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Civil Society, Widespread Trust, and Growth Theory: the Role of the Charity Commission in the British Experience

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CONTENTS

CHAPTER. 1
INTRODUCTION: WHY A THESIS ON CIVIL SOCIETY?

This thesis is the result of a methodological conflict that affects my research activities. On one hand, as an economist, I have always tried to support the economic perspective and its research methods. Indeed, the temptation to categorize stylised facts into formal and elegant mathematical models based on poor and (sometimes) inconsistent assumptions on human behaviour has played a crucial role in these pages. The main consequence of this influence is that, in order to explain my ideas and my ideological position, I have built a model in which individuals' identities are reduced into equations. Much worse, I have started theorising on this model, proposing hazardous normative conclusions and offering ideal insights on a "good society." On the other hand, as a soci(ologic)al scientist, I have always felt the malinconic desire of describing individuals for what they really are: social animals. Individuals cannot be thought as isolated entities which are characterised by goals and constraints and which live their life in order to solve maximisation problems. Individuals live in a society, feel part of it, and incorporate its values, its fears, its contradictions. Moreover, they define institutions through which they express their political and economic entrepreneurship.

Given these considerations, I hope the reader will appreciate the naïve trial of introducing new social dimensions and variables inherited from various social disciplines like philosophy, politics, and sociology into the economic debate. In particular, I have tried to isolate only few of these obscure entities and to formalise the idea of good society by using an economic model of endogenous growth. The starting point of my reflection is represented by the concept of civil society which is basically composed by two actors. On one side, there is a community made of individuals who are both isolated entities endowed with private desires and social animals linked each other through a need of mutual assistance. However, while they coexist, they inevitably define their values, their hopes, their fears and a shared idea of common good, in a word, their culture. On the other side there is the State intended as the main evolutionary output of the social interaction. Its institutional characteristics are defined over the cultural connotations of its creators. The desire of a virtuous and an ordered social life addressed to the achievement of the commonwealth legitimates its powers. Moreover, while the society moves towards this idealistic scheme, a shared sense of mutual trust starts spreading within the community and, inevitably, influencing its economic performances. The research questions of this thesis can be summarised as follows: can we formalise the idea of civil society by using a typical economic model? Can we highlight the linkage between civil society and economic performances? Is there any space for the intervention of super-partes institutions which operate in order to stimulate these social spill-over mechanisms? Is there any national example of civil society in which people have shown an attitude to cooperate and the state has intervened efficiently in supporting the social effort to the achievement of the common good?

Given these preliminary interpretative insights which will be widely explained in the next pages, let us briefly analyse the structure of the thesis.

In chapter 2, I discuss the main implications of the endogenous growth theory stressing the discouraging implications of the presence of the government. Firstly, I present the well-known Ramsey model under the assumption of presence of the government. Secondly, I discuss some theoretical contributions of Robert Barro in which the government offers productive expenditure or consumption services. The main conclusions of the models presented in this chapter are that: a) the presence of the government introduces a distortion in the economy which negatively affects the economic performance of the economy; b) the previous result holds both in the case the public expenditure consists of productive expenditure and in the case it is in the form of consumption services which directly represents an argument in the utility function of individuals.

Unfortunately, these models do not present any relevant assumption on the social structure of the economy. On one side, people are seen as pure optimising entities which do not care of nothing more than their private consumption and the best intertemporal allocation of resources. On the other side, the government is simply introduced as a super-partes body which at least bias individuals' choices and at most does not increase the growth rate of the country.

In chapter 3, I focus my analysis on the concept of Civil Society in order to introduce further interpretative elements which highlight different views of both government and individuals. There exist at least two reasons why I have referred to this philosophical concept in building my theory. Firstly, all the definitions of civil society I have referred to starts form the idea of a community of individuals who are strategically linked to each and face a typical prisoner dilemma problem when they have to decide their contribution to the achievement of the common good. Secondly, this concept leaves space for the government to stimulate the virtuous social process of creation of both social capital and economic prosperity.

The chapter is basically divided into two parts. In the first part, I present the most important contributions of both classic and modern thinkers on this fascinating concept. The emphasis is put on both the citizens of a civil society and the government. The formers live their social life endowed with values, culture, need of socialisation, and act on the basis of a delicate interaction between personal interest and search for the common good. The latter is intended as an institution which both naturally incorporates the cultural connotations of the society and virtuously serves the supreme goal of establishing the institutional conditions for an ordered, ethical, and pacific coexistence addressed towards the commonwealth.

In the second part, I highlight three constitutive elements of the concept of civil society which can be described using a typical economic language.

The first element refers to a definition of rationality which takes into account both the need of sociality and the capacity to cooperate showed by members of the civil society. In particular, I try to develop a reflection on a particular version of the so called we-rationality enriched with a principle of "evangelic" Kantianism. According to the definition of we-rationality, individuals who feel part of their community would easily identify what this enlarged team requires them to do in order to achieve the common good. The evangelic Kantianism is summarised by the proposition "act in the way you would like others to act" and it is required by the fact that in some circumstances the we-rationality is too vague in determining individual action. For instance, consider the public good context and suppose that an individual has to decide how much to contribute given the information about the number of individuals in his community and the preferences of others. For sure if people were driven by the we-rationality they would choose to contribute. However, if the contribution is voluntary and can be everything ranging from zero to the total income of the individual, I find quite difficult to use this concept to quantify the contribution that the we-rational individual should contribute. The evangelic Kantian principle would help people at least in this.

