., D. Dorn, and G. Hanson (2019, September). When Work Disappears: Manufacturing Decline and the Falling Marriage Market Value of Young Men. *American Economic Review: Insights 1*(2), 161–178.

Autor, D., D. Dorn, G. Hanson, and K. Majlesi (2020, October). Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure. *American Economic Review 110*(10), 3139–3183.

Barros, L. and M. Santos Silva (2019). #EleNão: Economic crisis, the political gender gap, and the election of Bolsonaro.

Bracic, A., M. Israel-Trummel, and A. F. Shortle (2019, June). Is Sexism for White People? Gender Stereotypes, Race, and the 2016 Presidential Election. *Political Behavior 41*(2), 281–307.

Brines, J. (1994, November). Economic Dependency, Gender, and the Division of Labor at Home. *American Journal of Sociology 100*(3), 652–688. Publisher: The University of Chicago Press.

Carian, E. K. and T. C. Sobotka (2018, January). Playing the Trump Card: Masculinity Threat and the U.S. 2016 Presidential Election. *Socius 4*, 2378023117740699. Publisher: SAGE Publications.

Ciccolini, G. (2023, December). Left Behind Whom? Economic Status Loss and Populist Radical Right Voting. Publisher: OSF.

Colantone, I. and P. Stanig (2019, November). The Surge of Economic Nationalism in Western Europe. *Journal of Economic Perspectives 33*(4), 128–151.

Dahl, J., T. Vescio, and K. Weaver (2015, August). How Threats to Masculinity Sequentially Cause Public Discomfort, Anger, and Ideological Dominance Over Women. *Social Psychology 46*(4), 242–254. Publisher: Hogrefe Publishing.

Dancygier, R., N. Egami, A. Jamal, and R. Rischke (2022). Hate Crimes and Gender Imbalances: Fears over Mate Competition and Violence against Refugees. *American Journal of Political Science 66*(2), 501–515. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/ajps.12595.

DiMuccio, S. H. and E. D. Knowles (2020, August). The political significance of fragile masculinity. *Current Opinion in Behavioral Sciences 34*, 25–28.

DiMuccio, S. H. and E. D. Knowles (2021, July). Precarious Manhood Predicts Support for Aggressive Policies and Politicians. *Personality and Social Psychology Bulletin 47*(7), 1169–1187. Publisher: SAGE Publications Inc.

Dinas, E., K. Matakos, D. Xefteris, and D. Hangartner (2019, April). Waking Up the Golden Dawn: Does Exposure to the Refugee Crisis Increase Support for Extreme-Right Parties? *Political Analysis 27*(2), 244–254. Publisher: Cambridge University Press.

Donovan, T. (2023, January). Measuring and predicting the radical-right gender gap. *West European Politics 46*(1), 255–264. Publisher: Routledge _eprint: https://doi.org/10.1080/01402382.2022.2034091.

Dülmer, H. and M. Klein (2005). Extreme right-wing voting in Germany in a multilevel perspective: A rejoinder to Lubbers and Scheepers. *European Journal of Political Research 44*(2), 243–263. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1475-6765.2005.00226.x.

Engler, S. and D. Weisstanner (2021, February). The threat of social decline: income inequality and radical right support. *Journal of European Public Policy 28*(2), 153–173. Publisher: Routledge _eprint: https://doi.org/10.1080/13501763.2020.1733636.

Ford, R. and M. J. Goodwin (2010, February). Angry White Men: Individual and Contextual Predictors of Support for the British National Party. *Political Studies 58*(1), 1–25. Publisher: SAGE Publications Ltd.

Frasure-Yokley, L. (2018, March). Choosing the Velvet Glove: Women Voters, Ambivalent Sexism, and Vote Choice in 2016. *Journal of Race, Ethnicity, and Politics 3*(1), 3–25. Publisher: Cambridge University Press.

Gidengil, E. and D. Stolle (2021, October). Beyond the Gender Gap: The Role of Gender Identity. *The Journal of Politics 83*(4), 1818–1822. Publisher: The University of Chicago Press.

Gidron, N. and P. A. Hall (2017). The politics of social status: economic and cultural roots of the populist right. *The British Journal of Sociology 68*(S1), S57–S84. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/1468-4446.12319.

Green, J. and R. Shorrocks (2023, March). The Gender Backlash in the Vote for Brexit. *Political Behavior 45*(1), 347–371.

Hanley, E. (2021). Sexism as a political force: The impact of gender-based attitudes on the presidential elections of 2012 and 2016. *Social Science Quarterly 102*(4), 1408 – 1427. Type: Article.

Hickel, F. R. and M. Deckman (2022). Did sexism drive Latino support for Trump? Latinx, sexism, and presidential vote choice. *Social Science Quarterly 103*(6), 1381 – 1400. Type: Article.

Holman, M. R. (2017). Women in Local Government: What We Know and Where We Go from Here. *State & Local Government Review 49*(4), 285–296. Publisher: [Sage Publications, Inc., Carl Vinson Institute of Government, University of Georgia].

Inglehart, R. and P. Norris (2016). Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash. *SSRN Electronic Journal*.

Kellogg, L. D., A. G. Gourrier, E. L. Bernick, and K. Brekken (2019, January). County governing boards: where are all the women? *Politics, Groups, and Identities 7*(1), 39–51. Publisher: Routledge _eprint: https://doi.org/10.1080/21565503.2017.1304223.

Kimmel, M. (2017, April). *Angry White Men: American Masculinity at the End of an Era*. Hachette UK. Google-Books-ID: k5aeDgAAQBAJ.

Koenig, B. (2022, November). Politicizing Status Loss Among Trump Supporters in 2020. *RSF: The Russell Sage Foundation Journal of the Social Sciences 8*(6), 69–86. Publisher: RSF: The Russell Sage Foundation Journal of the Social Sciences.

Kosakowska-Berezecka, N., T. Besta, K. Adamska, M. Jaśkiewicz, P. Jurek, and J. A. Vandello (2016). If my masculinity is threatened I won't support gender equality? The role of agentic self-stereotyping in restoration of manhood and perception of gender relations. *Psychology of Men & Masculinity 17*(3), 274–284. Place: US Publisher: Educational Publishing Foundation.

Kurer, T. (2020, September). The Declining Middle: Occupational Change, Social Status, and the Populist Right. *Comparative Political Studies 53*(10-11), 1798–1835. Publisher: SAGE Publications Inc.

Kurer, T. and B. V. Staalduinen (2022, November). Disappointed Expectations: Downward Mobility and Electoral Change. *American Political Science Review 116*(4), 1340–1356. Publisher: Cambridge University Press.

Kuriwaki, S. (2023). Cumulative CES Common Content. Type: dataset.

Maggio, C. (2021, March). Demographic change and the 2016 presidential election. *Social Science Research 95*, 102459.

Manza, J. and N. Crowley (2017, April). Working Class Hero? Interrogating the Social Bases of the Rise of Donald Trump. *The Forum 15*(1), 3–28. Publisher: De Gruyter.

Mills, C. E., M. Schmuhl, and J. A. Capellan (2020, October). Far-right violence as backlash against gender equality: A county-level analysis of structural and ideological gender inequality and homicides committed by far-right extremists. *Journal of Crime and Justice 43*(5), 568–584. Publisher: Routledge _eprint: https://doi.org/10.1080/0735648X.2020.1738261.

MIT Election Data And Science Lab (2018). County Presidential Election Returns 2000-2020. Type: dataset.

Monteith, M. J. and L. K. Hildebrand (2020, February). Sexism, perceived discrimination, and system justification in the 2016 U.S. presidential election context. *Group Processes & Intergroup Relations 23*(2), 163–178. Publisher: SAGE Publications Ltd.

Morgan, S. L. (2018, January). Correct Interpretations of Fixed-effects Models, Specification Decisions, and Self-reports of Intended Votes: A Response to Mutz. *Socius 4*, 2378023118811502. Publisher: SAGE Publications.

Morgan, S. L. and J. Lee (2018, April). Trump Voters and the White Working Class. *Sociological Science 5*, 234–245.

Morgan, S. L. and J. Lee (2019, January). Economic Populism and Bandwagon Bigotry: Obama-to-Trump Voters and the Cross Pressures of the 2016 Election. *Socius 5*, 2378023119871119. Publisher: SAGE Publications.

Mutz, D. C. (2018, May). Status threat, not economic hardship, explains the 2016 presidential vote. *Proceedings of the National Academy of Sciences 115*(19), E4330–E4339. Publisher: Proceedings of the National Academy of Sciences.

Newman, B. J., S. Shah, and L. Collingwood (2018, March). Race, Place, and Building a Base: Latino Population Growth and the Nascent Trump Campaign for President. *Public Opinion Quarterly 82*(1), 122–134.

Off, G., N. Charron, and A. Alexander (2022, August). Who perceives women's rights as threatening to men and boys? Explaining modern sexism among young men in Europe. *Frontiers in Political Science 4*, 909811.

Parth, A.-M. (2022, October). Backlash by Men against the Socio-Economic and Political Promotion of Women in Europe. *Social Sciences 11*(10), 428. Number: 10 Publisher: Multidisciplinary Digital Publishing Institute.

Pease, B. (2020). The rise of angry white men: Resisting populist masculinity and the backlash against gender equality. In *The Challenge of Right-wing Nationalist Populism for Social Work*. Routledge. Num Pages: 14.

Ratliff, K. A., L. Redford, J. Conway, and C. T. Smith (2019, June). Engendering support: Hostile sexism predicts voting for Donald Trump over Hillary Clinton in the 2016 U.S. presidential election. *Group Processes & Intergroup Relations 22*(4), 578–593. Publisher: SAGE Publications Ltd.

Reny, T. T., L. Collingwood, and A. A. Valenzuela (2019, May). Vote Switching in the 2016 Election: How Racial and Immigration Attitudes, Not Economics, Explain Shifts in White Voting. *Public Opinion Quarterly 83*(1), 91–113.

Richards, L., A. Heath, and N. Carl (2021, May). Not just 'the left behind'? Exploring the effects of subjective social status on Brexit-related preferences. *Contemporary Social Science 16*(3), 400–415. Publisher: Routledge _eprint: https://doi.org/10.1080/21582041.2020.1847312.

Richards, L., A. Heath, and G. Elgenius (2020). Remainers are nostalgic too: An exploration of attitudes towards the past and Brexit preferences. *The British Journal of Sociology 71*(1), 74–80. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/1468-4446.12710.

Ruggles, S., S. Flood, M. Sobek, D. Backman, A. Chen, G. Cooper, S. Richards, R. Rogers, and M. Schouwiler (2023). IPUMS USA: Version 14.0. Version Number: 14.0 Type: dataset.

Runciman, W. G. (1966). *Relative Deprivation and Social Justice: A Study of Attitudes to Social Inequality in Twentieth-century England*. University of California Press. Google-Books-ID: 1OfEAAAAIAAJ.

Schaffner, B. F. (2022, January). The Heightened Importance of Racism and Sexism in the 2018 US Midterm Elections. *British Journal of Political Science 52*(1), 492–500. Publisher: Cambridge University Press.

Schaffner, B. F., M. Macwilliams, and T. Nteta (2018, March). Understanding White Polarization in the 2016 Vote for President: The Sobering Role of Racism and Sexism. *Political Science Quarterly 133*(1), 9–34.

Scheiring, G., M. Serrano-Alarcón, A. Moise, C. McNamara, and D. Stuckler (2024, February). The Populist Backlash Against Globalization: A Meta-Analysis of the Causal Evidence. *British Journal of Political Science*, 1–25.

Schmitt, M., J. Maes, and K. Widaman (2010, April). Longitudinal effects of egoistic and fraternal relative deprivation on well-being and protest. *International Journal of Psychology 45*(2), 122–130. Publisher: Routledge _eprint: https://doi.org/10.1080/00207590903165067.

Setzler, M. and A. B. Yanus (2018). Why Did Women Vote for Donald Trump? *PS - Political Science and Politics 51*(3), 523 – 527. Type: Article.

Smirnova, M. (2018, January). Small Hands, Nasty Women, and Bad Hombres: Hegemonic Masculinity and Humor in the 2016 Presidential Election. *Socius 4*, 2378023117749380. Publisher: SAGE Publications.

Smith, H. J. and D. J. Ortiz (2002). Is it just me?: The different consequences of personal and group relative deprivation. In *Relative deprivation: Specification, development, and integration*, pp. 91–115. New York, NY, US: Cambridge University Press.

Smith, H. J., T. F. Pettigrew, G. M. Pippin, and S. Bialosiewicz (2012, August). Relative Deprivation: A Theoretical and Meta-Analytic Review. *Personality and Social Psychology Review 16*(3), 203–232. Publisher: SAGE Publications Inc.

Tajfel, H. and J. C. Turner (2004). The Social Identity Theory of Intergroup Behavior. In *Political Psychology*. Psychology Press. Num Pages: 18.

Valentino, N. A., C. Wayne, and M. Oceno (2018). Mobilizing sexism the interaction of emotion and gender attitudes in the 2016 US presidential election. *Public Opinion Quarterly 82*, 213 – 235. Type: Review.

Vandello, J. A. and J. K. Bosson (2013). Hard won and easily lost: A review and synthesis of theory and research on precarious manhood. *Psychology of Men & Masculinity 14*(2), 101–113. Place: US Publisher: Educational Publishing Foundation.

Weber, H. (2019, April). Attitudes Towards Minorities in Times of High Immigration: A Panel Study among Young Adults in Germany. *European Sociological Review 35*(2), 239–257.

Weisstanner, D. (2023). Stagnating incomes and preferences for redistribution: The role of absolute and relative experiences. *European Journal of Political Research 62*(2), 551–570. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/1475-6765.12520.

West, C. and D. H. Zimmerman (1987, June). Doing Gender. *Gender & Society 1*(2), 125–151. Publisher: SAGE Publications Inc.

Appendix

Figure A1: Change in women's relative median income, 2000-2015.

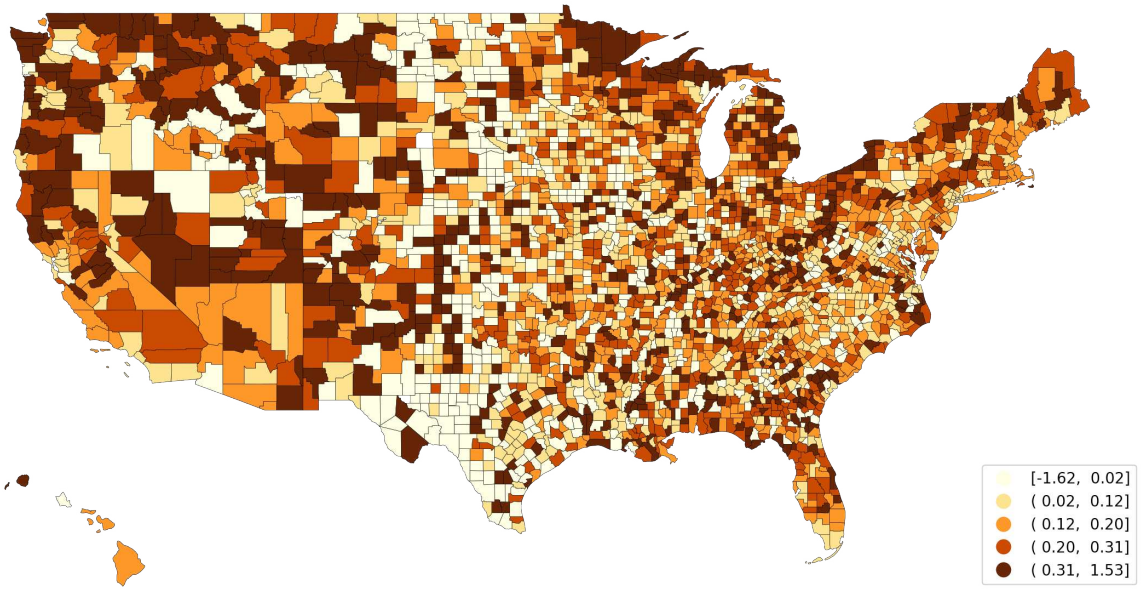


Figure A2: Change in women's relative college education attainment, 2000-2015.

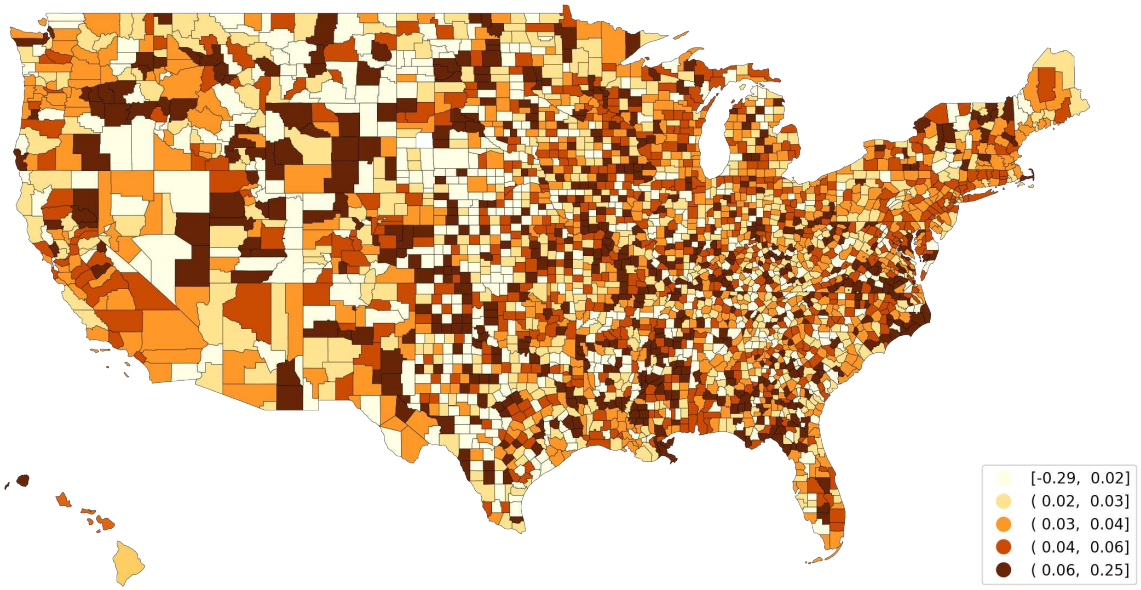


Figure A3: Change in women's relative labor force participation, 2000-2015.

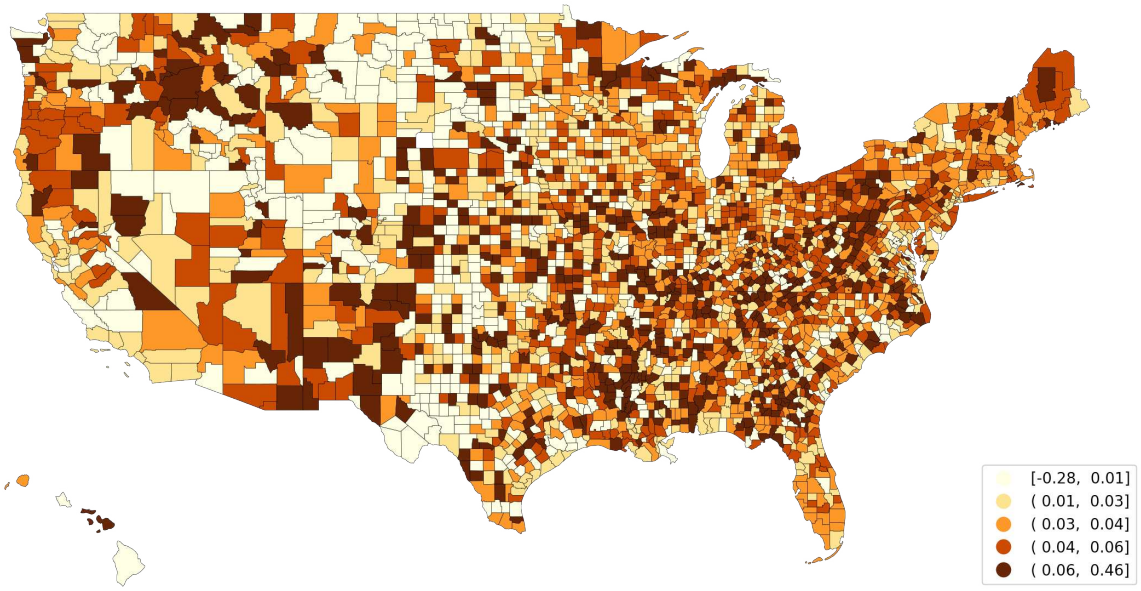


Figure A4: Change in the share of women among managers, 2000-2015.

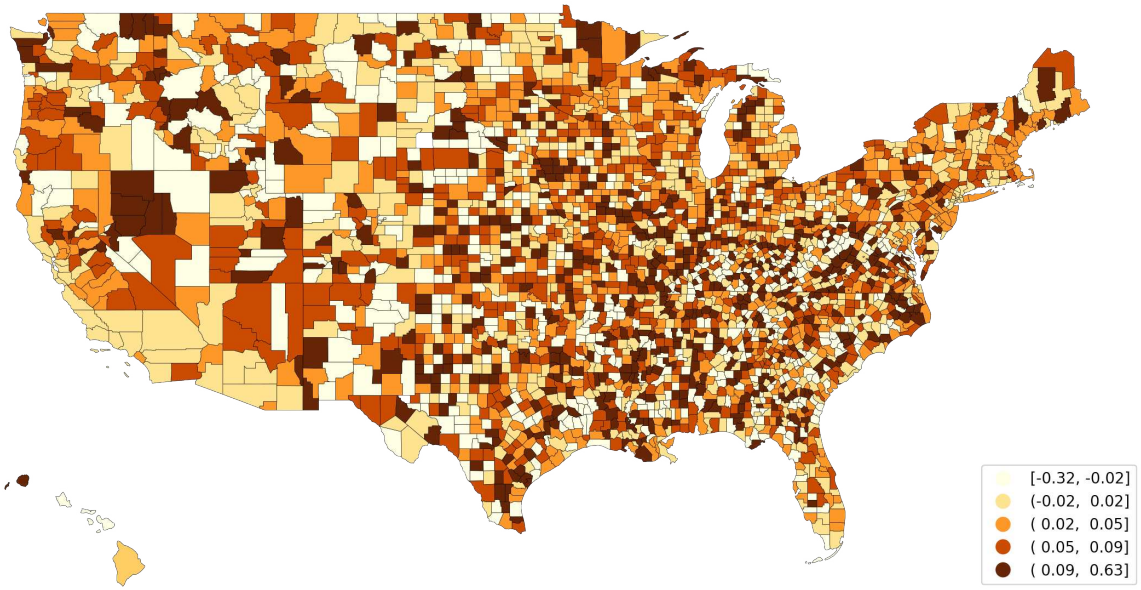


Figure A5: Share of votes for Donald Trump in 2016.

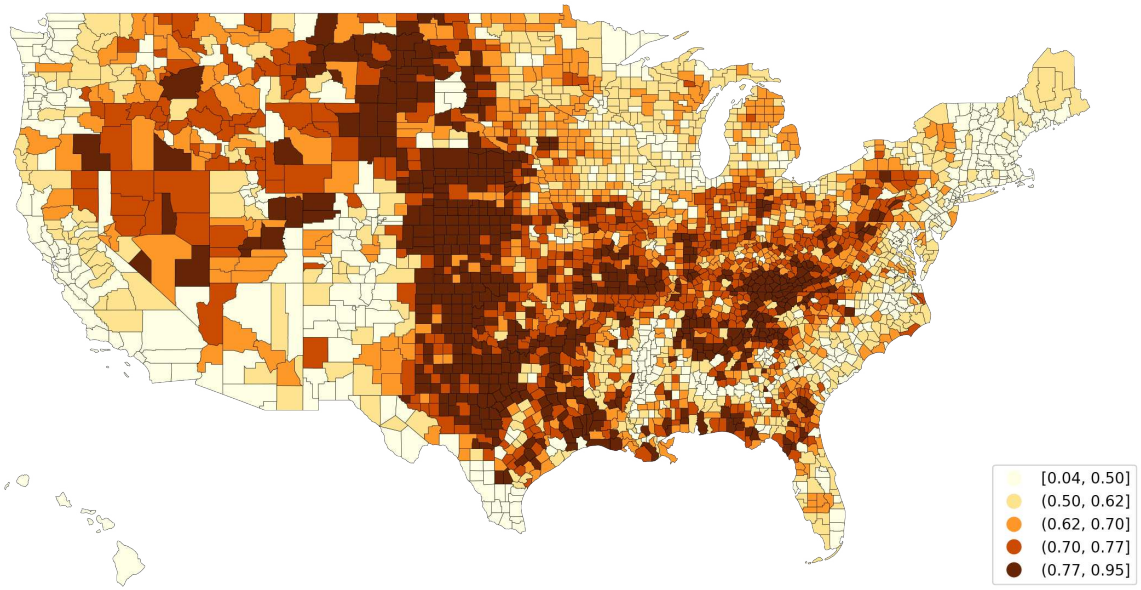


Table A1. Correlations between changes in women's relative social status, support for Donald Trump in 2016, and selected control variables.

(1)

	Share of votes for Trump (2016)	Median income	College education	Labor force participation	Managers	Share of women with college education 2000	Median income of women 2000	Labor force participation among women 2000	Share of men among managers 2000
Share of votes for Trump (2016)	1								
Median income	-0.0584**	1							
College education	-0.107***	0.143***	1						
Labor force participation	0.0182	0.195***	0.175***	1					
Managers	0.00725	0.102***	0.0502**	0.225***	1				
Share of women with college education 2000	-0.511***	-0.0213	0.0186	-0.114***	-0.0441*	1			
Median income of women 2000	-0.415***	-0.0862***	0.0840***	-0.0188	-0.0184	0.501***	1		
Labor force participation among women 2000	-0.304***	-0.0395*	0.0598***	-0.169***	-0.0394*	0.640***	0.531***	1	
Share of men among managers 2000	0.407***	-0.141***	-0.0848***	-0.0198	0.337***	-0.132***	-0.294***	-0.0191	1
Gender gap in college education 2000	-0.192***	0.0431*	0.279***	-0.0275	-0.0123	0.333***	0.279***	0.206***	-0.115***
Median income gender gap 2000	0.301***	0.352***	-0.0459*	-0.00507	0.0116	-0.112***	-0.405***	-0.123***	0.179***
Labor force participation gender gap 2000	0.249***	-0.00873	-0.118***	0.149***	0.000855	-0.0374*	-0.0238	-0.0808***	0.199***
Logarithm of total population in 2000	-0.516***	0.0854***	0.125***	0.00151	-0.00305	0.404***	0.606***	0.311***	-0.447***
Share of White non-Hispanic population in 2000	0.528***	0.0681***	-0.0293	0.0379*	0.00651	0.0582**	-0.0470**	0.222***	0.229***
Share of working men employed in construction 2000	0.106***	0.0853***	-0.0299	0.0691***	-0.0104	-0.161***	0.0144	-0.136***	-0.217***
Share of working men employed in manufacturing 2000	0.0729***	0.0989***	0.0397*	0.138***	0.0771***	-0.327***	0.145***	0.0456*	-0.0625***
Share of working men employed in agriculture 2000	0.415***	-0.176***	-0.169***	-0.111***	-0.0359*	-0.210***	-0.537***	-0.259***	0.539***
Unemployment among men 2000	-0.281***	0.122***	0.0321	0.0603***	0.0165	-0.172***	-0.300***	-0.369***	-0.257***

	Gender gap in college education 2000	Median income gender gap 2000	Labor force participation gender gap 2000	Logarithm of total population in 2000	Share of White non-Hispanic population in 2000	Share of working men employed in construction 2000	Share of working men employed in manufacturing 2000	Share of working men employed in agriculture 2000	Unemployment among men 2000
Share of votes for Trump (2016)									
Median income									
College education									
Labor force participation									
Managers									
Share of women with college education 2000									
Median income of women 2000									
Labor force participation among women 2000									
Share of men among managers 2000									
Gender gap in college education 2000	1								
Median income gender gap 2000	0.122***	1							
Labor force participation gender gap 2000	0.261***	0.341***	1						
Logarithm of total population in 2000	0.402***	-0.199***	-0.0231	1					
Share of White non-Hispanic population in 2000	0.0182	0.280***	0.180***	-0.175***	1				
Share of working men employed in construction 2000	-0.0932***	-0.00641	-0.00104	-0.0922***	0.0306	1			
Share of working men employed in manufacturing 2000	-0.0870***	-0.00823	0.0924***	0.176***	0.173***	-0.0975***	1		
Share of working men employed in agriculture 2000	-0.288***	0.240***	0.130***	-0.709***	0.0435*	-0.223***	-0.466***	1	
Unemployment among men 2000	-0.125***	-0.00723	-0.229***	0.0444*	-0.357***	-0.0274	-0.0942***	-0.0589**	1

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure A6: Increase in the share of votes for the Republican candidate (percentage points).

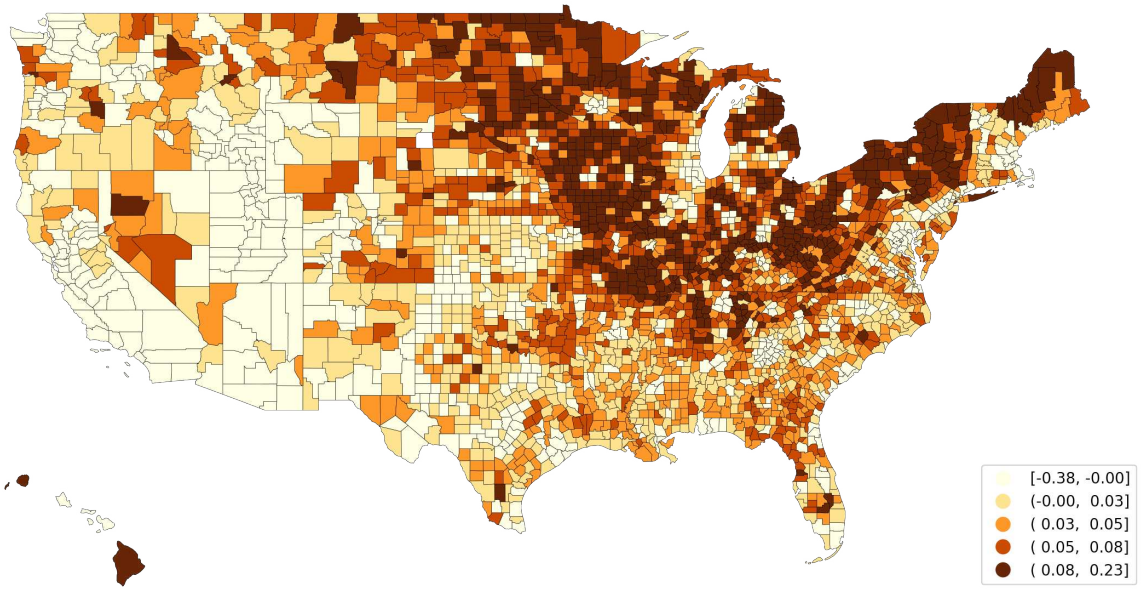
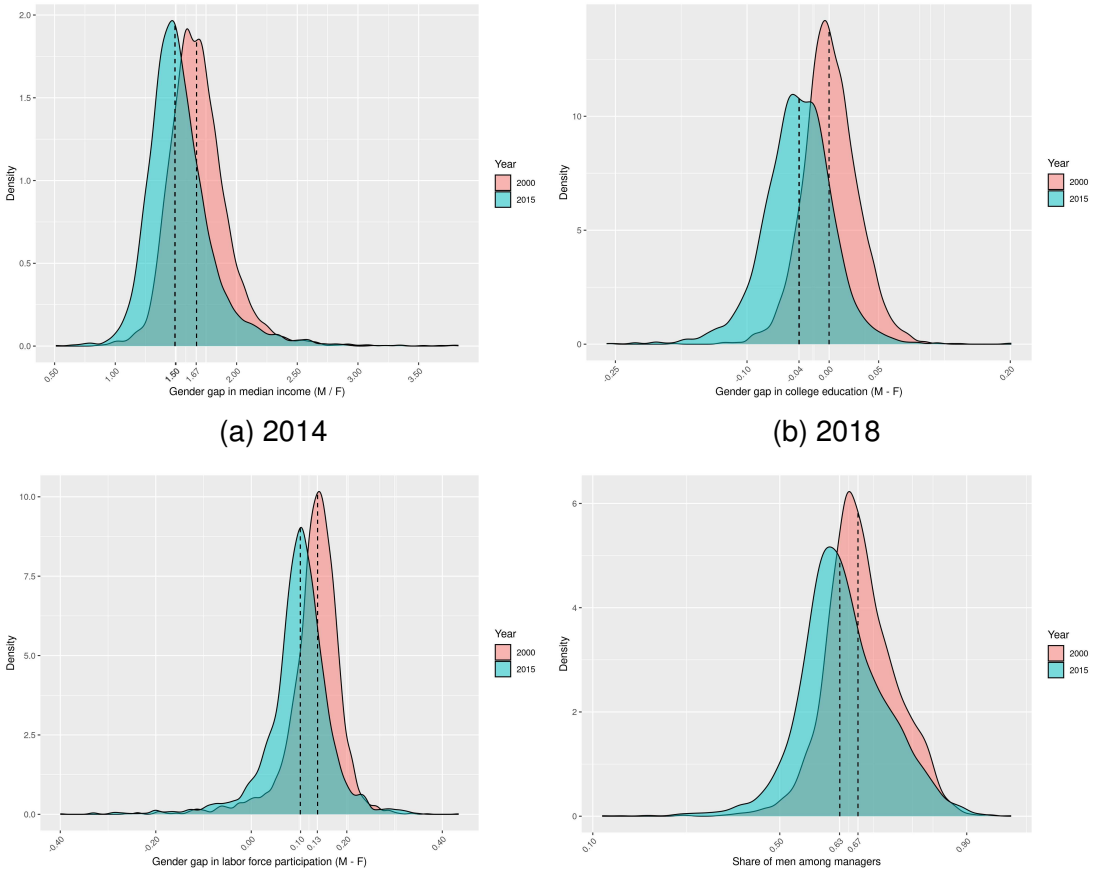


Figure A7: Distribution of women's relative social status.



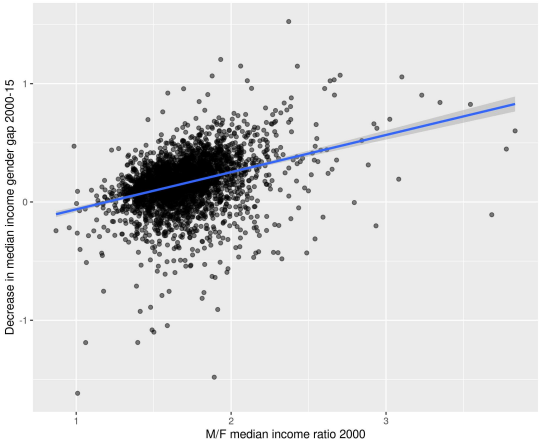
(a) 2014

(b) 2018

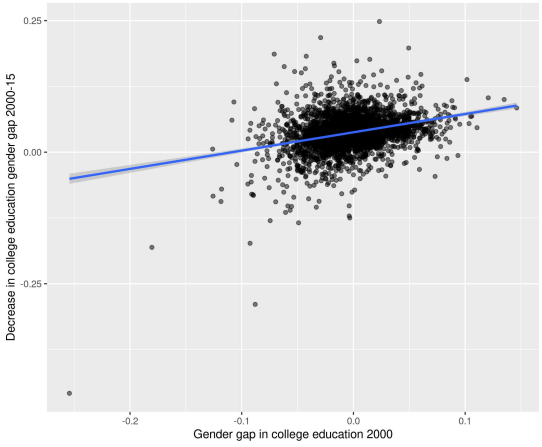
(c) 2018

(d) 2018

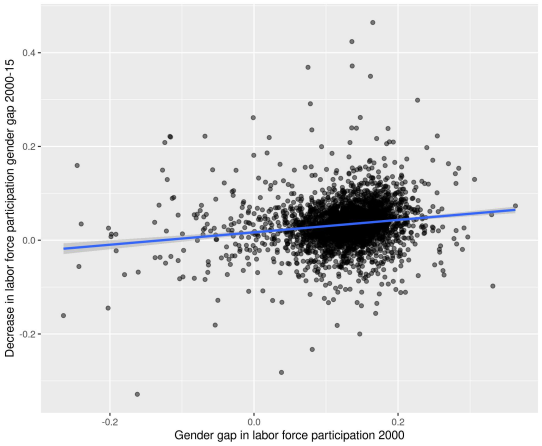
Figure A8: Initial levels and changes in the gender gaps, 2000-2015.