The second element of my theory of civil society regards the concept of social reciprocity. With this expression I refer to those situations in which, by observing a "sufficiently high" level of public good, anonymous and unobserved individuals are induced to contribute more than what is usually predicted by the public good models. In my theory, I assume that individuals contribute their "fair" contribution when they consider that particular behaviour as correct, otherwise they continue behaving as free-riders. In order to explain how individuals judge a particular behaviour as correct, I assume that each contributor applies a simple inferential procedure through which he can infer the proportion of fair contributors by observing the level of public good. If the inferred parameter is greater than his personal attitude to fairness, then he contributes his fair contribution. In other words, when an individual considers that "enough" people have acted cooperatively, then he joins the "team logic," contributing what should be optimal to contribute if everybody did the same. Finally, what does a fair contribution means? The basic assumption is that, in deciding their contribution towards the public good, individuals are always able to define an unconditional, "fair" contribution that they should contribute regardless of what the others do. According to the concept of Kantian categorical imperative adapted to the public good context, an individual should firstly define the amount he would like others to contribute if they were in his circumstances and, secondly, contribute that amount regardless of what the others do. It is clear that the main implication of this concept, particularly applicable to a context characterised by anonymous and unobservable contributors, is that an individual does not need to compare his contribution with what others contribute, in order to define the level of his fair contribution.

Finally, the third constitutive element of the concept of civil society is the widespread trust which represents the main by-product of a virtuous civil coexistence in which individuals voluntary cooperate and which can play a crucial role in explaining the economic performances of a country. The idea that widespread trust can influence economic performances has always been accepted by economists. Moreover, there exist a large number of empirical contributions which confirm the positive correlation between growth, efficiency and the level of trust. According to the theories of social capital, the channels through which trust would influence the economic performance of the country are: a) reduction of transactional costs (monitoring and preventive activities to protect themselves from being exploited in economic transactions) and legal disputes; b) higher reliability of formal institutions like the government and the central bank which implies that people can adopt more appropriate horizons in making investment decisions and choose production technologies that are optimal in the long run; c) a stronger feeling of teamwork due to the sharing of ethical norms which induces cooperative behaviours and organisational innovations. Although economists have always assumed that there exists a positive relation between trust and economic performance, they have rarely investigated on how this strong linkage can be explained theoretically. Since I have indirectly treated the concept of civil society in terms of a typical situation in which individuals are asked to cooperate in order to enjoy the common good, I should clarify how trust, which is virtuously produced by cooperative individuals, can spread over different contexts and positively influence the economic performances of the community. I find the concept of diffusion by analogy a reasonable explanation of this particular spillover effect. If people learn how to cooperate in collecting public good, then it is reasonable to assume that cooperation will spread "by analogy" to the productive sector. Individual work becomes more productive because of a higher coordination and a higher cooperation with colleagues and, moreover, production becomes more efficient because of a considerable reduction in transaction costs.

In chapter 4, I present a formal model of endogenous growth theory which incorporates the distinctive elements of the concept of civil society I have discussed in the previous chapter. The model is formally divided into two parts: a static specification and a dynamic specification. In the static specification, I build a theory of social reciprocity in which anonymous agents can decide to contribute either fairly or selfishly. An agent contributes fairly if and only if the observed level of public good is higher than his personal threshold. In the dynamic specification, I incorporate the main conclusions of the static specification into a model of endogenous growth theory. In particular, I have introduced a variable to capture the widespread trust. The basic idea is that, the more the members of the society cooperate in collecting the public good, the higher the level of widespread trust, the higher the economic performances are because of a reduction in the transactional costs. In particular in the "Civil Society," individuals are partitioned between self-interested contributors and fair contributors according to the equilibrium partition obtained in the static specification of the model. The main implication of the model is that, depending on the specification of the production function, the level of widespread trust within the community can either influence the growth rate of the economy or increase the levels of the variables. Moreover, the government can influence positively the economic performances of the country. In particular, one way the government can encourage the economic growth is to stimulate the production of social capital by triggering a motivational crowding-in in the society.

In chapter 5, I discuss the results of some important empirical researches which confirm the implications of my model. In particular, the chapter is divided into three parts each of which refers to one of the following implications: the coexistence of cooperative contributors and free-riders, the confutation of the crowding-out effect and, finally, the relation between trust and economic performances.

Firstly, I present the main empirical findings which confute the free-riding result. In particular, both the generalised tendency to support social projects through voluntary work and contributions and the large number of experimental researches which confirm individuals attitude to cooperate in situations similar to the prisoner dilemma represent an empirical puzzle with respect the result of absolute free-riding implied by the traditional public good models.

Secondly, I present the results of an experimental research which shows that the intervention of an external agent like the government stimulates individual contributions rather than crowding-out them.

Finally, I summarise some empirical findings which answer the following questions on trust: a) what are the determinants of impersonal trust? b) Does trust affect the economic performance of a country? Briefly, these researches suggest that trust positively depends on cooperative behaviours and, moreover, it positively affects the economic performances of a country.

In chapter 6, I focus my attention on the English Non Profit sector. One of the most important conclusions of the model presented in chapter 4 is that the government can stimulate the creation of widespread trust by supporting the civil society in achieving the common good. Indeed, by creating an institutional context in which charities, clubs, philanthropic associations, NGO can express their social involvement, it can trigger a virtuous process of "motivational cascade" which drives the system to converge to an equilibrium characterised by a higher proportion of fair contributors.

The English experience is characterised by the virtuous coexistence between the private sector (charities and volunteers) and the "invisible hand" of the government.