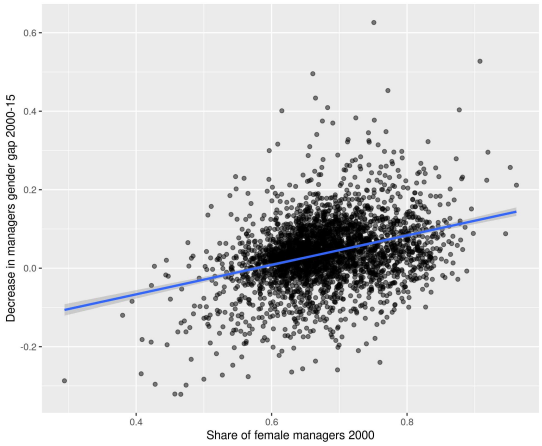
(a) 2014



(b) 2018



(c) 2018



(d) 2018

Table A2. Descriptive statistics for counties.

	count	mean	sd	min	max
Share of men with college education 2000	3114	.2211629	.0955732	0	.7534168
Share of women with college education 2000	3114	.2233516	.0803535	.0785195	.6315889
Median income of men 2000	3112	25522.95	5155.127	5819	56709
Median income of women 2000	3112	15243.69	3342.042	4732	34434
Labor force participation among men 2000	3114	.6746693	.0841833	.2622951	.934768
Labor force participation among women 2000	3114	.5480901	.065503	.2662233	.8085971
Share of men with college education 2015	3111	.2677596	.1039934	0	.8510739
Share of women with college education 2015	3111	.3069779	.0915211	.0934066	.7890496
Median income of men 2015	3109	33622.57	7023.748	10364	93000
Median income of women 2015	3109	22101.45	4339.673	6762	55141
Labor force participation among men 2015	3111	.6377555	.097641	.1106928	.9063121
Labor force participation among women 2015	3111	.5446811	.0690664	.2517287	.7451708
Share of men among managers 2000	3112	.6792889	.0759624	.2941177	.9615384
Gender gap in college education 2000	3114	-.0021887	.0316615	-.2542373	.1461294
Median income gender gap 2000	3112	1.696738	.2548776	.8695652	3.833142
Labor force participation gender gap 2000	3114	.1265792	.058135	-.264531	.3630129
Share of men among managers 2015	3111	.6411635	.0930859	.125	1
Gender gap in college education 2015	3111	-.0392183	.0397373	-.2572767	.2039474
Median income gender gap 2015	3109	1.540008	.2754861	.5146425	3.790602
Labor force participation gender gap 2015	3111	.0930744	.0696676	-.4048847	.4294007
Change in share of women among managers 2000-15	3109	.0382279	.084823	-.3213249	.6259881
Change in college education gender gap 2000-15	3111	.0370462	.035696	-.4581847	.2482919
Change in median income gender gap 2000-15	3107	.1567224	.2272246	-1.617314	1.525245
Change in labor force participation gender gap 2000-15	3111	.0335336	.0486425	-.3286466	.464357
Logarithm of total population in 2015	3111	10.28247	1.471453	4.442651	16.12193
Logarithm of total population in 2000	3114	10.23407	1.40805	4.204693	16.06884
Share of men in the population aged 25-34 in 2015	3111	.5163091	.0553807	.2534246	1
Share of men in the population aged 25-34 in 2000	3114	.5087862	.0415001	.3235294	1
Share of White non-Hispanic population in 2000	3114	.8153457	.1880775	.0201877	.9960887
Share of Black population 2000	3114	.0883046	.1455518	0	.8648871
Share of Hispanic population 2000	3114	.0620747	.120379	.0008203	.9753904
Share of foreign-born population 2000	3114	.0346028	.0485923	0	.5093567
Share of men in the population aged 25-34 in 2000	3114	.5087862	.0415001	.3235294	1
Share of White non-Hispanic population in 2015	3111	.7756847	.1963664	.0094656	.9976387
Share of Black population 2015	3111	.0907933	.1450932	0	.859478
Share of Hispanic population 2015	3111	.0886669	.1355258	0	.9871345
Share of foreign-born population 2015	3111	.0459424	.056064	0	.5165371
Share of men in the population aged 25-34 in 2015	3111	.5163091	.0553807	.2534246	1
Share of working men employed in construction 2000	3114	.1308978	.039522	.0166667	.4827586
Share of working men employed in manufacturing 2000	3114	.1996739	.1075954	0	.5690067
Share of working women employed in agriculture 2000	3114	.023702	.0316161	0	.4029412
Share of working women employed in construction 2000	3114	.0141102	.0075175	0	.0668203
Share of working women employed in manufacturing 2000	3114	.111377	.0775496	0	.4555045
Unemployment among women 2000	3114	.0574492	.0282905	0	.4155227
Share of working men employed in construction 2015	3111	.1223785	.0381216	0	.3783554
Share of working men employed in manufacturing 2015	3111	.1656667	.0930258	0	.5511771
Share of working women employed in agriculture 2015	3111	.0215534	.0306527	0	.3870968
Share of working women employed in construction 2015	3111	.0121343	.009262	0	.1830065
Share of working women employed in manufacturing 2015	3111	.0723164	.0503787	0	.3418618
Unemployment among women 2015	3111	.0738577	.0359503	0	.3006452
Share of votes for the Democratic candidate in 2012	3114	.3846744	.1476395	.0344828	.9338633
Share of votes for the Democratic candidate in 2016	3113	.3156343	.1527227	.0314465	.9086382
Share of votes for the Democratic candidate in 2020	3113	.3327608	.1597736	.0309091	.9214969
Share of votes for the Republican candidate in 2012	3114	.5955491	.1488882	.0597774	.9586207
Share of votes for the Republican candidate in 2016	3113	.6324465	.1571096	.0408747	.9458483
Share of votes for the Republican candidate in 2020	3113	.6496284	.161497	.0539732	.9618182
Increase in support for the Republican candidate in 2016	3112	.0368854	.0565251	-.3761871	.2311632

Table A3. Descriptive statistics for respondents.

	count	mean	sd	min	max
Male	40290	.4700918	.4991109	0	1
Age	40290	53.38168	15.32642	18	95
No college education	40290	.2172499	.4123792	0	1
Race	40290	1.513775	1.228441	1	8
Married	40290	.6000248	.489899	0	1
Single	40290	.1812609	.3852389	0	1
White non-Hispanic	40210	.7613529	.4262619	0	1
Vote for Trump 2016	40290	.416282	.4929476	0	1
Vote for Romney 2012	40290	.4012658	.4901607	0	1
Swung to Trump from Obama	40290	.0523703	.2227754	0	1
Swung to Trump in 2016	40290	.0708861	.2566376	0	1
Observations	40290				

Table A4. Support for Donald Trump and changes in women's relative median income.

	(1)	(2)	(3)	(4)
Vote for Trump 2016				
Male=1	1.374***	1.369***	1.404***	1.394***
	(0.0681)	(0.0704)	(0.0697)	(0.0719)
WRSS change	2.316***	2.201***	1.745**	1.598**
	(0.449)	(0.465)	(0.379)	(0.355)
Male=1 $\times$ WRSS change	0.635*	0.701	0.599**	0.664
	(0.162)	(0.181)	(0.153)	(0.172)
Observations	40235	40207	40235	40207
County controls	No	No	Yes	Yes
Individual controls	No	Yes	No	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A5. Support for Donald Trump and changes in women's relative college education attainment.

	(1)	(2)	(3)	(4)
Vote for Trump 2016				
Male=1	1.213**	1.219**	1.222**	1.223**
	(0.108)	(0.109)	(0.107)	(0.110)
WRSS change	0.00467***	0.0684*	0.321	0.218
	(0.00674)	(0.0997)	(0.471)	(0.324)
Male=1 $\times$ WRSS change	3.803	4.835	4.343	5.275
	(7.626)	(9.762)	(8.632)	(10.63)
Observations	40235	40207	40235	40207
County controls	No	No	Yes	Yes
Individual controls	No	Yes	No	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A6. Support for Donald Trump and changes in women's relative labor force participation rate.

	(1)	(2)	(3)	(4)
Vote for Trump 2016				
Male=1	1.349***	1.363***	1.377***	1.384***
	(0.0673)	(0.0706)	(0.0682)	(0.0713)
WRSS change	124.4***	45.98***	9.252**	7.641*
	(124.1)	(46.75)	(10.32)	(8.692)
Male=1 $\times$ WRSS change	0.177	0.181	0.130	0.151
	(0.239)	(0.247)	(0.174)	(0.205)
Observations	40235	40207	40235	40207
County controls	No	No	Yes	Yes
Individual controls	No	Yes	No	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A7. Support for Donald Trump and changes in women's share among managers.

	(1)	(2)	(3)	(4)
Vote for Trump 2016				
Male=1	1.320***	1.331***	1.342***	1.351***
	(0.0519)	(0.0551)	(0.0527)	(0.0559)
WRSS change	6.233***	4.996***	3.237**	3.517**
	(3.539)	(3.022)	(1.902)	(2.123)
Male=1 $\times$ WRSS change	0.386	0.416	0.345	0.366
	(0.308)	(0.337)	(0.273)	(0.295)
Observations	40235	40207	40235	40207
County controls	No	No	Yes	Yes
Individual controls	No	Yes	No	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A8. Support for Donald Trump and changes in women's relative social status, all four measures included.

	(1)	(2)	(3)	(4)
Vote for Trump 2016				
Male=1	1.313***	1.306***	1.339***	1.323***
	(0.127)	(0.127)	(0.128)	(0.129)
Median income	1.882***	1.983***	1.662**	1.528*
	(0.380)	(0.441)	(0.374)	(0.352)
Male=1 $\times$ Median income	0.697	0.753	0.664	0.735
	(0.191)	(0.208)	(0.182)	(0.204)
College education	0.00103***	0.0271**	0.134	0.0935
	(0.00148)	(0.0399)	(0.201)	(0.142)
Male=1 $\times$ College education	6.978	9.128	8.457	9.930
	(14.10)	(18.62)	(16.99)	(20.22)
Labor force participation	61.07***	9.346**	4.230	3.909
	(65.44)	(10.30)	(5.018)	(4.723)
Male=1 $\times$ Labor force participation	0.373	0.323	0.311	0.287
	(0.552)	(0.483)	(0.457)	(0.428)
Managers	3.563**	2.502	2.395	2.731
	(2.067)	(1.556)	(1.450)	(1.699)
Male=1 $\times$ Managers	0.512	0.531	0.485	0.489
	(0.425)	(0.448)	(0.402)	(0.412)
Observations	40235	40207	40235	40207
County controls	No	No	Yes	Yes
Individual controls	No	Yes	No	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A9. Switching to Trump and women's relative social status.

	(1) Median income	(2) College education	(3) Labor force participation	(4) Managers
Swung to Trump in 2016				
Male=1	1.208***	1.017	1.196***	1.184***
	(0.0794)	(0.114)	(0.0789)	(0.0619)
WRSS change	1.316	0.876	7.246	3.093
	(0.374)	(1.634)	(10.25)	(2.218)
Male=1 × WRSS change	0.694	16.72	0.207	0.319
	(0.225)	(42.57)	(0.350)	(0.311)
Observations	40207	40207	40207	40207
County controls	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table A10. Support for Donald Trump in 2020 and women's relative social status.

	(1) Median income	(2) College education	(3) Labor force participation	(4) Managers
Vote for Trump 2020				
Male=1	1.352***	1.226***	1.273***	1.246***
	(0.0471)	(0.0721)	(0.0442)	(0.0342)
WRSS change	1.160	1.563	0.588	0.629
	(0.178)	(1.558)	(0.450)	(0.247)
Male=1 × WRSS change	0.606***	1.664	0.561	1.161
	(0.106)	(2.202)	(0.509)	(0.603)
Observations	114527	114527	114527	114527
County controls	Yes	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes	Yes

Exponentiated coefficients; Standard errors in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Chapter 3

Men in European Union's Gender Equality Policies

Abstract

Gender mainstreaming is designed to address the social roles of both women and men. How are men included in gender equality policies? I conduct an analysis of all gender equality strategies and annual reports of the European Commission – a global leader in this field – since 1982. I find that, since the mid 1990s, the Commission has included men as contributors to gender equality ('problem solvers'). Yet, men's disadvantages in education and health were only addressed between 2006 and 2015. Later on, men's problems have been ignored, as they have been increasingly portrayed as a privileged group, undeserving of European policies. This withdrawal from addressing men's problems exposes the tension between legitimising policies for one group (women) and addressing the needs of a complementary group (men). A novel approach to gender equality policies should revive the global debate on their meaning and implications. My findings also raise new questions about the power of the European Commission to construct policy target populations.

1. Introduction

When gender mainstreaming was first introduced in European Union's policies in 1996, it was supposed to transform both women's and men's social roles, and also to address men's disadvantages and potential resentment against positive action supporting women (Booth and Bennett 2002). It posited an assessment of all policy outcomes for both women and men (Schmidt 2005). Yet, as noted by feminist scholars of European integration, gender equality narratives have often been reduced to the 'women-as-victims' frame, while not mentioning men and not finding a role in the progress towards gender equality for them (e.g. Lombardo and Meier 2008; Guerrina and Wright 2016).

So, how have men been included in gender equality policies? Existing research on men in the gender equality agenda of the EU has mostly focused on men as 'problem solvers' (following the conceptualisation by Verloo et al. 2007): addressing problems caused by men (e.g. violence), and men's possibilities to contribute to gender equality (see e.g. Hearn et al. 2021). In contrast, one cannot exclude a priori that men's disadvantages should be addressed by gender equality policies, i.e., men can also be recognised as 'problem holders.' Furthermore, extant research has not systematically analysed the changes in construction of men over time.

In this paper, qualitatively and quantitatively analysing all gender equality strategies (abbreviated as GESs from now onwards) and annual reports (ARs), I document the U-turn in Commission's approach over the years: men's disadvantages –such as the gender gaps in life expectancy, occupational health, and educational attainment[1]– were addressed as policy goals between 2006 and 2015, but later disappeared. To understand these changes, I study the evolution of deservingness of men. Schneider and Ingram (1993) argue that policy-makers construct policy target populations as deserving to show that 'they do good things for good people' (Schneider and Ingram 2017, p. 320) and to justify why they do not provide policies for other groups. For instance, the two most recent GESs constructed men increasingly as powerful and undeserving, thus limiting the possibility of creating policies targeted at men as 'problem holders.' In turn, men and boys can still be

[1] According to Eurostat, as of 2021, the life expectancy gender gap in the EU is equal to 5.6 years, ranging from 3.2 in the Netherlands to 9.6 in Latvia. In the age group 25-34, 35.7% of men have a tertiary degree, in contrast with 46.8% women.

targeted as ‘problem solvers’ (‘agents for change’), i.e., when targeting men would help women. Thus, legitimising policies for one group (women) and addressing the needs of a complementary group (men) proves difficult.

Gender equality policies are meant to correct for gender biases and, therefore, it may seem unsurprising that they have historically focused on women. Yet, the idea of gender mainstreaming envisioned the inclusion of men as both problem solvers and problem holders. My findings demonstrate that, indeed, the Commission treats men as problem solvers, but only temporarily recognised them as problem holders. Thus, the place of men in the Commission’s vision of gender equality is far from obvious.

The construction of men in gender equality policies is also utterly important for at least four reasons. First, gender equality policies influence the allocation of the EU funds. Some funding is directly dedicated to correcting gender inequalities. The deployment of Horizon Europe funds is conditional upon the adoption of gender equality plans by the receiving institutions. But gender equality goals are currently included also in the Common Agricultural Policy (to support women in farming) and in ‘gender-responsive public procurement’ guidelines of the Commission. Second, the Commission purposely tries to shape men’s lives and masculinity norms in Europe and in third countries via policies addressing, e.g., parental leave, violence, and education. Third, gender equality is the primary policy field where ‘men are named men’ (Collinson and Hearn 1994), i.e., the Commission recognises men’s gender and, potentially, might explicitly address life expectancy or reversed education gender gaps. Nowadays, the Commission does not recognise gender unequal outcomes when men are disadvantaged, even if they arise in an EU flagship policy like Erasmus+ (as documented by Böttcher et al. 2016; Schnepf and Colagrossi 2020). Fourth, the explicit communication about men may shape men’s attitudes towards European integration.

This paper contributes to two literature streams: on gender equality policies and on European institutions. So far, they have not employed the framework of policy target populations and they have not investigated men as a policy target population or problem holders. These methodological and empirical contributions raise new questions about how narratives about men, women and gender equality are constructed, and about their influence on policy design and consequences of gender

equality policies for men. They also suggest another likely mechanism by which the EU gender equality agenda can provoke the –predominantly male– combined backlash against gender equality policies and European integration (Rawłuszko 2021).

In the following sections, I discuss the literature on gender and the European integration, and on the conceptual framework (problem holders, problem solvers, and deservingness). Then, I describe the data and methods. The results section is divided by dimension of analysis: men as problem solvers, men as problem holders, and men's (un)deservingness. The final subsection of the results systematizes the evidence by dividing the analysed period into four phases.

2. Framework

2.1. Gender and the European integration

There is a consensus that the EU has strongly contributed to gender equality[2] in the Member States and third states, with the Commission being 'a key driver' of the process (Guerrina and Wright 2016, p. 302). The literature on the EU gender equality policies stresses the rising role of the Commission and a growing democratic deficit in this field (van der Vleuten and Verloo 2012, Ahrens 2019, Rawłuszko 2021).

Policy documents call gender equality a 'core value' of the EU (e.g. GES2020). According to some critical scholars, this 'foundational myth' is exaggerated by the Commission to gain legitimacy for supranational policy-making (MacRae 2010) and neo-liberal economic policies (Elomäki 2015) or, more specifically, 'increase loyalty and legitimacy among European women' (MacRae 2010, p. 171). Nevertheless, the democratic deficit may contribute to the backlash against gender equality and the EU (Rawłuszko 2021).

Historically, EU policies on gender equality started in 1957 with Article 119 of the Treaty of Rome, which obliged Member States to ensure the principle of equal pay for women and men for equal work. Thus, the gender pay gap and women's participation

[2] For the purposes of my analysis, I simplify the understanding of "gender equality" to a synonym of "equality of women and men." The EU institutions alternate between "gender" and "women and men" (e.g. in translations of the name of the European Institute for Gender Equality) and non-binary genders have not explicitly appeared in the analysed documents.

in the labor market were the main priorities of what we know call gender equality policies. As Sophie Jacquot (2020) writes: “it was not a matter of asserting the principle of gender equality, or of demonstrating a desire for social justice, but rather of avoiding any risk of social dumping in sectors that relied heavily on female labour at the time.

When first introduced, ‘gender mainstreaming’ was meant to go beyond equal treatment and women’s perspective (positive action), by adding the gender perspective (Rees 1998; Booth and Bennett 2002). The first of the three approaches aims at ensuring equal rights and opportunities in the public sphere. The second recognises women as a disadvantaged group, requiring special treatment. The third aims at ‘transform[ing] the organization of society to a fairer distribution of human responsibilities,’ based on the premise that ‘men are not the deliberate oppressors of women, but can also be disempowered by current social arrangements’ (Booth and Bennett 2002, p. 434). The gender perspective includes a transformation of men’s roles, but also ‘addresses the feelings of resentment and alienation caused by the use of positive action approaches’ and avoids ‘plac[ing] women in opposition to men’ (p. 438), while guaranteeing assessment of all policy outcomes for both women and men (Schmidt 2005).

2.2. Problem holders and problem solvers

A successful gender mainstreaming should, thus, include men as ‘problem solvers’ and ‘problem holders.’ However, according to Jacquot (2020), the implementation of the gender perspective has been in decline after the Lisbon Treaty, even though the ‘affirmation of the importance of gender equality as part of the foundational identity of the European Union’ has been strengthening. Indeed, in EU narratives, the meaning of ‘gender’ is often equalized with ‘woman,’ ‘and policies are often evaluated for their effects on women’ (Kronsell 2016a, p. 105).

Yet, ‘men are hardly ever mentioned as problem holders or target groups’ in the EU gender equality policies (Meier et al. 2007, p. 125) and this seems equally true with respect to the academic literature. Only a few studies on gender equality and the EU explicitly focus on men. On the one hand, some papers concentrate on the role of

men and masculinity in the shaping of foreign, security and defence policies (Kronsell 2016a; 2016b). On the other hand, Scambor et al. (2013) broadly discuss some of the domains, in which men typically face a gap (e.g. education and health). However, this way of reasoning has not yet led to any studies on the construction of men or men's disadvantages in gender equality policies. Instead, the main concern underlying those studies is 'how men and boys can contribute to greater gender equality' (Hearn et al. 2021, p. 87). Scambor et al. (2013) caution against discussing 'costs of masculinity' without acknowledging men's privileges, '[adopt] advocacy of "caring masculinities" as a policy aim' (p. 86), and see organisations of men (e.g., fathers' movements) as a 'risk of counteracting feminist visions of gender equality' (p. 10).

This line of research is based on Messner's triangle (1997) designed to evaluate men's social position, attitudes, and movements: men's privileges, costs of masculinity, and diversity of men. This approach gives only limited insight into the evolution of gender equality policies. Men's privileges (women's disadvantages) are at the core of any women's empowerment or gender equality policy, so they are always present in such policies. If a gender equality policy includes men's disadvantages, it usually attributes them to only some men. Thus, diversity of men and costs of masculinity co-occur.

Since the concepts of 'problem holders' and 'problem solvers' (Verloo et al. 2007) have not been clearly defined yet, I define them here. A group is recognised as a 'problem holder' when its problems, disadvantages or interests are acknowledged and treated as policy goals. In other words, when it is treated as a policy target population whose interests should be directly addressed with policies.

In turn, a group is considered a 'problem solver' when it is expected to contribute to or made responsible for the achievement of policy goals. As will be shown, men are assumed to have sufficient agency or power to contribute to gender equality. For instance, men and boys are called 'agents of change' or 'allies.'

So far, the literature has focused on 'men's role in' or 'men's contribution to' gender equality (e.g., Scambor et al. 2013, Hearn et al. 2021). Thus, it occasionally studied men as problem solvers but not as problem holders. The 'problem holder – problem

solver' dimension proposed here is more specific than the 'cost – privilege' dimension from Messner's (1997) triangle. If men are seen as problem solvers, their agency is assumed and policies impose on them responsibility and expectation to act. If men are seen as problem holders, men's needs are recognized and somebody else (e.g., institutions) is made responsible for solving men's problems.

This difference between the existent studies and the current one is my focus on men, rather than masculinities. In particular, Scambor et al. (2014) conclude with a specific prescription: promotion of a "caring masculinity." "Masculinities and femininities refer to the social roles, behaviors, and meanings prescribed for men and women in any society at any time. Such normative gender ideologies (...)" (Kimmel 2001). I believe we should clearly distinguish 'men' as a group of people from 'masculinities' as 'normative gender ideologies.' The concept of 'problem holders' allows to highlight the changes in the Commission's approach to this group rather than the Commission's prescriptive vision of masculinity.

2.3. Deservingness

A key condition affecting provision of welfare policies for a group is the group's deservingness (Oorschot 2000). Oorschot (2000) asks "who gets what and why?" and answers that the needs of people perceived as deserving are more likely to be addressed by the state and society. Deservingness is usually defined by the CARIN conditions: control, attitude, reciprocity, identity, and need. People are perceived as more deserving if they cannot control their situation or are responsible for it; if they are more likeable or conforming to standards; if they have contributed or are likely to contribute to the society in the future; if they are more similar in terms of identity; if they are more in need. In the context of the EU documents on gender equality, men are portrayed as less deserving if they are presented as power holders and agents (in control of their situation), and conforming to standards (e.g., non-violent). In the analysis, I did not find any mentions presenting men's contribution to the society other than the expectation to 'contribute to gender equality', which I treat as a sign of agency. Since I do not compare men with other groups, identity is constant across

documents. The recognition of men as problem holders is a sign of acknowledgment of men's needs and their deservingness.

A change in the construction of the benefiting group is crucial for a change in policy design (Farmbry 2010, Herbst-Debby 2022). Policy makers may influence the social constructions of target populations in order to reconcile incompatible objectives by showing that they 'do good things for good people' (Schneider and Ingram 2017, p. 320). Schneider and Ingram (2017) note that social constructions of target populations in public policies reflect the images, framings and stereotypes that underlay policy-making. But they also send messages about those groups to the public, assigning valence and 'legitimiz[ing] the way they are treated by government' (p. 321). If a public policy constructs a group as deserving, it may encourage the group to further struggle for advantages, while the construction of a group as undeserving or trouble-making may lead the group to disengage.

There is a self-reinforcing loop between the public perception of social groups and political communication about them. On the one hand, the public perception of target groups influences policy-makers' decisions to include certain groups in or exclude them from social programmes (Larsen 2008). Also, bureaucrats may influence policy outcomes by constructing policy target populations (Starke 2020). On the other hand, policy-makers may influence the framing of groups in the media in order to justify their decisions (Esmark and Schoop 2017). So far, the ability of the EU institutions to construct policy target populations has been studied only with respect to Member States (Capucha et al. 2014, Matthijs and McNamara 2015).

When it comes to social groups, exemplary groups perceived as deserving are women, students, children, and families in poverty. In turn, undocumented immigrants, sex offenders or young minority males are typically seen as undeserving (Schneider and Ingram 2017). As a clear example, "able-bodied men have consistently been viewed as undeserving of poor relief" (Watkins-Hayes and Kovalsky 2017, p. 196).

The problem of men's undeservingness has been also recognised by the literature on international migration. The EU communication, including the declared commitment to gender sensitivity, creates a 'hierarchy of suffering' based on gender and age by

contrasting vulnerable women and children with potentially dangerous and undeserving male refugees. In consequence, only women's and children's, but not men's 'special needs' are taken into account in the EU's funding schemes (Welfens 2020). EU politicians, following the public fear of male immigrants, treat single migrant men as a threat to public security (Welfens 2021).

In order to evaluate men's changing deservingness in the analysed documents, I focus on two policy fields: gender-based violence and political power. The former is closely linked to the attribution of amoral behaviour (Esmark and Schoop 2017), which limits the deservingness of a group. The latter questions the need for public support (Oorschoot 2000).

3. Data and methods

In order to show how the construction of men and men's problems has been changing in the EhiU gender equality policies, I track the changes in two series of documents dedicated to gender equality. I analyse all nine Gender Equality Strategies (GESs) of the European Commission since the first one from 1982 and all 24 Annual Reviews (ARs) issued by the Commission since the first one from 1996,[3] with respect to the concepts defined above –men as problem solvers and holders, and men's deservingness. I focus on three areas where men have been recognised as problem holders at some point in time –occupational segregation, education, and health– and two that influenced men's construction as politically powerful and undeserving: decision-making and gender-based violence.

All GESs besides GES2016 took the form of Commission communication and were adopted in the Commissioners' College as official positions of the European Commission. Some of them were later endorsed by a Council Resolution and Council Decision (Ahrens 2019). ARs are also produced by the European Commission as staff working documents. In 2010, the responsibility for gender equality was transferred from Directorate General for Employment to Directorate General for Justice (and Consumers) (Ahrens 2019). Unlike GESs, AR2022 and AR2023 include an explicit note that "This document should not be considered as representative of

[3] No ARs were issued for the years 2003, 2009, 2016 and 2020.

the European Commission's official position." Nevertheless, ARs are often cited by scholars, think tanks and in further EU official documents. For instance, AR2021 was cited in 177 publications in Google Scholars, and in European Commission's staff working documents (among others, accompanying proposal for a directive on standards for equality bodies). Thus, they influence European laws, national equality policies, but also public and scholarly debate.

Although ARs usually follow the structure and topics set by GESs, the distribution of attention to specific issues varies from one year to another. They also contain specific policy recommendations, share examples of policies of Member States considered as good practices, address current challenges (like the pandemic or economic crisis), and present the newest data. The analysis of ARs allows to track changes between the multi-year GESs and in specific policy fields. The full list of GESs and ARs is presented in Appendix 1.

The directed qualitative content analysis (Hsieh and Shannon 2005) of the documents consisted of two steps. First, I searched for phrases mentioning words referring to men ('male,' 'man,' 'men,' 'boy,' 'father'). This allowed to identify the relevant policy fields, and to select parts of the documents dedicated to them (education or school, violence, health or life expectancy, power, parental leave). On this basis, I established whether each document: (i) mentions men's disadvantages, defines them as policy goals and proposes solutions, (ii) mentions men as agents for or contributors to gender equality. The former reflects the recognition of men as problem holders, and the latter as problem solvers. The in-depth analysis of document parts dedicated to violence and power served to discover men's construction as (un)deserving. Second, I summarised the changes over time on the four dimensions and divided the analysed timespan into four distinct periods. As a supportive piece of evidence, I provide a quantitative analysis of GESs and ARs. Appendix 2 contains a table with the 20 most frequent words appearing in each document to show the evolution of dominant themes over time.

4. Results

4.1. Men as problem solvers

The first three GESs focused mainly on women's employment. Men –missing in the titles[4]– were mentioned only in three ways: (i) in phrases like 'equality of women and men,' (ii) as a better-off comparison group, and (iii) as a group for which some jobs and positions had been traditionally reserved. Those three contexts dominate in the GESs and ARs until today.

GES1996 opened paths to the construction of men as problem solvers and, later, problem holders. That strategy introduced the word 'gender' and the idea of gender mainstreaming. It underlined the 'gender perspective' understood as 'taking into account [policies'] possible effects on the respective situations of men and women' (p. 2). Men were to be encouraged to contribute more to care work, and (similarly to women) to join sectors of the economy where they had been traditionally underrepresented.

Since then, calls for stimulating men to take responsibility for housework and care for children and other dependents have been a constant part of GESs and ARs. However, while GES1996 addressed women's and men's difficulties to reconcile work with family life equally (guaranteeing the rights of fathers as much as those of mothers', p. 5), subsequent documents focused on men's roles as a solution to women's disadvantages. GES2000 blamed the 'outdated male breadwinner model' for women's limited access to social rights (p. 9). Most recently, GES2020 mentioned parental leave as a means for 'addressing the gender gaps in the labour market' (p. 8).

Therefore, although technically such measures target men, women's professional achievements are the underlying goal. The alternative framing of 'giving fathers back to the family,' uniquely adopted in AR2001 (p. 23) and focusing on men's difficulty to participate in family life, did not persist. Thus, parenthood policies have generally constructed men as problem solvers.

[4] Only since 1991, the titles of GESs have included either "women and men" or "gender." The binary form dominated as raising visibility of women, following the calls by the European Women's Lobby (Ahrens 2019).

Men's role as problem solvers was not a constant in the analysed documents. Only in AR2005 it earned a separate section. The document called to include men in designing GESs. Moreover, it underlined that men's roles were also changing and, beyond fatherhood and care policies, proposed to target men with actions promoting change of workplace culture. Although dismantling stereotypes (in general, in specific sectors of the economy, or in education) has been a constant goal of GESs, only some documents underlined targeting men as a solution (AR2005, GES2006, AR2007, AR2008, GES2010, GES2016). Since GES2020, the Commission has used the concept of 'masculinities' to denote norms that should be changed, mostly in the context of gender-based violence.

In recent years, men (and even boys) have been consistently portrayed as 'agents for change' or 'allies.' The Commission expects them to use their power stemming from their position of 'senior leaders' (AR2018) or directly from their gender (AR2019-AR2023).

In sum, the construction of men as problem solvers was introduced in 1996 and persisted in the goals related to the reconciliation of work with family life. Men's role in dismantling stereotypes was sometimes mentioned between 2005 and 2016. In the most recent documents, the concept of 'masculinities' was introduced and the expectations of men's active contribution to gender equality have been more consistently underlined.

4.2. Men as problem holders

In the 1980s and 1990s, no disadvantages of men fell under the gender equality framework. Only in AR2001, the Commission referred to National Action Plans identifying men's predominance among groups at risk of poverty: homeless people, (ex-)offenders, and early school leavers. Nevertheless, the report did not mention any specific measures targeting them. Therefore, although men's problems were identified by Member States and incidentally mentioned by the Commission, tackling them was not a policy goal.

Occupational (and later, educational) gender segregation was a constant concern in ARs since the first one published in 1996. However, the underrepresentation of men

in some sectors was addressed only marginally. Beyond the mentioned possibility to support men in pursuing non-traditional careers in AR1996,[5] AR2000 described projects from Denmark and Finland encouraging boys' to move into traditionally female areas. But the reduction of jobs in the 'male-dominated manufacturing sector' was mentioned in AR1998 only as an antecedent of possible future problems of women, and not as a men's disadvantage to be tackled.

It is also through occupational segregation that gender gaps in education (disadvantaging boys and men) were noticed in AR2000, although initially just to highlight the unfairness of the gender pay gap (disadvantaging women). Only in AR2004, the 'major changes in education enrolment,' school drop-out, and tertiary graduation were admitted, opening the path to recognition of men as problem holders. The related statistics were again presented in AR2005, but the education gender gaps were assessed as closing (i.e., from women's perspective). So, men's problems were recognised as existing, but not yet as requiring policy intervention. References to the gender gap among tertiary graduates –with a counterbalancing remark about women's underrepresentation either among PhDs or fields presented as most profitable– were repeated in ARs every year until 2008.

GES2006 was the first GES to recognise men as problem holders. It mentioned the goal of 'encouraging young women and men to explore non-traditional educational paths,' and regarded as important 'to promote men's presence in sectors traditionally occupied by women' (p. 9). It also proposed to tackle the problem of early school leaving, more common among boys.

The balanced approach to gendered problems was continued in GES2010, paying more attention to boys' and men's disadvantages: 'literacy rates, early school-leaving and occupational health' (p. 11). It also announced two reports focusing on men, indeed published later: on the role of men in gender equality (Scambor et al. 2013) and on men's health (Commission 2011). Although in GES2010, the promotion of non-traditional occupations was limited to women, the accompanying staff working document on 'Actions to implement the Strategy for Equality between Women and Men 2010-2015' mentioned 'presence of men in initial teaching' and 'more men in the

[5] "The Commission actively encouraged the project applicants to develop positive action projects intended to encourage women (or men) to participate in areas where they are traditionally underrepresented" (p. 44).

classrooms' as goals (p. 9). It also foresaw to 'issue a proposal for a Council Recommendation on Early School Leaving addressing inter alia the issue of the higher drop-out rate among boys' (p. 17).

This new approach towards men's disadvantages in education persisted in subsequent ARs. AR2010 noticed that only few policies fighting gender segregation implemented by Member States focus on men. AR2012 discussed boys' underperformance in education in detail, including early school leavers, tertiary education completion, reading skills, and fields where men were underrepresented. The call to tackle gender inequalities in education treated constraints faced by boys and girls equally. The Commission also shared that the Danish national gender equality plan focused on 'failing boys' in education. AR2013 detailed the gender gaps, referring to debates over 'the so called boys' crisis' (p. 23). It 'recall[ed] the urgency of engaging boys in schools and motivating them to read, changing reading material and introducing engaging male role models' (p. 25).

Those disadvantages of boys were still mentioned in new Commissioner Věra Jourová's introduction to AR2014, even though the document discussed solutions targeting women only. This contrasted with a reference to Finland as a country being 'ahead in developing a more comprehensive approach to men's issues' (p. 11). A similar approach –recognising problems without proposing solutions– could be seen with respect to occupational segregation. In AR2013, the Commission admitted that 'Segregation is not always associated with disadvantage for women. Some male-dominated jobs are also associated with poor working conditions and low wages' (p. 26), but concluded only that segregation leads to undervaluation of women's work.

GES2016 started a new period, in which men's and boys' disadvantages fell out of gender equality policies. Although it repeated that '[b]oys, especially from disadvantaged backgrounds, drop out of school more than girls and encounter many more difficulties in reading' (p. 7), it did not foresee any action tackling this problem. Although the inclusion of gender mainstreaming into the Erasmus+ programme was underlined, the gender gap in participation among students was not mentioned.