There are three reasons why I have chosen this country. Firstly, in order to understand the English experience, it is important to consider the cultural connotations of the English civil society. Indeed, United Kingdom is by definition a reality where multiculturalism has played a crucial role in determining the size of the voluntary participation in social projects.

Secondly, the intention of the English Government to support the civil community in achieving the common good has been efficiently expressed through the creation of a professional body: the Charity Commission. Any charity who needs legal or organisational support to conduct its activities can address its problems to this professional body. On the other hand, by creating a formal office devoted to the charities' problems, the English government has implicitly declared its intention to offer the best legal and institutional environment in which any individual involved in the charities or affected by their activities can express his entrepreneurship or his needs.

Thirdly, my interest for the English experience has been inspired by my personal experience in United Kingdom. I was really impressed by the different approach and pragmatism shown by English people in leading their charities and their voluntary organisations. Rather than expressing political ideologies and the religious affiliation of the volunteers who work for them, *Charities exist because of their goals* which have to be achieved with the same organisational efficiency and excellence required by any other economic activity.

CHAPTER. 2
ENDOGENOUS GROWTH THEORY AND GOVERNMENT EXPENDITURE

2.1. Introduction: How to Explain the Growth Rate of a Country?

The endogenous growth theory is, without any doubt, the most important theoretical instrument used by macroeconomists to answer problematic questions about development and poverty. This is because of three different reasons. Firstly, it allows theoreticians to state macroeconomic results starting from a microeconomic framework. Indeed, the models which belong to this strand of literature start from a simple problem of utility maximisation faced by a representative agent and end up with predictions on the growth rate of the economy. Secondly, it is a dynamic theory which is not based on any difficult mathematical instrument. In order to be understood, the endogenous growth theory does not require anything more than basic knowledge on calculus of variations. Finally, the main predictions of this class of models are directly testable and, moreover, they seem to be confirmed by many empirical studies.

These characteristics have induced macroeconomists to introduce a large number of assumptions and variables in their models in order to explain the economic performance of a country. In this chapter, after having presented the Ramsey model (which represents the basic structure all the other models of endogenous growth are based on), I discuss the implications of a class of models which analyse the impact of the government activity on the growth rate of a country. Robert Barro represents the most important theoretician in this field. In sections 2.4 and 2.5 I present his main conclusions, which are: a) the presence of the government introduces a distortion in the economy which negatively affects the economic performance of the economy; b) the previous result holds either in the case the public expenditure consists of productive expenditure or in the case it is in the form of consumption services which directly represents an argument in the utility function of individuals.

2.2. The Ramsey Model[1]

Let us start presenting the assumptions of the model. The Ramsey world is closed to international operators and it is populated by two operators: Households and Firms.

There are a large number of identical households. The size of each household grows at rate n . Each member of the households supplies inelastically one unit of labour at every point in time. The household rents inelastically[2] whatever capital it owns to firms perceiving a rental rate on capital. He has also to decide how much to save or consume and he can save by either accumulating capital or lending to other households. He is indifferent as to the composition of his wealth, so the interest rate on debt must be equal to the rental rate on capital. Households have perfect foresight; that is, they know both current and future values of wages and rental rate on capital and take them as given.

The problem faced by each household can be summarized by the following constrained maximisation problem in the continuous time:

$$\max_{\{c_t\}_{t=0}^{\infty}} \int_0^{\infty} e^{-\rho t} \frac{c_t^{1-\theta}}{1-\theta} \frac{L_t}{H} dt$$

[1] $s.t.$

$a) budget\_constra$ int

$b) no - Ponzi - game - condition$

The function $\int_0^{\infty} e^{-\rho t} \frac{c_t^{1-\theta}}{1-\theta} \frac{L_t}{H} dt$ is the household's utility function. $u(c_t)$ is the instantaneous utility function which is supposed to be nonnegative and a concave increasing function of consumption of each member of the household (c_t). For simplicity we have assumed that the instantaneous utility function is a *constant-relative-risk-aversion* (CRRA) utility where $\theta \geq 0$ represents the inverse of the intertemporal elasticity of substitution.

[1] The reader can refer to Barro et al [2001], Romer [2001].
[2] Capital is the result of previous decisions and is given at time t; by assumption, labour is supplied inelastically.

L_t is the size of the population. We assume that L_t has a constant growth rate over time $\frac{\dot{L}_t}{L_t} = n$ and $L_0 = 1$. H is the number of households in the society which is supposed to be fixed overtime.

$\frac{L_t}{H}$ is therefore the number of members of the household. Thus $\frac{c_t^{1-\theta}}{1-\theta}\frac{L_t}{H}$ is the household's total instantaneous utility at t. We can simplify our analysis by normalising H to 1. ρ is the rate of time preference; the greater is ρ, the more impatient is the household in the sense that he attributes an higher importance to the present consumption than to the future one.

Assuming that the economy starts with some capital (K_0) so that it can get production of the ground, we can write the budget constraint in aggregate terms as follows:

[2] $$\dot{E}_t = r_t E_t + W_t - C_t$$

where E_t is the aggregate amount of nonhuman wealth.

The above expression represents the dynamic law for aggregate savings. The variation in the size of the aggregate savings between two periods depends positively on the aggregate amount of wages and interests on lending and negatively on the aggregate amount of consumption. Let us assume $E_t = K_t - B_{pt}$ which means that the nonhuman wealth is equal to holdings of capital (K_t) minus family debt (B_{pt}).