The following AR2015[6] did not present any data on education gender gaps, and mentioned them only as a positive factor limiting the gender pay gap. In contrast with

[6] GES2016 was published in December 2015 and AR2015 in 2016.

the situation of European boys, tackling a symmetrical disadvantage of girls in third countries was recognised as a goal in external policy. In AR2017, the advantage of European girls in reading was acknowledged but juxtaposed with the underrepresentation of girls among the top-achieving students in science. In AR2018, the word 'boy(s)' did not appear even once, as opposed to 'girl(s)' used 40 times. In AR2019, the Commission recognised men's underrepresentation in some fields but committed only to increasing girls' participation in Information and Communication Technologies (ICT) and Science, Technology, Engineering and Mathematics (STEM). Boys' limitations in career choices were only discussed in the description of a project realized in Austria.

This process of exclusion continued with GES2020 even denying the education gender gap ('While the gender gap in education is being closed […],' p. 2, i.e. taking the default perspective of women's underachievement). The unique case where a problem symmetrically affecting girls and boys was shown in GES2020 –boys expecting careers in engineering and science, and girls in health professions– was used to show that stereotypes should be changed, but no policy was proposed to help boys in choosing a non-traditional career. Furthermore, the advantage of girls in digital literacy was used as an argument to promote career in the digital sector among women.

In AR2023, data on education gender gaps are presented only in a footnote (p. 51). In turn, the problem of gender gaps in education has been recognised as one of the goals to be addressed by the Working Group on Equality and Values within the European Education Area. However, in response to a formal question about Commission's action regarding boys' and men's disadvantages asked by two Members of the European Parliament, the Commissioner Mariya Gabriel dismissed the gender imbalance in Erasmus+ and did not referred to any policies tackling these issues (European Commission 2022).

A similar process occurred regarding occupational segregation. In AR2017, the issue of work-life balance in the male-dominated sector of transport was framed as 'women in transport,' and not as a problem of male workers. Similarly, the underrepresentation of women in transport, agriculture, fishery, maritime, and energy sectors has been raised in ARs until 2022. In turn, in AR2022, men's underrepresentation among (early

childhood) teachers and in the care sector, returned to ARs with a call to ‘mak[e] certain occupations more appealing for men’ (p. 29). The AR2023 admitted that national policies often address the underrepresentation of women in STEM or ICT, but not the reversed problem in ‘education, health and welfare activities’ (p. 30). Future ARs will show if this approach persists and spreads to other fields.

Similarly, in the field of health, men’s disadvantages first appeared as policy goals, and later only as a means of highlighting women’s disadvantages. Until AR2000, the analysed documents comprised consistently, but exclusively, reproductive health and working conditions of pregnant women. Later, only the annex to AR2005 exceptionally presented the data on the gender gap in (healthy) life expectancy, but without any discussion.

Health was reintroduced in AR2008 with a symmetrical prescription: ‘The approach to issues of health and well-being at work (…) should take account of the specific situations and problems of women and men’ (p. 7). AR2010 highlighted the life expectancy gender gap, and poor health as a major obstacle to men’s employment. The analysis was deepened in AR2011, following the publication of the report on men’s health requested by the Commission, with a call for ‘targeted health information aimed at men.’

However, the topic was not raised again in AR2012 and AR2013, while in 2014, the field of health was reduced only to the need for more medical research focusing on women. In the following years, health was mostly mentioned as a problem of women outside of the EU. Similarly, GES2016 discussed only sexual and reproductive health, including maternal health and results of gender-based violence. Life expectancy gender gap was mentioned only as a concern in the context of women’s lower pensions. GES2020 mentioned reproductive health and announced that gender would be taken into account in the EU Beating Cancer Plan, while the EU Drug Agenda would ‘address gender-specific challenges faced by women and girls’ (p. 16). So, the life expectancy gender gap and occupational health disappeared.

The paragraphs dedicated to health in the most recent ARs provide the clearest examples of the difference in treatment of vulnerable women and men. Applying an intersectional approach, ‘[t]he Commission encourages EU Member States to (...)

increase Roma women's life expectancy by 5 years (…)' (AR2021, p. 53). In contrast, the life expectancy gender gap has not been addressed at all since AR2012. Although large part of AR2022 is dedicated to the gendered impact of Covid, including the mental health of women, gender differences in mortality (disadvantaging men) were not considered. AR2022 did not refer to the risky behaviour and men's lack of information about health, identified as challenges a decade before, but mentioned boys as targets of vaccination against HPV (i.e., a problem affecting mostly girls and women). AR2023 proposes to expand cancer screening programmes, among others, with the prostate cancer. It also recalls that the Europe's Beating Cancer Plan calls for gender-specific measured. However, the graph showing that men's mortality due to (any) cancer is notably higher in all EU Member States, was left without any comment. So, men are not explicitly named as a target of health policies.

The exceptional references to other men's disadvantages reflect the same pattern. AR2010 underlined the benefits of the Europe 2020 Strategy for both men and women under the risk of poverty or exclusion. In turn, AR2017 mentioned men's prevalence in homelessness, but only as a background for women's higher exposition to 'housing difficulties.' Therefore, no special policies tackling men's vulnerability to poverty and homelessness have ever been proposed in ARs. AR2023 underlines the "Russia's war of aggression against Ukraine (…) has a particular impact on women and girls" (p. 3) and the information that men were not allowed to flee the invaded country is mentioned only in brackets.

4.3. (Un)deservingness of men

For most of the investigated period, references to men were not value-laden. Men served as a better-off comparison group to set goals for women's achievement. However, the increasing salience of gender-based violence and men's political power in GESs implied a negative portrayal of men as potential perpetrators of violence and power-holders. Therefore, I focus here on the construction of men in the sections of the analysed documents dedicated to violence and political power.

The issue of violence was first introduced in GES1996 as 'violence against women' and 'trafficking of persons' (with a particular focus on 'prostitution networks,' pp. 10-11). Later documents used also the terms of 'domestic violence,' and 'trafficking in women and children.' Although only women and children were recognised as victims of such violence, with the exception of AR1998, the proposed solutions were general and did not specify men as targets of policies, nor masculinities as part of the problem. The introduction of the term 'gender-related violence' (GES2000) and 'gender-based violence' (GES2006) –without any specific definition or with a relatively balanced wording: 'Women are the main victims of gender-based violence' (p. 8)– opened the path to recognition of male victims of gender-based or domestic violence. When proposing policies addressing victims and perpetrators in GES2006, the Commission did not specify their gender.

While GES2010 turned back to 'violence against women,' the attention was paid to the victims rather than to the perpetrators of violence. In the same chapter as violence, the Commission discussed gender-specific health problems and announced the Men's Health report. The calls for action in favour of men and boys included in GES2006 and GES2010 and subsequent ARs show that the Commission clearly perceived and communicated about them as deserving of public policies in the period from 2006 to 2015.

Although GES2016 generally used the term 'gender-based violence' (without defining it), the part on EU gender equality funds deployment mentions only 'violence against women.' Similarly, the defined measures of progress in this field counted only female victims. So, even if gender-based violence could include male victims, they were not treated as a target population of anti-violence policies.

This approach further clarified in GES2020, which started with a chapter on gender-based violence, focusing on female victims only. In the entire GES2020, the only policy proposal that explicitly targets boys and men is education aiming at 'violence prevention focusing on men, boys and masculinities' (p. 4). Thus, men were seen as potential perpetrators and problem solvers. Such a beginning of GES2020 increased the salience of gender-based violence, and set a clear distinction between women-as-victims (dependents) and men-as-perpetrators, i.e., a non-deserving group.

The increasing salience of violence is also visible in the frequency of words used in the documents (Appendix 2). Violence appeared among the 20 most common words in AR2012 and remained there in all subsequent documents, including GES2016 and GES2020. Since GES2020 and AR2021, the word 'violence' is more frequently used than 'work,' becoming the most common word denoting a policy field. For comparison, 'health' never appeared among the most common words, and 'education' only in GES1986.

Gender gaps in political power were already addressed in the first GES. and have always been mentioned since then. In GES1982, the Commission promised to aim at equal opportunities among its own staff and recognised the importance of women's representation in policy-making. In GES1986, political parties were mentioned, and in GES1991 a separate chapter was dedicated to 'women in the decision-making process.'

The next cornerstone was AR2010, subtitled 'The gender balance in business leadership.' Beyond elevating part of the issue to the title, it also introduced a new way of framing it. While earlier documents talk about women's underrepresentation, AR2010 discusses the 'over-representation of men in power and decision-making' (p. 55). This framing of the problem as 'too many men' or 'men outnumber women,' in contrast with the earlier 'too few women,' was repeated in a few later documents (AR2012, AR2014, GES2016) and has become a constant part in the most recent ARs (2019-2023).

GES2020 aimed 'to redistribute power' (p. 15), and discussed the negative consequences of men holding power for a long time. This stability of men's advantage in institutions was contrasted with the appraisal of young women as political outsiders, whose role 'has been remarkable in leading the push for change' (p. 15), while '[t]he #MeToo movement [...] has empowered women' (p. 2). Such statements oppose men's construction as undeserving power holders to women's image as dependents, i.e., a deserving group of low political power.

Importantly, men were portrayed as uniformly privileged. While the report by Scambor et al. (2013) encouraged institutions to adopt an intersectional approach to men's issues, GES2020 mentions intersectionality only to state that '[w]omen are a

heterogeneous group and may face intersectional discrimination' (p. 16). In this way, although intersectionality is one of the fundaments of the gender perspective within gender mainstreaming, and might help in discovering some dependent groups of men, the Commission discarded such a possibility.

In consequence, the advantage in power and agency is equally ascribed even to the most vulnerable groups of men and, interestingly, to boys. In AR2019, the word 'boy(s)' was mentioned only once (as opposed to 'girl(s)' 28 times): as 'positive agents of change' (p. 51). AR2022 mentioned an international programme targeting 'men and boys at risk or socially excluded.' The goal of the programme was, however, not to reduce that risk and exclusion, but to combat violence resulting from 'violent masculinities' (p. 22). Although AR2021 recognised that '[g]ender stereotyping (…) harms not only women, but men as well,' this is only to provide an argument for 'involving men as allies' and 'agents of change (...) using positively their position of influence and power as well as their privileged status (…)' (p. 18). The treatment of men and boys as agents strengthens the argument that men are not seen as a target population of gender equality policies but as a uniform group of problem solvers.

In sum, in terms of the CARIN conditions defining men's deservingness, I conclude that the changes in narratives made men less deserving. Men have been portrayed as too powerful since AR2010 and as perpetrators of gender based violence since GES2016. Since then, both topics gained salience. Thus, men are increasingly shown to be in control of their needs and less conforming to standards (less likeable). In the most recent documents, even the most vulnerable men are uniformly constructed as agents, not as a group requiring support.

4.4. Periodisation

The results show four distinct phases of men's construction in the Commission's communication. They coincide with the periodisation by Ahrens (2019) who focused on the changes in choice of policy instruments.

Table 1. Summary of the three dimensions of analysis in GESs.

	GES1982 GES1986 GES1991	GES1996	GES2000	GES2006	GES2010	GES2016	GES2020
Men as problem solvers	No	Yes	Yes	Yes	Yes	Yes	Yes
Men as problem holders	No	No	No	Yes	Yes	No	No
Deserving-ness of men	Neutral	Neutral	Neutral	Neutral	Partially negative	Negative	Negative

In the first period, until 1995, men were not included. They appeared as problem solvers with the introduction of the gender perspective in 1996 and discussions over more equal involvement of men in housework and care. This role persisted until the most recent documents, which ascribe even more power and agency to men, also beyond family.

Crucially, between 2006 and 2015, men were recognised as problem holders. Only in that period, the Commission consistently engaged in addressing men's disadvantages and communicated about them. Nevertheless, the seeds of the future return to constructing men as –at most– problem solvers were probably sown then. AR2008 was the first to emphasise the general 'role of men in promoting equality' (p. 9) and AR2010 underlined the 'over-representation of men in power' (p. 55).

The following GES2016 marked a sharp change in the construction of men by the Commission. Men's disadvantages were no longer addressed. Men's deservingness vanished in the final period, with the increasing attention to violence against women and its perpetrators, and to men's disproportionate power. This reversal of attitude is even clearer when it comes to boys. While the Commission discussed concerns

about the ‘failing boys’ in AR2012 and the ‘boys’ crisis’ in AR2013, in AR2019, it only expected boys to use their power and contribute as ‘agents of change.’

In sum, the introduction of the ‘gender perspective’ in the 1990s allowed to construct men as problem solvers, and later, as problem holders. Until 2015, they were seen as deserving of public policies, particularly in the areas of education and health. However, the increasing focus on men’s and boys’ power and their potential to do harm shifted the construction of men closer to both powerful and undeserving of benefiting from EU gender equality policies. Regardless of their social status, they have been portrayed as allies and agents of change, i.e., problem solvers. Men’s disadvantages disappeared from GESs and ARs.

5. Discussion

I document a U-turn in the approach towards men in gender equality strategies produced by the European Commission. While since the 1980s, women have consistently emerged as a deserving and politically powerless policy target population (which can be associated with the ‘women-as-victim’ frame), the construction of men as a policy target group has been volatile. Men appeared first as problem solvers in 1996. Between 2006 and 2015, but not later, the Commission treated men and boys also as problem holders and addressed issues like early school-leaving, deficiencies in literacy, and occupational health.

These findings confirm Jacquot’s (2010, 2015, 2020) diagnosis of the gender mainstreaming crisis: the ‘gender perspective’ is not applied as initially intended. The increasing attention paid to perpetrators of gender-based violence, as well as the narrative turn from underrepresentation of women to the over-representation of men in decision-making, contributed to the construction of men as undeserving. After 2016, the Commission no longer intended to tackle men’s disadvantages. The documents increasingly focused on problems with men, men’s power, and men’s expected contributions to gender equality. The lack of deservingness did not allow men to maintain their position as problem holders. In turn, the political power ascribed to men (and boys) supported their construction as problem solvers. In the areas of

gender-based violence and work-life balance, men are targeted with actions motivated by attempts to solve problems held by women.

In the framework of Messner's (1997) triangle, one could say that from 2006 to 2015, the Commission recognised the costs of masculinity and differences among men. Later, it focused again on men's privileges. Men are no longer seen as a diverse group, as the intersectional approach is used only to focus on disadvantages of subgroups of women. Thus, I show that the move away from the 'gender perspective' and broader transformation of gender roles found in earlier studies (Woodward 2012, Jacquot 2020, Hartlapp et al. 2021) may be particularly harmful for men.

Also, I demonstrate that the Commission has the power to flexibly construct certain groups as deserving or undeserving, and problem holders or solvers. In this way, without democratic control, it may actively shape the public perception of specific groups, and the distribution of benefits from European integration. Although the EU institutions publish data on the disadvantages of boys and men (e.g. within the Gender Equality Index), those problems are rarely reflected in ARs, and no longer considered as policy goals in GESs. But that power of construction certainly goes beyond women and men, leading to a more general question: which groups does the Commission construct as deserving of EU policies?

The consequences of the construction of target populations at the European level on policy design and implementation in Member States and EU agencies, as well as on policy outcomes in specific policy fields (most importantly, education and health) require further research. The academic community should be particularly interested in the impact of men's construction on gender equality policies being currently adopted by universities under Horizon 2020, or the Commission's lack of interest in addressing men's underrepresentation among Erasmus+ students (Commission 2022).

My findings suggest that public administrations struggle to legitimise policies supporting one policy target population without negatively affecting others. The salience of gender, content of gender equality policies and policy-making process may incite a backlash (Rawłuszko 2021, Weeks and Allen 2022). It remains to be studied how much the social construction of men by the EU has influenced the

public opinion on men, gender and European integration. Furthermore, the presented typology of target populations offers a promising path for research on movements against gender equality. For instance, their strategy of self-victimisation –exposed by Kantola and Lombardo (2020)– may be explained as an attempt to counteract the current trend, and improve the deservingness of men.

The puzzle remains: why did the Commission change its construction of men? What is the role of various actors and factors –other EU institutions, attitudes of EU officials and individual Commissioners, political parties, lobbies, public opinion, salience of gender, lack of democratic control, political cleavages or academic discourses– in shaping narratives about gender, and men's deservingness in particular? Although the Commission is believed to silence gender issues in its economic policies due to legitimacy concerns (O'Dwyer 2018), targeting women or signalling commitment to equality could be perceived as a legitimacy-seeking move (as suggested, e.g., by MacRae 2010).

Finally, in their classic book, Verloo et al. (2007, p. 285) ask: 'Who Has Voice, And What Does That Mean?' Several GESs later, it is time to ask how the perspectives of men are invited and reflected within the gender equality agenda of the EU. Future studies may investigate how these discourses translate into national policies or other policy fields and to what extent women's and men's interests and preferences are represented in the European legislative process. In other words, they may analyse EU policies with the lens of substantive representation of women and men.

Also, scholars must critically assess their own role in and responsibility for constructing policy target populations. The EU officials do make use of research on the EU (Duina 2021) and many scholars have been actively involved in debating and shaping EU gender equality policies. Has the report on the 'role of men in gender equality' by Scambor et al. (2013) helped in shifting attention from men as problem holders to men as problem solvers, without succeeding in promoting the intersectional approach? The next report requested by the Commission –'New Visions for Gender Equality' (Crowley and Sansonetti 2019)– no longer mentioned any of the men's disadvantages identified in GES2006, GES2010, and by Scambor et al. (2013).

So far, the literature has usually equated gender with women, and feminist studies with gender studies (Kronsell 2016a). The re-inclusion of men's issues and perspectives in both research and policy-making can surely help to revive, complete and legitimise gender equality policies (Booth and Bennett 2002).

References

Abels, G., Krizsán, A., MacRae, H., & Vleuten, A. van der. (2021). *The Routledge Handbook of Gender and EU Politics*. Routledge.

Ahrens, P. (2019). The birth, life, and death of policy instruments: 35 years of EU gender equality policy programmes. *West European Politics*, *42*(1), 45–66. https://doi.org/10.1080/01402382.2018.1490561

Booth, C., & Bennett, C. (2002). Gender Mainstreaming in the European Union: Towards a New Conception and Practice of Equal Opportunities? *European Journal of Women's Studies*, *9*(4), 430–446. https://doi.org/10.1177/1350506802009004401

Böttcher, L., Araújo, N. A. M., Nagler, J., Mendes, J. F. F., Helbing, D., & Herrmann, H. J. (2016). Gender Gap in the ERASMUS Mobility Program. *PLOS ONE*, *11*(2), e0149514. https://doi.org/10.1371/journal.pone.0149514

Busuioc, M., & Rimkutė, D. (2020). The promise of bureaucratic reputation approaches for the EU regulatory state. *Journal of European Public Policy*, *27*(8), 1256–1269. https://doi.org/10.1080/13501763.2019.1679227

Capucha, L., Estêvão, P., Calado, A., & Capucha, A. R. (2014). The Role of Stereotyping in Public Policy Legitimation: The Case of the pigs Label. Comparative Sociology, 13(4), 482–502. https://doi.org/10.1163/15691330-12341316

Collinson, D., & Hearn, J. (1994). Naming Men as Men: Implications for Work, Organization and Management. *Gender, Work & Organization*, *1*(1), 2–22. https://doi.org/10.1111/j.1468-0432.1994.tb00002.x

Crowley, N., & Sansonetti, S. (2019). *New visions for gender equality 2019*. Publications Office of the European Union. https://data.europa.eu/doi/10.2838/307975

Duina, F. (2021). Is academic research useful to EU officials? The logic of institutional openness in the Commission. *Journal of European Public Policy*, *0*(0), 1–19. https://doi.org/10.1080/13501763.2021.1968016

Elomäki, A. (2015). The economic case for gender equality in the European Union: Selling gender equality to decision-makers and neoliberalism to women's organizations. *European Journal of Women's Studies*, *22*(3), 288–302. https://doi.org/10.1177/1350506815571142

Esmark, A., & Schoop, S. R. (2017). Deserving social benefits? Political framing and media framing of 'deservingness' in two welfare reforms in Denmark. *Journal of European Social Policy*, *27*(5), 417–432. https://doi.org/10.1177/0958928716688262

European Commission (2010). *Actions to implement the Strategy for Equality between Women and Men 2010-2015*.

European Commission (2011). *The State of Men's Health in Europe*.

European Commission (2022). *Answer given by Ms Gabriel on behalf of the European Commission. Question reference: E-000987/2022.* https://www.europarl.europa.eu/doceo/document/E-9-2022-000987-ASW_EN.html

Farmbry, K. (2010). Administration and the other: Explorations of diversity and marginalization in the political administrative state (1st pbk. ed). Lexington Books.

Guerrina, R., & Wright, K. A. M. (2016). Gendering normative power Europe: Lessons of the Women, Peace and Security agenda. *International Affairs*, *92*(2), 293–312. https://doi.org/10.1111/1468-2346.12555.

Hartlapp, M., Müller, H., & Tömmel, I. (2021). Gender Equality and the European Commission. In G. Abels, A. Krizsán, H. MacRae & A. van der Vleuten (Eds.), *The Routledge Handbook of Gender and EU Politics* (pp. 80–92), Routledge.

Hearn, J. E., Wojnicka, K., Šmídová, I. & Pringle, K. (2021). The EU, men and masculinities. In G. Abels, A. Krizsán, H. MacRae & A. van der Vleuten (Eds.), *The Routledge Handbook of Gender and EU Politics* (pp. 80–92), Routledge.

Herbst-Debby, A. (2022). (De)legitimization of single mothers' welfare rights: United States, Britain and Israel. Journal of European Social Policy, 32(3), 302–316. https://doi.org/10.1177/09589287221076743

Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, *15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687

Jacquot, S. (2010). The Paradox of Gender Mainstreaming: Unanticipated Effects of New Modes of Governance in the Gender Equality Domain. *West European Politics*, *33*(1), 118–135. https://doi.org/10.1080/01402380903354163

Jacquot, S. (2015). *Transformations in EU Gender Equality: From emergence to dismantling*. Springer.

Jacquot, S. (2020). European Union Gender Equality Policies Since 1957. In *Encyclopédie d'histoire numérique de l'Europe* [online]. https://ehne.fr/en/node/12435.

Kantola, J. & Lombardo, E. (2020). Strategies of Right Populists in Opposing Gender Equality in a Polarized European Parliament. *International Political Science Review*: 0192512120963953.

Kimmel, M. (2001). Masculinities and Femininities. In *International Encyclopedia of the Social & Behavioral Sciences*. https://doi.org/10.1016/B0-08-043076-7/03977-2.

Kronsell, A. (2016a). The Power of EU Masculinities: A Feminist Contribution to European Integration Theory. *JCMS: Journal of Common Market Studies*, *54*(1), 104–120. https://doi.org/10.1111/jcms.12328

Kronsell, A. (2016b). Sexed Bodies and Military Masculinities: Gender Path Dependence in EU's Common Security and Defense Policy. *Men and Masculinities*, *19*(3), 311–336. https://doi.org/10.1177/1097184X15583906

Larsen, C. A. (2008). The political logic of labour market reforms and popular images of target groups. *Journal of European Social Policy*, *18*(1), 50–63. https://doi.org/10.1177/0958928707084451

Lombardo, E., & Meier, P. (2008). Framing Gender Equality in the European Union Political Discourse. *Social Politics: International Studies in Gender, State & Society*, *15*(1), 101–129. https://doi.org/10.1093/sp/jxn001

MacRae, H. (2010). The EU as a Gender Equal Polity: Myths and Realities. *JCMS: Journal of Common Market Studies*, *48*(1), 155–174. https://doi.org/10.1111/j.1468-5965.2009.02046.x

Matthijs, M., & McNamara, K. (2015). The Euro Crisis' Theory Effect: Northern Saints, Southern Sinners, and the Demise of the Eurobond. Journal of European Integration, 37(2), 229–245. https://doi.org/10.1080/07036337.2014.990137

Meier, P., Peterson, E., Tertinegg, K. & Zentai, V. (2007). The Pregnant Worker and Caring Mother: Framing Family Policies across Europe. In M. Verloo (Ed.),

Multiple Meanings of Gender Equality: A critical frame analysis of gender policies in Europe (pp. 109–140). Central European University Press.

Messner, M.A. (1997). *Politics of Masculinities: Men in Movements*. AltaMira Press.

O'Dwyer, M. (2018). Making sense of austerity: The gendered ideas of European economic policy. *Comparative European Politics*, *16*(5), 745–761. https://doi.org/10.1057/s41295-018-0129-y

van Oorschot, W. (2000). Who Should Get What, and Why? On Deservingness Criteria and the Conditionality of Solidarity Among the Public. Policy & Politics, 28, 33–48. https://doi.org/10.1332/0305573002500811

Rawłuszko, M. (2021). And If the Opponents of Gender Ideology Are Right? Gender Politics, Europeanization, and the Democratic Deficit. *Politics & Gender*, *17*(2), 301–323. https://doi.org/10.1017/S1743923X19000576

Rees, T. (1998). *Mainstreaming Equality in the European Union*. Routledge. https://doi.org/10.4324/9780203010044

Scambor, E., Wojnicka, K. & Bergmann, N. (Eds.). (2013). *The role of men in gender equality: European strategies & insights.* Publications Office. https://data.europa.eu/doi/10.2838/14738

Scambor, E., Bergmann, N., Wojnicka, K., Belghiti-Mahut, S., Hearn, J., Holter, Ø. G., Gärtner, M., Hrženjak, M., Scambor, C., & White, A. (2014). Men and Gender Equality: European Insights. *Men and Masculinities*, *17*(5), 552-577. https://doi.org/10.1177/1097184X14558239

Schmidt, V. (2005). *Gender mainstreaming -- an innovation in Europe? The institutionalisation of gender mainstreaming in the European Commission*. Barbara Budrich Publishers.

Schneider, A., & Ingram, H. (1993). Social Construction of Target Populations: Implications for Politics and Policy. *American Political Science Review, 87*(2), 334–347. https://doi.org/10.2307/2939044

Schneider, A., & Ingram, H. (2017). Framing the target in policy formulation: The importance of social constructions. In M. Howlett & I. Mukherjee, *Handbook of Policy Formulation* (pp. 320–336). Edward Elgar Publishing. https://doi.org/10.4337/9781784719326.00028

Schnepf, S. V., & Colagrossi, M. (2020). Is unequal uptake of Erasmus mobility really only due to students' choices? The role of selection into universities and fields

of study. *Journal of European Social Policy*, *30*(4), 436–451. https://doi.org/10.1177/0958928719899339

Starke, A. M. (2020). Poverty, Policy, and Federal Administrative Discourse: Are Bureaucrats Speaking Equitable Antipoverty Policy Designs into Existence? *Public Administration Review*, *80*(6), 1087–1099. https://doi.org/10.1111/puar.13191

van der Vleuten, A., & Verloo, M. (2012). Ranking and benchmarking: The political logic of new regulatory instruments in the fields of gender equality and anti-corruption. *Policy & Politics*, *40*(1), 71–86. https://doi.org/10.1332/030557310X550097

Verloo, M., Bustelo, M. & Lombardo, E. (2007). Conclusions on Framing Gender Inequality as a Policy Problem in Europe. In M. Verloo (Ed.), *Multiple Meanings of Gender Equality: A critical frame analysis of gender policies in Europe* (pp. 281–301). Central European University Press.

Watkins-Hayes, C., & Kovalsky, E. (2016). The Discourse of Deservingness: Morality and the Dilemmas of Poverty Relief in Debate and Practice. In D. Brady & L. M. Burton (Eds.), The Oxford Handbook of the Social Science of Poverty (p. 0). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199914050.013.10

Weeks, A.C., & P. Allen. (2022). Backlash against “Identity Politics”: Far Right Success and Mainstream Party Attention to Identity Groups. *Politics, Groups, and Identities*: 1–19. https://doi.org/10.1080/21565503.2022.2065318.

Welfens, N. (2020). Protecting Refugees Inside, Protecting Borders Abroad? Gender in the EU’s Responses to the ‘Refugee Crisis’. *Political Studies Review*, *18*(3), 378–392. https://doi.org/10.1177/1478929919887349.

Welfens, N. (2021). Whose (in)security counts in crisis? Selection categories in Germany’s humanitarian admission programmes before and after 2015. *International Politics*. https://doi.org/10.1057/s41311-021-00311-6.

Woodward, A.E. 2012. ‘From Equal Treatment to Gender Mainstreaming and Diversity Management’. In *Gendering the European Union: New Approaches to Old Democratic Deficits*, Gender and Politics Series, eds. G. Abels & J.M. Mushaben. London: Palgrave Macmillan UK, 85–103. https://doi.org/10.1057/9780230353299_5

Supplemental Material

Appendix 1

Table A1. List of Gender Equality Strategies and Annual Reports of the European Commission.

Abbreviation	Title	Year of publication
GES1982	A new Community action programme on the promotion of equal opportunities for women 1982-85	1981
GES1986	Equal opportunities for women. Medium-term Community programme 1986-90	1985
GES1991	Equal opportunities for women and men. The third medium-term community action programme 1991-1995	1991
GES1996	Incorporating equal opportunities for women and men into all community policies and activities	1996
GES2000	Towards a community framework strategy on gender equality (2001-2005)	2000
GES2006	A roadmap for equality between women and men 2006-2010	2006
GES2010	Strategy for equality between women and men 2010-2015	2010
GES2016	Strategic Engagement for Gender Equality 2016-2019	2015
GES2020	A Union of Equality: Gender Equality Strategy 2020-2025	2020
AR1996	Equal Opportunities for Women and Men in the European Union 1996	1997
AR1997	Equal Opportunities for Women and Men in the European Union 1997	1998
AR1998	Equal Opportunities for Women and Men in the European Union 1998	1999
AR1999	Equal Opportunities for Women and Men in the European Union 1999	2000
AR2000	Equal Opportunities for Women and Men in the European Union 2000	2001
AR2001	Equal Opportunities for Women and Men in the European Union 2001	2002
AR2002	Equal Opportunities for Women and Men in the European Union 2002	2003
AR2004	Report on equality between women and men, 2004	2004
AR2005	Report on equality between women and men, 2005	2005
AR2006	Report on equality between women and men, 2006	2006
AR2007	Report on equality between women and men – 2007	2007
AR2008	Equality between women and men – 2008	2008

AR2010	Report on Progress on Equality between Women and Men in 2010. The gender balance in business leadership	2011
AR2011	Progress on Equality between Women and Men in 2011. A Europe 2020 initiative	2012
AR2012	Report on Progress on equality between women and men in 2012	2013
AR2013	Report on Progress on equality between women and men in 2013	2014
AR2014	Report on equality between women and men in the EU 2014	2015
AR2015	Report on equality between women and men in the EU 2015	2016
AR2017	2017 Report on equality between women and men in the EU	2017
AR2018	2018 Report on equality between women and men in the EU	2018
AR2019	2019 Report on equality between women and men in the EU	2019
AR2021	2021 Report on gender equality in the EU	2021
AR2022	2022 Report on gender equality in the EU	2022
AR2023	2023 Report on gender equality in the EU	2023

Appendix 2. (attached as an Excel file)

Table A2. Frequency of the most common words in the annual reviews and gender equality strategies of the European Commission, 1982-2023.

Appendix: Response to the Reviewers

Dear Professors,

I thank you for the kind words and helpful comments on my dissertation. I respond to each suggestion (in italic) in this Appendix following the order of chapters. After the first submission of the dissertation, the third chapter ("Men in EU Gender Equality Policies") has been accepted for publication in the *Journal of European Social Policy*.

Kind regards,

Michał Gulczyński

Introduction

Ana Catalano Weeks

This dissertation addresses the problem of gendered inequalities and life chances with a focus on men's perspectives. The three papers focus on demography, political behavior, and public policy, respectively. A key strength of the dissertation is its interdisciplinary and mixed methods approach. The research draws on theory and evidence from demography, political science, public policy, and other fields. The methods are sophisticated and robust. The literature review is adequate, especially as it needs to cover a broad range of disciplines, but more attention should be given to theories and evidence of gender as a social construct and gendered inequalities, over time and today. This felt unbalanced. Theoretically, there is an opportunity to further develop the contributions you aim to make here and clarify also which subfields / literatures you aim to speak to as a researcher. The dissertation employs appropriate methods to address each research question, and it is very nice to see a product that is very much question-led, in this sense – matches the methods to the question, rather than the other way around. Keep doing this. Analyses include computation procedures to estimate / decompose sex-ratios, multilevel models, and qualitative content analysis. Careful attention is paid to the operationalization of variables and robustness checks. The empirical findings are very interesting and while I have some suggestions for analysis for papers 2 and 3, they offer relevant new information to questions related to gender, demography, political behavior, and public policy. Finally, the writing style and structure is very professional, as evidenced by the success of 2 of these manuscripts moving forward in the publication process already. My comments focus first on literature and theory overall, and then proceed by chapter (focusing more on Chapters 2 and 3, as Chapter 1 is published).

The literature review and associated theory-building can at times come across as ahistorical and lacking serious engagement with the history of women's marginalization in society and theory / evidence on gendered inequalities. In other words, for a study of gender equality, it is very light on engaging seriously with the concept/ theory of gender and gendered inequalities. The approach seems to be assume that if we care about gender equality, that means focusing on both men and women equally. But this ignores the vast history of and current level of patriarchy that undergirds our societies, even the most

feminist or egalitarian like Sweden. For example, the introduction simply states that many gender gaps have been closed, substantially reduced, or even reversed, to set up the contribution you hope to make to newer approaches to research on gender. But this is very problematic. Which important gender gaps have closed or reversed? In the countries under investigation here, education stands out as one of the only areas. Women remain politically underrepresented, they earn less than men, they are especially unlikely to reach the highest levels of political or corporate power. They still do the majority of unpaid household and care work in every society for which we have data. It seems to me exceedingly obvious that women are some ways away from achieving equality, so to imply that this is the case is inaccurate and misleading. This comes out in the Introduction and Chapter 3 most strongly. I encourage you to include more discussion about gender as social construct and a more complete picture, historically and today, of gendered inequalities.

This approach also leaves me unsure of who the main audiences are that you hope to reach and which subfields you will contribute to. Are you speaking to the women, gender and politics subfield, or are you speaking to men's rights audiences?

Linking to theory, this often seemed underdeveloped. The papers are set up more as empirical puzzles to answer, without much theoretical development (eg, in Chapter 2 of the main objective social status measure, and Chapter 3 the deservingness concept). Can you clarify overall and for each paper, what is the main theoretical contribution you are making? Who are you arguing against, or building on?

I am grateful for the kind and detailed assessment of my dissertation, the encouragement to pay more attention to theories and inspiring suggestions.

Thanks to your comments, I have substantially developed the theory in Chapter 2. Most importantly, I dedicated more space to the threatened masculinity theory, which leads me to the hypotheses that men who are unable to achieve the traditional masculinity standards may react by voting for Trump. Some of those standards include an economic advantage over women and the ability to provide for one's family.

I added several paragraphs in Chapter 3 to explain how it differs from previous approaches to gender and the European Union, and how we can read the findings in the light of the classical Messner's (1997) triangle. This should better link it to the existent literature. I also

develop the part on the deservingness concept and add a short explanation of the history of EU gender equality policies.

In the introduction, I now underline that sex-selective migration may be driven by women's limited access to resources, e.g., unequal inheritance norms. I also specify that when I talk about reversed gender gaps, I mean mostly education in developed countries. I add an acknowledgment of the still existent gender gaps: "In almost all countries of the world and at almost all levels of government, women are less numerous than men. Women earn less then men and are much less likely to achieve most prestigious positions."

As regards the attention to men's issues, I do not claim that men's and women's concerns should be addressed equally. In Chapter 3, I show that EU gender equality policies do not address men's disadvantages at all, and I assume that they might be addressed (and, as I find out, it was the case in the past). This does not imply any reduction in attention to women's concerns and disadvantages. I answer your specific comments on men's rights and disadvantages in my response to your review of that chapter. In short, I believe there is no contradiction between speaking to the gender and politics subfield and studying men's disadvantages. As you rightly point out in one of the further comments, the goal of gender equality is not a zero-sum game and studying men's disadvantages should not be considered as an attempt at bidding or competition.