The last constraint is the well known "No-Ponzi-game-condition":

[3] $$\lim_{t\to\infty} E_t \exp\left[-\int_0^t (r_v)dv\right] \geq 0$$

We need this condition to prevent households from choosing an exploding path of borrowings without imposing any constraint that rules out temporary indebtedness[3].

[3] In the absence of any restrictions on borrowing, it is optimal for a household to borrow sufficiently to maintain a level of consumption such that the marginal utility of consumption equals zero and to let the dynamic budget constraint

As long as marginal utility is positive, households will not want to have increasing wealth forever at rate r_t, and that the condition will hold as an equality. So we use the condition directly as equality.

Thanks to this condition, we can pass[4] from the dynamic budget constraint [4] to the intertemporal budget constraint:

$$[4] \qquad \int_0^{\infty} C_t \exp\left[-\int_0^t (r_v)dv\right]dt = E_0 + \int_0^{\infty} W_t \exp\left[-\int_0^t (r_v)dv\right]dt$$

Expression [4] implies that the present value of consumption is equal to total wealth.

Moving to the productive sector, let us assume the existence of an infinitive number of identical firms whose technology is characterised by constant returns to scale. Firms rent the services of capital and labour to produce output. Let us assume that there exists a rate of physical depreciation of capital. Firms behave competitively trying to maximise their profit and taking the prices (the real wage and rental rate on capital) facing them as given. More formally, the problem faced by the firm in aggregate terms is:

$$[5] \qquad \max_{K_t, L_t} \ PROFIT \quad = K_t^{\alpha}(A_t L_t)^{1-\alpha} - (r_t + \delta)K_t - \hat{w}_t L_t$$

Where $Y_t = K_t^{\alpha}(A_t L_t)^{1-\alpha}$ is the production function that is homogenous of degree one[5]. A_t reflects the technological progress which enters as labour-augmenting argument. Let us assume the rate of growth of technology be fixed over time $\frac{\dot{A}_t}{A_t} = \gamma_A = x$ and $A_0 = 1$. $\hat{w}_t$ is the wage rate in terms of *units of effective labour*.

determine the dynamic behaviour of E_t. From the budget constraint it follows that this borrowing being used to meet interest payments on the existing debt. Ultimately, net aggregate level of indebtedness will be growing at rate r_t.

[4] Integrating the budget constraint from 0 to ∞, multiplying both sides by $\exp\left[-\int_0^t (r_v)dv\right]$ (that is discounting to time 0) and imposing the No-Ponzi-Game condition.

[5] The production function we have suggested respects the Inada conditions.

2.3. Solution of the Model

The solution of this general equilibrium model is given by the following dynamic system expressed in terms of units of effective labour (given a generic variable Z_t in aggregate terms, $\hat{z}_t = \frac{Z_t}{A_t L_t}$ represents the correspondent variable in terms of units of effective labour) and obtained by combining the first order conditions of problem [1] with the equilibrium conditions of the firms and by considering that $B_{pt} = 0$ in a closed economy:

[6] $$\begin{cases} \dot{\hat{c}}_t = \frac{1}{\theta}(\alpha \hat{k}_t^{\alpha-1} - \delta - \rho - \theta x)\hat{c}_t \\ \dot{\hat{k}}_t = \hat{k}_t^{\alpha} - (\delta + n + x)\hat{k}_t - \hat{c}_t \end{cases}$$

Where the first equation represents the well known Euler equation for consumers where $r_t = \alpha \hat{k}_t^{\alpha-1} - \delta$ is the interest rate in equilibrium obtained by the optimising decisions of the firm.

From [6] we can easily compute the steady state of the system:

[7] $$\dot{\hat{c}}_t = 0 \Leftrightarrow \hat{k}^* = \left(\frac{\alpha}{\delta + \rho + \theta x}\right)^{\frac{1}{1-\alpha}};$$

[8] $$\dot{\hat{k}}_t = 0 \Leftrightarrow \hat{c}_t = \hat{k}_t^{\alpha} - (\delta + n + x)\hat{k}_t$$

Evaluating [8] in $\hat{k}^*$, we obtain the steady state value for consumption in terms of units of effective labour:

[8 bis] $$\hat{c}^* = \hat{k}^{*\alpha} - (\delta + n + x)\hat{k}^*$$

From [8] we can compute the golden rule value of capital in terms of units of effective labour:

[9] $$\frac{\partial \hat{c}_t}{\partial \hat{k}_t} \geq 0 \Leftrightarrow \hat{k}^{gold} \leq \left(\frac{\alpha}{\delta + n + x}\right)^{\frac{1}{1-\alpha}};$$

[10] "Strictly concavity of the expression for $\hat{c}_t$": $\frac{\partial^2 \hat{c}_t}{\partial^2 \hat{k}_t} < 0$

We can easily note that if $\rho > n + (1-\theta)x$, then $\hat{k}^{gold} > \hat{k}^*$. However the condition $\rho > n + (1-\theta)x$ simply requires that the effective discount rate in the household's optimisation problem[6] is greater than zero meaning that households are impatient to consume. This is the well known result of *individuals' myopia*: since current consumption is evaluated more than future consumption, the steady state is characterized by a quantity of capital in terms of units of effective labour which is lower than the one of golden rule (the one which maximizes the consumption in terms of units of effective labour). It is also possible to prove that, by linearising system [6],[7] the steady state is locally unstable and there exists only one saddle path that allows the system to converge to the steady state (i.e. the equilibrium is not stable).