Which gender gaps have been closed or reversed? I believe almost all laws explicitly discriminating women have been abolished in developed countries (some of which surprisingly recently, like the restrictions on having a bank account in France or voting rights in Switzerland), but there are still some laws that explicitly discriminate against men (e.g., unequal retirement age, military conscription or safety norms). The Health and Education subindices of the World Economic Forum's are close to 100% (95.2% and 96.0%), respectively, for all countries under study, which means that the gaps in these fields are almost closed (or reversed, because that index is truncated at 100%, i.e., does not take into account men's disadvantage). The Gender Equality Index of the European Union rose from 63.1 in 2013 to 70.2 in 2023. This index includes also men's disadvantages, but shows a substantial progress (growth by 11%) within 10 years. In the introduction, I do not claim that all gender gaps have been closed, but I believe it is

factually true that many gender gaps (even in political representation) have been ‘substantially reduced.’

Introduction

Anthony Heath

The thesis consists of three independent chapters on different aspects of gender inequalities. The first substantive chapter covers ‘Migration and skewed subnational sex ratios among young adults’, the second covers ‘Women’s increasing relative social status and men’s vote for Trump’, while the third chapter covers ‘Men in EU gender equality policies’. The first of these three chapters has already been published in the highly-regarded refereed journal Population and Development Review. This provides independent confirmation of the quality of the work.

Overall, my judgement is that the thesis is of high intellectual quality and makes a significant contribution to the field, and is therefore worthy of a doctorate. The topic and scope of the thesis is clearly explained; the thesis displays an excellent grasp of the relevant (recent) literature and debates; it uses a wide range of appropriate analytical techniques to excellent effect; and it demonstrates mastery of three very different datasets. The main conclusions of each chapter are convincing and robust, are well-supported by the evidence and analysis, and clearly answer the research questions. Overall, the thesis makes an important and original contribution to the field of research. While I have some comments and questions about the work, I raise these primarily as suggestions for future research and publication.

I am grateful for the kind assessment of my dissertation and all the inspiring suggestions.

Chapter 1

Ana Catalano Weeks

This chapter asks the question, where do men and women live and how has this evolved over time? To answer this question, a global sample of sex-ratio data are analyzed. The main findings are that skewed sex-ratios (urban or rural) are common, and sex-selective migration is an important determinant of these skewed sex ratios. I found this paper very interesting, and it is very nice to bring this analysis of migration and sex-ratios into conversation with questions related to politics and gender equality. The many examples you give of specific contexts work well to bring the data and findings to life. It is also timely to focus on young people whose experiences / views might be shifting compared to older cohorts.

The theory was relatively underdeveloped here, re gendered migration flows. I think there is an opportunity to provide a more elegant explanation for the patterns observed – the approach here is treat it as an empirical puzzle to be solved, instead. I missed a better explanation for why scholars of politics and policy should study this. And I had expected you to incorporate this more centrally in the rest of the papers. I am interested to know whether and how you aim to develop this topic going forward – eg projects on political consequences of skewed sex ratios? These are all comments for future development, in my opinion not necessary to change in the dissertation as it stands given this work is published.

As you mention, a more detailed universal theory of sex-selective rural-urban migration might be a path for future research. How exactly is the sex-selectiveness related to the level of development, economic structures or culture? My study did not aim at answering this question but opens a promising empirical basis for further debates. I dedicate five paragraphs in the Conclusions to lay out unanswered puzzles and research questions. I also mention implications for policies:

“Finally, my study can inform policy-makers. To my best knowledge, imbalanced SRYA and local marriage squeezes do not gain much attention of public institutions in most countries despite the fact that –as I find– most countries suffer from such phenomena, usually not due to the phenomenon of “missing girls.” My decomposition shows that sex-selective

internal and international migration should be at the centre of public policies tackling rural depopulation, but also –based on the literature dedicated to the consequences of sex ratios– lower fertility, demographic decline, violence, and health."

Skewed sex ratios and sex-selective migration has been also recently found to influence voting behaviour and attitudes by Dancygier et al. (2022) and Krakowski and Sambanis (2023). Furthermore, I have recently started a collaborative study on the relationship between sexism and support for Ukrainian refugees in Poland, which also speaks to this literature.

Chapter 1

Anthony Heath

The first chapter on 'migration and skewed subnational sex ratios among young adults' is particularly impressive. It analyses population data covering almost all countries in the world, demonstrating differences both between and within countries (the within-country element focusing on rural/urban differences) in sex ratios among young adults. It finds that most countries have either rural or urban-skewed sex ratios among young adults with a strong log-linear relationship between sex ratios and population density in European subnational regions.

This chapter is an impressive piece of work. It decomposes country-level sex ratios into the three components of sex ratios at birth (SRB), sex differences in survival rates, and sex ratios among young adults (SRYA), demonstrating that, in the absence of sex-selective international migration, country-level SRYA would be balanced in almost all countries of the world. Particularly innovative is the focus on within-country differences and the role of internal migration in generating different SRYAs in more and less urbanized areas.

While the analysis and conclusions are compelling, I was puzzled about some aspects of the data. For example, why were SRBs in Greece and Cyprus so skewed? No explanation for this is provided, and I wondered whether the pattern might be due to poor quality data and measurement error. Issues of measurement error need to be taken seriously even with

(or perhaps especially with) official data where the data collection procedures are often opaque and poorly documented.

I am grateful for your recognition of my work. Unfortunately, the method implies that measurement errors are included in the migration factor. To my best knowledge – confirmed with one of the leading experts on internal migration – there is currently no better method to estimate migration flows by sex (and age group). The United Nations Population Division is currently preparing a new version of the URPAS data set with corrections of past estimates, which may confirm or disconfirm the results of my study for specific countries and dates.

Each country deserves a detailed study with more discussion on historical and geographical patterns, at various levels of aggregation. I have not found any literature explaining sex-selective migration in Cyprus. As regards Greece, Arapoglou and Sayas (2009) explain the spatial segregation with occupational trajectories. Kaberis and Koutsouris (2012) focus on the 'gendered nature of farming' and, as you rightly point out, access to resources:

"Patrilinear succession and modernisation (specialisation and mechanisation) have been shown to sustain and strengthen, respectively, such a gendered differentiation. Furthermore, access to resources and especially land has wider implications pertaining to gender roles within the farming household as well as economic, political and ideological power in the wider spectrum of social life in rural areas. The structure of occupational activities and social life in the countryside being gendered male, results in an image of the rural space which is not attractive to young women who, in turn, choose to abandon it."

Chapter 2

Ana Catalano Weeks

Chapter 2 asks, does objective social status impact support for radical right candidates? The analysis uses the case of the 2016 US general election, focusing on whether rising objective social status for women increases men's support for Trump. The results suggest no evidence that objective social status of women predicts men's behavior. The data collected and multilevel models provide an appropriate test of your theory. The research question is an important one, and it is nice to see this question applied to the case of the US, which is a very different context to previous studies.

The theory you test is different from past research. Gidron and Hall, for example, are interested in the relative decline of subjective social status, a measure that (for men) is not operationalized as reliant on women's relative social status. More discussion of why you select the measure you do – objectively declining status of men relative to women – and how it compares to previous theories is needed. There is a paragraph of related literature on p59, but this could be developed and theorized much more. Why is it men's status vs women in particular that matters (and not other groups like racial minorities, or status compared to previous generations)? Your measure implies that even if men and women both are better off than in previous years / generations, so long as women are moving at a faster rate, the objective status of men relative to women would be negative. Is this a problem?

I am grateful for the inspiring questions, which helped me formulate a more developed theory.

I add several paragraphs to answer three questions:

- why do I look at changes in men's status relative to women, and not on the changes within genders or compared with minorities?

- why do I study objective status?

- why do I study local changes?

Since the section “2. Theoretical background” is now almost twice as long, I do not paste the new parts here.

Additionally, is it possible to test a measure of over-time objective social status of men that more closely aligns with Gidron and Hall’s theory? I ask because you want to engage with these authors (and potentially others who follow), but your measure is not the same. They argue that relative social status is a better measure of status threat, although it is influenced by objective measures of status (but can’t be reduced to it). So the fact that you do not find significant results cannot disconfirm their theory in the US case. Alternatively, to speak to some of these issues could you demonstrate to what extent relative social status correlates with objective social status (esp the 4 measures you employ), and whether this relationship is different for men and women.

Thank you for the opportunity to clarify the differences.

The argument of Gidron and Hall (2017) is that men vote for populist right more often than women because men’s average status over time declined and women do not vote as often for populist right because their average status increased. Their study has two parts. In the first part, they focus on the individual’s subjective social status and their party choice. In the second part, they use means and shares of votes for groups defined at the intersection of education and gender. Thus, the level of analysis is an individual in the first part and a country in the second part. In turn, I am interested in the relationship between the local (county-level) change of women’s and men’s relative status.

Both Gidron and Hall’s paper and my chapter measure relative social status. They calculate means for women and men and so do I.

The first difference between the two studies is that they split women and men into low-educated and high-educated groups and calculate means within those groups and relate them to the means for the entire society (“the distance between the average level of subjective social status reported by members of the group and the mean level of subjective social status within the society as a whole at that point in time”). They are interested in the correlation between the change in average status for those intersectional groups and their support for populist right parties.

My argument is slightly different and requires different measures. Since I am interested in a potential backlash against women's increasing relative social status, I do not split the society into intersectional groups. I add the following sentence to the limitations of the study, as I believe an analysis of changing gender relations in subgroups of population – e.g., within social classes, but also families – requires a separate endeavor:

"Also, my study is based on the assumption that if men were to react to the objective advancement of women, they would compare women and men in their entirety as two social groups. Future studies may analyse, whether changes within subgroups (e.g., relative mobility of women and men from families of low social status) matter for the representatives of those subgroups."

I hope that the more developed theoretical section makes my study less reliant on the comparison with Gidron and Hall's approach.

The second difference is that they measure subjective social status with a survey question. In contrast, I try to measure women's and men's objective social status (operationalized by the four variables). Gidron and Hall's theory explicitly focuses on subjective social status and, as you point out, it is influenced by but not limited to the objective social status. Thus, even if my study does not find any relationship between objective relative social status change and vote, it does not exclude that the relationship holds for subjective relative social status change.

Gidengil and Stolle's work on gender, masculinities, and voting for Trump seems relevant to engage with in this chapter.

Thank you for this suggestion. I included their work in the section "2. Theoretical background."

As an SMD system with two strong parties perhaps there is more limited room for the role of declining social status to play a role – there are only two options (Trump had to co-opt a party, rather than start his own). Thus the institutional context seems worth further discussion.

At the moment of election, Trump's choice to co-opt a party had already been done. The voters faced a choice between a conservative party represented by a male radical right populist and sexist candidate and a liberal (progressive) party represented by a female feminist candidate.

In any case, the case under study was a presidential election, i.e., a strongly personal one. This contrasts with Gidron and Hall (and most research on radical right vote in Europe) who discuss party choice. However, it is similar to a run-off in any presidential election.

Also, the non-proportional SMD system strengthens the role of negative attitudes toward political opponents (Gidron et al. 2020). The theories described above are based on the assumption that voters attracted by Trump (and not by Romney) were motivated by anger or backlash against the social changes, which were personified by Hillary Clinton (a liberal feminist woman who breaks the ceilings). Thus, the Trump vs. Clinton election seems to be a particularly suitable case to find the expected effects.

It would strengthen the paper to add a discussion of potential confounders of the relationship between objective social status of men vs woman and voting for Trump. What are the correlates of this main explanatory variable? The study is not causal due to the nature of the data, but it could have a more causal interpretation if you can speak to this question. Right now, controls are simply listed without explanation.

To address the question about correlates of WRSS change, I expand Table A1 with in the Appendix and add a short description in the text:

"In almost all cases, the changes in WRSS are only weakly correlated with the initial levels of college education, median income, labor force participation, population structure or employment structure or unemployment. The exceptions suggest that WRSS increased least in the agricultural areas and most in the areas with high levels of employment in manufacturing. WRSS measured by gaps in median income and college education increased the most in most populated counties. The median income gender gap decreased the most in places with high levels of unemployment in 2000. I control for all those variables."

Since most of those variables correlate with both WRSS and support for Trump, it seems reasonable to include them as control variables. They are also commonly known to be related to support for Trump and do not divert from the usual selection of variables used in previous studies. I add a sentence to make

"They are similar to previous studies and, as shown in Table A1 and discussed later correlate with both the dependent and independent variables."

P63 – don't agree that changes in WRSS were substantial over the period for all measures. Guess it depends on how you define substantial.

I change the word to 'non-negligible.'

Chapter 2

Anthony Heath

The second chapter on 'women's increasing relative social status and men's vote for Trump' explores how local changes in the relative social status of women and men influenced support for the Republican candidate in recent US Presidential elections. The chapter tests the 'social status threat' hypothesis, according to which men will feel threatened by declining social status relative to women and will be more inclined than women to switch support to right-wing populist candidates such as Trump. Men's relative social status is measured at the county level (since suitable panel data on individuals is not available), change in gender gaps being measured with respect to median income, college education, and labour force participation. The analysis finds that, although Trump gained more votes in places were women's relative social status increased the most, the interaction between (male) gender and (men's) declining relative social status is not statistically significant.

The methodological approach of the chapter is attractive. I particularly admire the focus on change in relative social status. This offers a much more powerful test of the hypothesis than the usual static cross-sectional approach. The use of area differences offers considerable statistical advantages over small-scale panel studies of individuals.

Technically, the chapter could be seen as using a 'difference in differences' statistical approach, comparing changes over time in men's relative status with changes across elections in support for the Republican Party. (Mathematically, controlling for support for Romney in 2012 is equivalent to analysing change over the four-year period, although it might have been even better to have used similar lengths of period for the changes in relative status and for changes in support for the Republican candidate).

I study the change between Romney and Trump because the literature convincingly shows that it was precisely this election that made gender and gender issues salient. For the first time, a woman competed in a US presidential election. In addition, Trump's rhetoric was unusually sexist and gender was a relevant part of his campaign. These two factors made gender salient and triggered sexist attitudes. Thus, although the relative social status of women and men has been changing over the decades, the 2016 presidential election was a trigger that made gender politically much relevant than before.

It would been useful to relate the theory to Runciman's classic study of fraternal relative deprivation (and the subsequent voluminous literature in social psychology). There is also an important earlier literature (such as the seminal paper by West and Zimmerman 1987, and that of Brines 1994) on men 'doing gender' that might be worth citing.

I am grateful for the suggestions. I add a reflection on these two streams of literature in the following paragraphs:

„In contrast, I am interested in the consequences of changing relations between women and men. In the Runciman's (1966) framework, one may understand the diminishing socio-economic advantage of men over women as relative deprivation. The threatened masculinity theory provides an explanation for why the comparison between women and men may be particularly important for voting behavior. Traditional masculinity relies on the economic advantage of men over women. The increasing social status of women raises new obstacles for men to "do their gender" understood as "the activity of managing situated conduct in light of normative conceptions of attitudes and activities appropriate for one's sex category" (West and Zimmerman, 1987). Men who do not achieve the standards of traditional masculinity by earning more than their wives may be inclined to reassert their

masculinity in other ways (Brines 1994), one of which may be the vote for a candidate or party who embodies those masculinity standards, like Donald Trump (DiMuccio and Knowles, 2020; Carian and Sobotka, 2018; Smirnova, 2018). At a high level of aggregation, the frequency of Google searches related to men's anxieties (e.g. in sexual life), correlates with votes for Trump in 2016 (DiMuccio and Knowles, 2021). In general, men whose masculinity is threatened, i.e., their ability to fulfil a traditional men's role is questioned, are less likely to support gender equality (Kosakowska-Berezecka et al., 2016).

As Gidengil and Stolle (2021) write, "gender identity conditions the extent to which white men experience societal transformations as threats to their masculinity and respond by acting to preserve their dominant status. Because femininity is less susceptible to threat, gender identity will have a smaller impact on women." They show that women and men who identify as most feminine and masculine, respectively, are most likely to support Trump. The effect of gender identity is substantially stronger among men. This is because men can reassert their masculinity by rejecting femininity and behavior considered as female (Brines 1994; Vandello and Bosson 2013) and Donald Trump gave an opportunity for such an anti-feminine behavior."

In addition, a more detailed justification for looking at changing relative status at the county level would have been helpful. Since the analysis effectively leads to a null result, a critic might naturally wonder whether a different geographical level might have yielded findings in line with the theory. Social geographers have often shown that different patterns can obtain at different geographical levels. In particular what are the hypothesized mechanisms that operate at a county level. Might a national or state level be more appropriate (for example if the main mechanism were media-mediated stories)? Or might a more granular level work better (for example if feelings on relative deprivation are based in small neighbourhood communities?

For lack of data, I cannot provide any insights on lower level of aggregation (e.g., neighbourhood or family). As regards, higher levels of aggregation, a previous version of this study used 1078 "consistent public-use microdata areas" and the results were similar.

As I noted in the Conclusions:

“There are other aspects of increasing women’s social status that may lead to men’s backlash, such as women’s political representation or election pledges made by parties. Furthermore, studies on the local effects of economic conditions (Dülmer and Klein, 2005) and immigration (Weber, 2019) showed that similar processes measured at different levels of observation may suggest different results. My earlier attempts at the research included in this chapter showed similar effects at the higher level of aggregation (for 1078 consistent public-use microdata areas, constructed for the purposes of the US census). At the country level, Gidron and Hall (2017) show an association between men’s declining (subjective) social status and gender gap in radical right support. Also, my study is based on the assumption that if men were to react to the objective advancement of women, they would compare women and men in their entirety as two social groups. Future studies may analyse, whether changes within subgroups (e.g., relative mobility of women and men from families of low social status) matter for the representatives of those subgroups.”

Chapter 3

Ana Catalano Weeks

Chapter 3 asks the question, to what extent does the European Commission address men's and women's concerns? The chapter draws on qualitative analysis of reports and strategies. It analyses the data through a framework of men's deservingness, the extent to which they are portrayed as "problem solvers" versus "problem holders". The key findings are that over time the representation of men's problems has increased and then fallen again, in a reverse-U shape. The method is appropriate for investigating this question, and the analysis was very interesting to read. I understand that you have an R&R on this paper. My comments focus mainly on the contribution, the attention to historical gender equality, and concepts/theory employed. I do not think that they would require significant additional analysis.

How much do these reports matter? Who is responsible for writing them? Does anyone read them? You could strengthen the "so what" question by speaking to this.

Thank you for this question. I added the following paragraph to clarify this:

"All GESs besides GES2016 took the form of Commission communication and were adopted in the Commissioners' College as official positions of the European Commission. Some of them were later endorsed by a Council Resolution and Council Decision (Ahrens 2019). ARs are also produced by the European Commission as staff working documents. In 2010, the responsibility for gender equality was transferred from Directorate General for Employment to Directorate General for Justice (and Consumers) (Ahrens 2019). Unlike GESs, AR2022 and AR2023 include an explicit note that "This document should not be considered as representative of the European Commission's official position." Nevertheless, ARs are often cited by scholars, think tanks and in further EU official documents. For instance, AR2021 was cited in 177 publications in Google Scholars, and in European Commission's staff working documents (among others, accompanying proposal for a directive on standards for equality bodies). Thus, they influence European laws, national equality policies, but also public and scholarly debate."

Moreover, there are reems of policy outputs from the EU that also affect (or don't) gender equality. Given this, why focus on these documents rather than evaluating the EU's policy agenda more holistically? Aren't the policies adopted and implemented more important than gender equality report rhetoric?

As I mention in the introduction, gender equality goals are currently included in many policy areas, consistently with the goal of gender mainstreaming. I provided some examples in the introduction:

"gender equality policies influence the allocation of the EU funds. Some funding is directly dedicated to correcting gender inequalities. The deployment of Horizon Europe funds is conditional upon the adoption of gender equality plans by the receiving institutions. But gender equality goals are currently included also in the Common Agricultural Policy (to support women in farming) and in 'gender-responsive public procurement' guidelines of the Commission."

Many other examples could follow. We can also find gender equality goals in Free Trade Agreements. The recent directive on corporate boards will have consequences for companies, which will have to provide information about gender representation on their boards and may be punished for non-compliance. The directive on work-life balance recently expanded the leave for fathers in many Member States. Thus, gender equality goals formulated in the strategies are consequential.

I acknowledge that other policies may not be gender neutral and, in particular, may address men's interests better than women's, or that the implementation of gender equality policies may differ by field.

To underline the potential for heterogeneous influence of gender equality discourses on policy fields and Member States, I added the following sentences in the Discussion:

"Future studies may investigate how these discourses translate into national policies or other policy fields and to what extent women's and men's interests and preferences are represented in the European legislative process. In other words, they may analyse EU policies with the lens of substantive representation of women and men."

There is 1 sentence implying historical inequality of women on p.86, and nothing about contemporary context. This reads very strangely. It is necessary to understand the historical exclusion of women from public life, legal rights, and so on, if we are interested in understanding the rhetoric of reports on gender equality. Not to be too glib, but it does remind me of the discussion about whether men should have an international men's day (they do, it's in November). As written, the text seems to be engaging with men's rights activists who would make this kind of argument, rather than the gender and politics subfield. This left the main contribution / to whom you aim to speak to unclear.

In response to your concern, I added two paragraphs to better connect my paper with the existing literature on gender and the European Union. In the subsection "2.2. Problem holders and problem solvers":

"This line of research is based on Messner's triangle (1997) designed to evaluate men's social position, attitudes, and movements: men's privileges, costs of masculinity, and diversity of men. This approach gives only limited insight into the evolution of gender equality policies. Men's privileges (women's disadvantages) are at the core of any women's empowerment or gender equality policy, so they are always present in such policies. If a gender equality policy includes men's disadvantages, it usually attributes them to only some men. Thus, diversity of men and costs of masculinity co-occur.

(…)

The 'problem holder – problem solver' dimension proposed here is more specific than the 'cost – privilege' dimension from Messner's (1997) triangle. If men are seen as problem solvers, their agency is assumed and policies impose on them responsibility and expectation to act. If men are seen as problem holders, men's needs are recognized and somebody else (e.g., institutions) is made responsible for solving men's problems.

This difference between the existent studies and the current one is my focus on men, rather than masculinities. In particular, Scambor et al. (2014) conclude with a specific prescription: promotion of a "caring masculinity." "Masculinities and femininities refer to the social roles, behaviors, and meanings prescribed for men and women in any society at any time. Such normative gender ideologies (...)" (Kimmel 2001). I believe we should clearly

distinguish ‘men’ as a group of people from ‘masculinities’ as ‘normative gender ideologies.’ The concept of ‘problem holders’ allows to highlight the changes in the Commission’s approach to this group rather than the Commission’s prescriptive vision of masculinity.”

And in the Discussion:

“In the framework of Messner’s (1997) triangle, one could say that from 2006 to 2015, the Commission recognised the costs of masculinity and differences among men. Later, it focused again on men’s privileges. Men are no longer seen as a diverse group, as the intersectional approach is used only to focus on disadvantages of subgroups of women. Thus, I show that the move away from the ‘gender perspective’ and broader transformation of gender roles found in earlier studies (Woodward 2012, Jacquot 2020, Hartlapp et al. 2021) may be particularly harmful for men.”

In order to justify the origins of the focus of gender equality polices on women, I add the following paragraph:

“Historically, the EU policies started in 1957 with Article 119 of the Treaty of Rome, which obliged Member States to ensure the principle of equal pay for women and men for equal work. Thus, the gender pay gap and women’s participation in the labor market were the main priorities of what we know call gender equality policies. As Sophie Jacquot (2020) writes: “it was not a matter of asserting the principle of gender equality, or of demonstrating a desire for social justice, but rather of avoiding any risk of social dumping in sectors that relied heavily on female labour at the time.”

Actually, men do not have any international men’s day. It has never been recognized by the United Nations. November 19th, to which you refer, is officially recognized only as the World Toilet Day. Also, there are several ways, in which men are discriminated by law: unequal conscription, work safety regulations, unequal retirement age (with Poland being the last EU Member State which does not aim at equalizing it), ban on leaving the country for Ukrainian men, etc. I do not mention them in the paper and I would not like to enter into the

discussion on equal rights, which is ultimately normative. I mention them here to show that men's calls for equal rights are not without merit and should not be easily dismissed. This does not mean that they are more important than women's disadvantages and rights or that they are inconsistent with feminist visions of gender equality. I believe I do not question any policy supporting women in any place of the chapter.

I am not sure I understand the deservingness of men concept and how you are conceptualizing it. It seems that if men are not addressed as problem holders, then they are perceived / coded as underserving. But why does focusing on women's but not men's inequalities means that men are underserving? Why is it conceived as a zero-sum game? Feminists believe that equality of men and women is good for everyone.

I am grateful for the encouragement to clarify the concept of deservingness. I added the following paragraph:

"Oorschot (2000) asks "who gets what and why?" and answers that the needs of people perceived as deserving are more likely to be addressed by the state and society. Deservingness is usually defined by the CARIN conditions: control, attitude, reciprocity, identity, and need. People are perceived as more deserving if they cannot control their situation or are responsible for it; if they are more likeable or conforming to standards; if they have contributed or are likely to contribute to the society in the future; if they are more similar in terms of identity; if they are more in need. In the context of the EU documents on gender equality, men are portrayed as less deserving if they are presented as power holders and agents (in control of their situation), and conforming to standards (e.g., non-violent). In the analysis, I did not find any mentions presenting men's contribution to the society other than the expectation to 'contribute to gender equality', which I treat as a sign of agency. Since I do not compare men with other groups, identity is constant across documents. The recognition of men as problem holders is a sign of acknowledgment of men's needs and their deservingness."

I agree that many feminists believe that equality of men and women is good for everyone. However, women's empowerment and gender equality are different concepts. This

difference lies at the very basis of ‘gender mainstreaming,’ since mid-1990s. As I explain in chapter:

“When first introduced, ‘gender mainstreaming’ was meant to go beyond equal treatment and women’s perspective (positive action), by adding the gender perspective (Rees 1998; Booth and Bennett 2002). The first of the three approaches aims at ensuring equal rights and opportunities in the public sphere. The second recognises women as a disadvantaged group, requiring special treatment. The third aims at ‘transform[ing] the organization of society to a fairer distribution of human responsibilities,’ based on the premise that ‘men are not the deliberate oppressors of women, but can also be disempowered by current social arrangements’ (Booth and Bennett 2002, p. 434). The gender perspective includes a transformation of men’s roles, but also ‘addresses the feelings of resentment and alienation caused by the use of positive action approaches’ and avoids ‘plac[ing] women in opposition to men’ (p. 438), while guaranteeing assessment of all policy outcomes for both women and men (Schmidt 2005).”

Thus, the inclusion or non-inclusion of men’s disadvantages in gender equality policies is clearly not a zero-sum game or a step against women’s empowerment. It is rather a part of the gender equality agenda as initially conceived.

Some feminists, like bell hooks, call for more attention in feminists thought to the limitations that the society and social norms impose on men. However, some people who consider themselves feminist oppose equal rights of men and women (e.g., when it concerns retirement age or military conscription) or even expose their misandrist views (e.g., Pauline Harmange in her book “Moi les hommes, je les déteste” / „I hate men”). It is beyond the scope of my dissertation to discuss what kind of views should be considered feminist.

Surely most men, for example, would also believe that it is important to make progress on gender-based violence even if it is mostly perpetrated by men.

I have no doubt that a vast majority of men are against gender-based violence. I do not suggest that anti-violence policies oppose men’s interest. This would be a necessary argument for an analysis with the lens of ‘substantive representation’, which I do not adopt (as I discuss in further answers).

The aim of the paper is to analyse how men are portrayed by the Commission. I show that men are increasingly shown as perpetrators of violence, which reduces their deservingness.

At times the discussion seems normatively laden, eg on p101 when you say that statements about men's political representation frame men as undeserving power holders. Are you implying that they deserve to hold the majority of power, or that these reports and strategies should avoid objective characterizations of men's dominance in powerful roles lest it frame men as undeserving? On p103 you also put 'over-representation' of men in quotation marks, as it if is an opinion rather than a fact – which similarly implies a normative and "men's rights" view. This detracted from my understanding of your results.

I agree that, unfortunately but necessarily, research on inequalities usually relies on some normative assumptions. We tend to choose topics that we consider relevant for normative reasons. The assumption of my paper is stated in the introduction:

"one cannot exclude a priori that men's disadvantages should be addressed by gender equality policies, i.e., men can also be recognised as 'problem holders.'"

My analysis shows that both the scholarly literature (e.g., Booth and Bennett 2002), and the European Commission (in GES2006 and GES2010) agree with this assumption.

In the paragraphs dedicated to representation, I show that men's dominance in powerful roles can be described in various ways. I focus on the change in narratives and salience. Thus, even if the characterization is factually true, it is not strictly objective. The object of my study is the change in narratives and their salience, and not the judgments or fact-checking of the arguments used by the Commission. For the same reason, I used the word 'over-representation' in quotation marks. I want to underline that it is the change of words used by the Commission that matters.

To clarify what the key findings are and how they matter in terms of the adopted analytical framework, I rephrase the last paragraph of the subsection "4.3. (Un)deservingness of men":

“In sum, in terms of the CARIN conditions defining men’s deservingness, I conclude that the changes in narratives made men less deserving. Men have been portrayed as too powerful since AR2010 and as perpetrators of gender based violence since GES2016. Since then, both topics gained salience. Thus, men are increasingly shown to be in control of their needs and less conforming to standards (less likeable). In the most recent documents, even the most vulnerable men are uniformly constructed as agents, not as a group requiring support.”

I wonder if there is a more simple approach to this which is measuring attention to men and women’s interests or preferences in the documents (in the way you already seem to do) without the frame of deservingness. You can go back to a classic substantive representation concept. Then, the theoretical contribution becomes about explaining whether and potentially under which conditions / for which issues we see attention to men’s interests.

Thank you for this suggestion. It would be really interesting to look at these issues from the substantive representation perspective. In particular, it would be needed if one wanted to justify the claim that EU gender equality policies contribute to the backlash against the EU and against gender equality. However, one would need to clearly define what men (and women) want from the EU. Basing on anecdotal evidence, I believe men are usually not conscious of the limitations stemming from their gender roles and most people are not aware of the disadvantage of men in terms of health or education. Also, it is rarely formulated as an issue that any policy should tackle. Thus, I doubt that men on average would expect the EU to deal with their gendered disadvantages, but it does not mean that they should not be included in policies.

I suggest this possible path for development of my study in the Discussion:

“Future studies may investigate how these discourses translate into national policies or other policy fields and to what extent women’s and men’s interests and preferences are represented in the European legislative process. In other words, they may analyse EU policies with the lens of substantive representation of women and men.”

You make an empirically important contribution to show that men are rarely and inconsistently considered, with declines over time. You could even strengthen the analysis about lack of attention to intersectional men. I agree with you that it could be this feeds into potential backlash against women or gender, although of course that is not the only reason to care about the interests of men. In other words, I think the findings are important, but the framing is currently detracting from them.

Thank you for the recognition of the value of my findings. The new paragraphs on Messner's triangle highlight the differences among men. However, as regards empirical research, it is difficult to conduct any more complex analysis of the lack of attention to intersectional men in the EU documents on gender equality. As I write, the Commission uses an intersectional perspective to focus on subgroups of women. Although the Commission does not seem to notice it, men's disadvantages almost always concern men of lower social status. If I was to conduct a study on substantive representation in various EU policy fields (as you suggest), I would surely analyse it by taking into account how the needs of men of lower social status or belonging to minorities are reflected in social or educational policies.

Minor: is this mixed methods? It seems qualitative. Where was the quantitative?

Unfortunately, the system does not allow me to submit anything else than one PDF. The Appendix is an Excel file that I would happily share. As I write in the end of the subsection "3. Data and methods":

"As a supportive piece of evidence, I provide a quantitative analysis of GESs and ARs. Appendix 2 contains a table with the 20 most frequent words appearing in each document to show the evolution of dominant themes over time."

The specific method is explained in the Appendix 2. I attach a new version of the tables corrected after the reviews from the journal.

The quantitative piece of evidence is described in the subsection "4.3. (Un)deservingness of men":

“The increasing salience of violence is also visible in the frequency of words used in the documents (Appendix 2). Violence appeared among the 20 most common words in AR2012 and remained there in all subsequent documents, including GES2016 and GES2020. Since GES2020 and AR2021, the word ‘violence’ is more frequently used than ‘work,’ becoming the most common word denoting a policy field. For comparison, ‘health’ never appeared among the most common words, and ‘education’ only in GES1986.”

Chapter 3
Anthony Heath

The third chapter takes a very different approach from the other two, both with respect to data and to analytical techniques, thus demonstrating great versatility on the author’s part. The chapter asks how men’s (as opposed to women’s) disadvantages, for example with respect to life expectancy or educational attainment, are addressed within the European Union’s gender equality policies. The chapter analyses all published gender equality strategies and annual reports of the European Commission since 1982. Using both qualitative and quantitative content analysis, the chapter finds that, since the mid-1990s, the Commission has included men as contributors to gender equality (‘problem solvers’) whereas men’s disadvantages in education and health (as ‘problem holders’) were only addressed between 2006 and 2015. After 2015, men’s problems have been essentially ignored, as men have been increasingly portrayed as a privileged group undeserving of European policies.

The analysis and interpretations are persuasive. The chapter convincingly argues that a key weakness of the EU’s approach has been the neglect of intersectionality. Thus it is certainly true that some groups of men, such as white men from elite social backgrounds and in key sectors of the economy or key institutions such as the police and military, may have disproportionate power relative to other men and to most women. In contrast other groups of men, notably young black men from disadvantaged social backgrounds, may well be disproportionately subject to state-sponsored violence compared with other men and most women – as for example with respect to being victims of stop and search,

miscarriages of justice, incarceration, and homelessness. It would have been interesting (although not essential) to have had more detailed discussion of this kind of intersectionality and its relevance for EU policy formation. It might also be interesting to reflect on the reasons for the EU's recent neglect of intersectionality. Might this perhaps reflect the legal framework provided by EU Directives on Sex and Racial Discrimination?

I am grateful for the recognition of my contribution.

I agree that men's disadvantages almost always concern men of lower social status or those who belong to an ethnic or sexual minority. In order to better connect my chapter with the existing literature on gender and EU policies, I added several paragraphs dedicated the 'Messner's triangle,' which is commonly used to analyse the rhetoric of men's movements. One of the vertices of this triangle is the 'diversity of men,' which is close to the idea of men's intersectionality.

"This line of research is based on Messner's triangle (1997) designed to evaluate men's social position, attitudes, and movements: men's privileges, costs of masculinity, and diversity of men. This approach gives only limited insight into the evolution of gender equality policies. Men's privileges (women's disadvantages) are at the core of any women's empowerment or gender equality policy, so they are always present in such policies. If a gender equality policy includes men's disadvantages, it usually attributes them to only some men. Thus, diversity of men and costs of masculinity co-occur.

(…)

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This difference between the existent studies and the current one is my focus on men, rather than masculinities. In particular, Scambor et al. (2014) conclude with a specific prescription: promotion of a "caring masculinity." "Masculinities and femininities refer to the

social roles, behaviors, and meanings prescribed for men and women in any society at any time. Such normative gender ideologies (...)" (Kimmel 2001). I believe we should clearly distinguish 'men' as a group of people from 'masculinities' as 'normative gender ideologies.' The concept of 'problem holders' allows to highlight the changes in the Commission's approach to this group rather than the Commission's prescriptive vision of masculinity."

And in the Discussion:

"In the framework of Messner's (1997) triangle, one could say that from 2006 to 2015, the Commission recognised the costs of masculinity and differences among men. Later, it focused again on men's privileges. Men are no longer seen as a diverse group, as the intersectional approach is used only to focus on disadvantages of subgroups of women. Thus, I show that the move away from the 'gender perspective' and broader transformation of gender roles found in earlier studies (Woodward 2012, Jacquot 2020, Hartlapp et al. 2021) may be particularly harmful for men."

However, as regards empirical research, it is difficult to conduct any more complex analysis of the lack of attention to intersectional men in the EU documents on gender equality. The Commission does not neglect intersectionality as such. It only limits its application to subgroups of women.