Graphically:

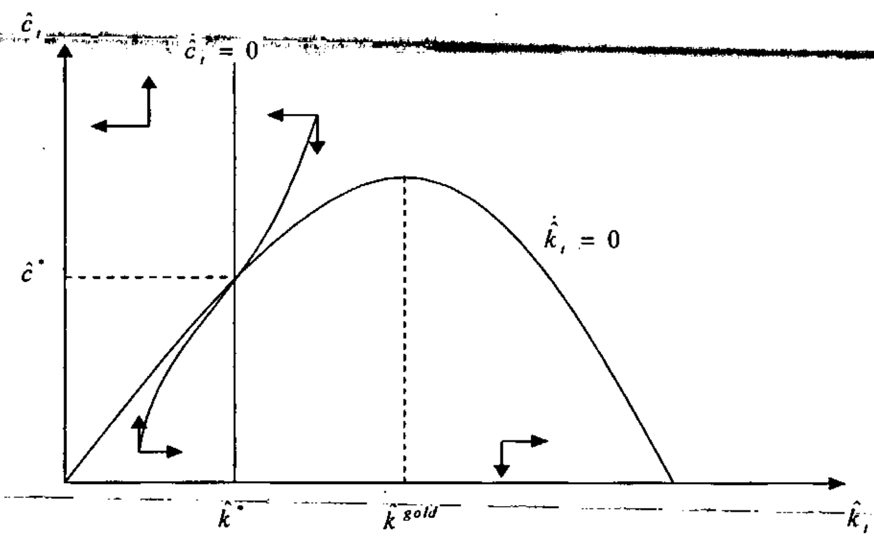

Figure 1. Phase diagram in the Ramsey model

[6] Expressed by $\mu = \rho - n - (1-\theta)x$

[7] For a formal discussion see Simon et al [1994].

To the left of the $\dot{\hat{c}}_t = 0$ locus consumption is rising while to the right of it consumption is decreasing. Above the $\dot{\hat{k}}_t = 0$ locus capital is decreasing while below it capital is rising.

How is it possible that the economy reaches the saddle path starting from an initial value of $\hat{k}_0$? Thanks to the hypothesis that people have perfect foresight, the intertemporal budget constraint in terms of unit of effective labour[8] must be always satisfied and this additional condition regulates the value of $\hat{c}_0$. If consumption is too high, it means that household is consuming more than his wealth while if it is too low it means that household is consuming too little. In the first case the intertemporal budget constraint is not satisfied while in the second case the household is not maximizing his utility function. In fact, given the Euler equation and the capital accumulation process, there is only one value of $\hat{c}_0$ that satisfies the budget constraint and it is the one that places the economy on a stable trajectory towards the steady state.

Once the economy has converged to the steady state, capital, consumption and output expressed in terms of unit of effective labour are constant. Since consumption and output expressed in terms of unit of effective labour are constant, the saving rate $\frac{\hat{y}_t - \hat{c}_t}{\hat{y}_t}$ is also constant. This means that:

$$[11] \qquad \gamma_y = \gamma_k = \gamma_c = x$$

2.4. The Government in the Ramsey Model

Let us introduce the government. Suppose that it finances its expenditures by collecting taxes from the individuals. Let us assume that the public expenditure does not affect individual utility function. The government can decide to finance its spending either by lump-sum taxes or by proportional capital income taxes.

[8] Expressed by $\int_0^\infty \hat{c}_t \exp\left[-\int_0^t (r_v - n - x)dv\right]dt = \hat{e}_0 + \int_0^\infty \hat{w}_t \exp\left[-\int_0^t (r_v - n - x)dv\right]dt$

Lump-sum taxes

Let us assume that the government finances its spending introducing lump-sum taxes in terms of units of effective labour which remain constant in every period. These taxes do not change the Euler equation. This basically means that the $\dot{\hat{c}}_t = 0$ locus is unchanged. Let us assume that the government balances its budget in every period and has not outstanding debt. Let us assume that the public spending does not influence the future output; that is, they are devoted to public consumption rather than public investment.

Since governmental spending does not affect the Euler equation, the $\dot{\hat{c}}_t = 0$ locus is unaffected.

On the other hand, it is clear that the budget constraint faced by households is affected by governmental spending. For instance, the intertemporal budget constraint becomes:

$$[12] \qquad \int_0^\infty \hat{c}_t \exp\left[-\int_0^t (r_v - n - x)dv\right]dt = \hat{e}_0 + \int_0^\infty (\hat{w}_t - \hat{g}_t)\exp\left[-\int_0^t (r_v - n - x)dv\right]dt$$

where $\hat{g}_t$ represents the per capita lump-sum tax in terms of units of effective labour.

Regarding the time horizon of the governmental spending we can distinguish two different cases: the permanent and temporary increase in the government's spending.

In the first case (a permanent increase in the level of lump-sum taxes) the $\dot{\hat{k}}_t = 0$ locus shifts down permanently as a consequence of the lump-sum taxes. Furthermore, since the household's wealth falls by an amount equal to the present value of future government spending and since these spending are permanent, there is no scope for households to raise their utility by adjusting the time pattern of their consumption. This means that the level of consumption in terms of units of effective labour falls down by the amount of the lump-sum taxes.

Graphically:

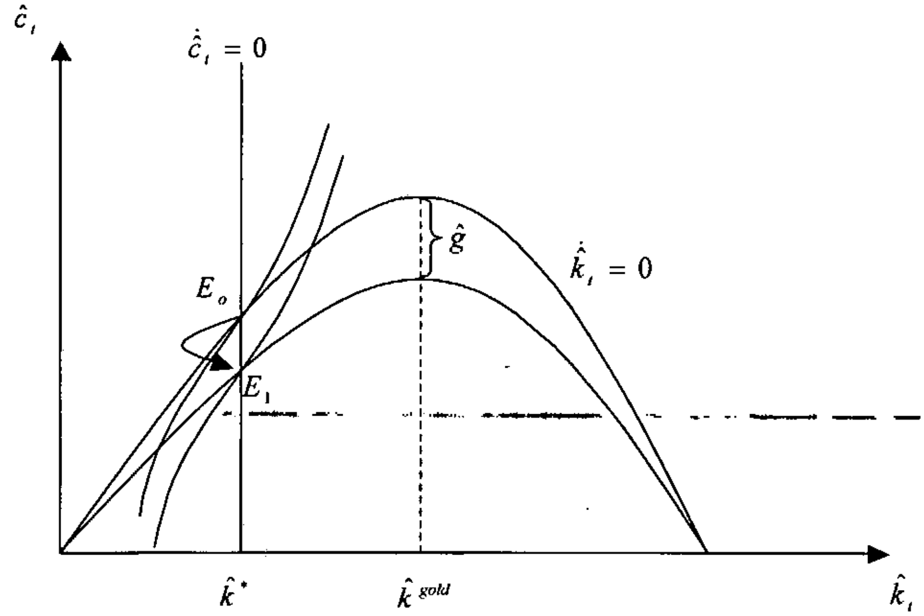

Figure 2. Phase diagram in the Ramsey model with permanent lump-sum taxes

The steady state of the economy shifts from E_o to E_1 implying a lower long run consumption level. In order to satisfy the intertemporal budget constraint, households must be on the saddle path once the taxes are introduced in the system. However, at the time when the policy is changed, $\hat{k}^*$ is predetermined (it is a state variable), so the only way to get to the saddle path is if the consumption in terms of units of effective labour falls immediately by the full amount of the increase in government spending. In other words there is no gradual transition and consumption is completely crowded out by public consumption.

Let us now consider the case of temporary spending. In this case, given the hypothesis of perfect foresight, households can raise their intertemporal utility by adjusting the time pattern of their consumption anticipating the return to the normal condition. This means that they can reduce their consumptions in terms of units of effective labour for an amount lower than the value of the taxes.

Graphically:

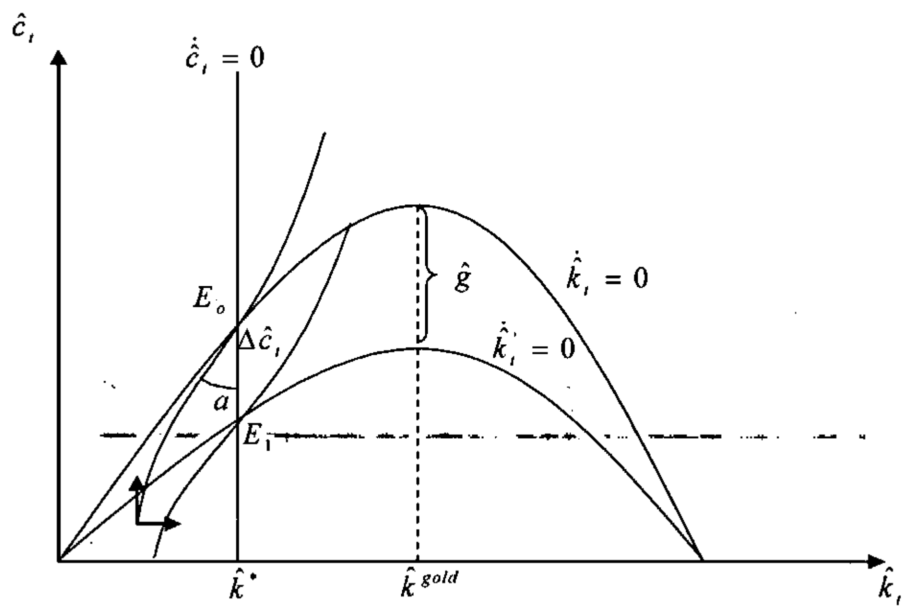

Figure 3. Phase diagram in the Ramsey model with temporary lump-sum taxes

As soon as the government imposes the lump-sum taxes, $\hat{c}_t$ jumps down to the point a and the dynamics is driven by the new dynamic system composed by the same $\dot{\hat{c}}_t = 0$ locus and the new $\dot{\hat{k}}_t = 0$ locus. The jump in $\hat{c}_t$ is such that the system gets the previous saddle path as soon as the government stops imposing the taxes. At the end of the process, the system reaches the original steady state.

Distortionary taxation of capital

Suppose that, instead of a lump-sum tax, the government finances its permanent spending through a proportional capital income tax at rate τ. In order to focus exclusively on the effects of the distortion, let us assume that the revenue from the tax is remitted back to households in lump-sum fashion. The last assumption implies that their overall income remains unchanged, so that $\dot{\hat{k}}_t = 0$ locus does not shift down. The impact of the distortionary tax is to reduce the after-tax return earned by households on their savings for a given capital stock. The after tax interest rate (assuming depreciation is tax-deductible) is then $r_t = \alpha(1-\tau)\hat{k}_t^{\alpha-1} - \delta$ and then the household's Euler equation becomes:

[13] $$\frac{\dot{\hat{c}}_t}{\hat{c}_t} = \frac{1}{\theta}\left(\alpha(1-\tau)\hat{k}_t^{\alpha-1} - \delta - \rho - \theta x\right)$$

Thus, the $\dot{\hat{c}}_t = 0$ locus becomes:

[14] $$\dot{\hat{c}}_t = 0 \Leftrightarrow \hat{k}^* = \left(\frac{\alpha(1-\tau)}{\delta+\rho+\theta x}\right)^{\frac{1}{1-\alpha}}$$

Graphically:

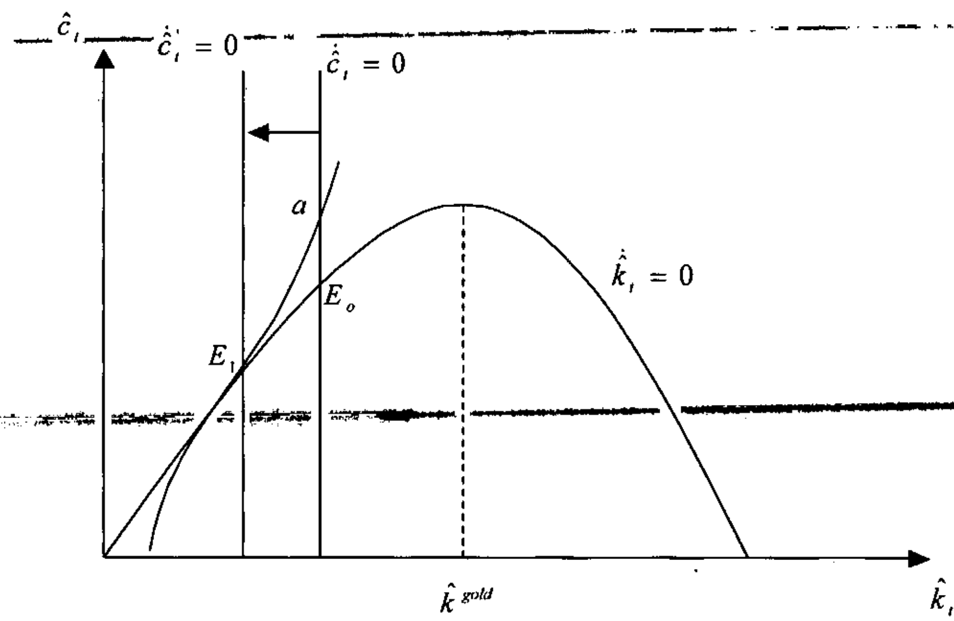

Figure 4. Phase diagram in the Ramsey model with permanent proportional taxes

The steady state shifts from E_0 to E_1, so that in the long run, the increased tax leads the system to lower capital stock and lower per capita consumption. However, since capital cannot adjust instantaneously, the initial impact will be to cause consumption to raise to point a on the saddle path towards E_1. As said, this must be the case if the households satisfy their budget constraint. This short-run impact occurs because households start saving less of their income in response to the tax on the returns to saving. The result of this change in the households' behaviour is the reduction of investments over time that implies the decline of both capital and consumption along the saddle path until the system reaches the new steady state.

2.5. Productive Expenditure of the Government

In two brilliant papers, Barro analyses the effects of the presence of a government which provides productive spending to the private sector.

In the first paper[9], he incorporates tax-financed government services that affect production in a model which assumes constant returns to scale of capital.

All the assumptions used by the author about the households are the same of the ones presented in the Ramsey's model except the innocuous hypothesis that the size of population is constant over time and for this reason normalized to the unity.

Regarding firms, Barro introduces a particular production function expressed by:

$$[15] \qquad y_t = k_t \phi\left(\frac{g_t}{k_t}\right)$$

with $\phi' > 0$ and $\phi'' < 0$ so that the production function exhibits the usual conditions for positive and diminishing marginal products. The variable k_t is the quantity of capital hold by the representative producer, and g_t is the quantity of public services provided to each producer. The public services are introduced as an input to private production. It is this productive role that creates a potentially positive relation between government and growth. Production exhibits constant returns to scale in k_t and g_t together but diminishing returns in k_t separately. This simply means that production involves decreasing returns to private inputs if the government inputs do not expand in a parallel manner. Thus, the general idea of including g_t as a separate argument of the production function is that private inputs, represented by k_t, are not a close substitute for public inputs.

The expression [15] is quite similar to the well-known Rebelo's production function:

$$[16] \qquad y_t = f(k_t) = Ak_t$$

[9] Barro [1990].

which exhibits constant returns to scale in k_t being $\frac{\partial y_t}{\partial k_t} = A > 0$ and $\frac{\partial^2 y_t}{\partial^2 k_t} = 0$

instead of the usual decreasing returns to scale (implied by $\frac{\partial^2 y_t}{\partial^2 k_t} < 0$).

The most important implication of the Rebelo's model is that the economy is always at a position of steady-state growth in which all variables (c_t, k_t and y_t) grow at the same constant rate which is function of the technological progress expressed by the following expression:

[17] $$\frac{\dot{c}_t}{c_t} = \frac{1}{\theta}(\frac{\partial y_t}{\partial k_t} - \rho) = \frac{1}{\theta}(A - \rho)$$

Let us analyse the most important implications of Barro's model. Assuming that the government finances its expenditures by a proportional income tax to run a balanced budget (in other words, $g_t = T_t = \tau_t y_t = \tau_t k_t \phi\left(\frac{g_t}{k_t}\right)$), Barro shows that the growth rate produced by this model is:

[18] $$\gamma = \frac{\dot{c}_t}{c_t} = \frac{1}{\theta}\left(\frac{\partial y_t}{\partial k_t} - \rho\right)$$

which is formally the same of the one predicted by the Rebelo's model except for the fact that the marginal productivity of capital has now the following expression:

[19] $$\frac{\partial y_t}{\partial k_t} = (1-\tau)\phi\left(\frac{g_t}{k_t}\right)(1-\eta_t)$$

where $\eta_t = \phi'\left(\frac{g_t}{k_t}\right)\frac{g_t}{y_t}$ is the elasticity of y_t with respect to g_t (for a given value of k_t), so that $0 < \eta_t < 1$.

As long as τ_t and $\frac{g_t}{y_t}$ are constant, $\frac{g_t}{k_t}$, η_t and therefore the growth rate are constant. In particular, the dynamics coincides with the one in Rebelo's model.

The most important conclusion of the model is that different sizes of the government (that is different sizes of τ_t and $\frac{g_t}{y_t}$) have two effects on the growth rate in expressed by [18]. An increasing in τ_t reduces γ, but an increase in $\frac{g_t}{y_t}$ raises $\frac{\partial y_t}{\partial k_t}$ which raises γ. Typically the second force dominates when the government is small, and the first force dominates when the government is large.

Thus, there exists an optimal size of $\frac{g_t}{y_t}$ which maximises the growth rate of the economy. Furthermore, Barro shows that the maximisation of the growth rate corresponds to the maximisation of utility.

The author also proves that the decentralized solution of the model is not Pareto optimal because of the externalities implied by public expenditures and taxation on the decentralised choices of consumption and savings. He finds that the decentralised growth rate is lower than the one obtained starting from a planning problem in which it is supposed that the government can choose a constant expenditure ratio $\frac{g_t}{y_t}$ and can dictate each household's choices for consumption over time such that he maximizes his attained utility.

In the second paper[10] Barro and Sala-I-Martin consider three versions of the previous model each of which differs from the others for the concept of public services it refers to. In particular the authors consider three alternative definitions of public services:

a) Publicly provided public goods which are rival and excludable and affect the production according to the following production function:

[20] $y_t = Ak_t^{1-\alpha} g_t^{\alpha}$;

b) Publicly provided public goods which are non-rivals and non-excludable and affect the production according to the following production function:

[10] Barro et al [1992].

[21] $\quad y_t = Ak_t^{1-\alpha}G_t^{\alpha}$;

c) Publicly provided public goods which are subject to congestion and affect the production according to the following production function:

[22] $$y_t = Ak_t\left(\frac{G_t}{K_t}\right)^{\alpha}.$$

Activities like education and health can be represented by some combination of the first two models while services like highways, water and sewer systems, courts, security services, national defence and police can be described by the third category.

Let us analyse the main implications of these three models.

In the first model, each producer has property rights to a specified quantity of public services. This characteristic implies that producers cannot congest the services provided to others. From an analytical point of view, this hypothesis means that producers regard their individual allotment of public services (g_t) as fixed when choosing the quantity of private input (k_t).

Expression [20] shows that production is subject to diminishing returns with respect capital (k_t) for a given individual allotment of public good ($g_t = \frac{G_t}{L_t}$). On the other hand, production is subject to constant returns with respect to k_t and g_t together.

Because each unit of g_t requires the government to use one unit of resources, the natural efficiency condition for determining the size of the public sector is $\frac{\partial y_t}{\partial g_t} = 1$.

Assuming that the government runs a balanced budget leaving a proportional tax $\tau_t = \frac{g_t}{y_t}$, the main result of this model is that the growth rate in a decentralised economy is lower than the one in the centralised case. A Pareto optimal outcome can be achieved by shifting to a lump-sum tax or by subsidising (financing these subsidies by lump-sum taxes) the purchase of capital goods.

In the second model identified by expression [21], since the public good is neither rival nor excludable, the per capita quantity (g_t) in each producer's production function is replaced by the aggregate quantity of public good (G_t).

Because of this non-rivalry, the marginal product of public services is the effect of a change in G_t on aggregate output $Y_t = L_t y_t$. In this case, productive efficiency requires this revised marginal product of public services to equal one.

Again, the main conclusion of the model is that the privately determined growth rate is below the socially optimal rate, and a Pareto optimal situation can be attained by shifting to a lump-sum tax.

Finally, the idea behind the third model is that for a given level of public purchase (G_t), the quantity of public services available to a producers declines if other producers raise their levels of usage represented by their levels of input. The individual production expressed by [22] satisfies constant returns to private inputs (k_t) as long as the government maintains a given state of congestion of the public good facilities ($\frac{G_t}{K_t}$).

The main result of this model is that, without user fee (that is under lump-sum taxation), the congestion distortion leads to an excessive use of the public good. Expression [22] indicates that this distortion depends on the expenditure ratio $\frac{G_t}{Y_t}$ so that the user fee that internalises the congestion distortion is a proportional tax on output or income at the rate $\tau_t = \frac{G_t}{Y_t}$.

In Barro [1991], the author tests the implications of his models in a sample of 98 countries over the period 1960 to 1985. He finds that the relation between productive public expenditure and growth rate is positive but not significant. As suggested in his models there are two possible explanations of this result. The first one is that the public investment is not very important for economic growth. The alternative interpretation of the empirical result is that government are optimising and are therefore going to the point where the marginal effect of the public investment on the economic growth is close to zero.

2.6. Government Consumption Services

Barro [1990] also analyses a context in which the government's expenditures are used to finance some services that directly enter into the households' utility function. Assume that the total spending per household is $g_t + h_t$ where h_t represents the government's consumption services. The utility function of the representative household becomes:

[23] $$u(c_t, h_t) = \frac{(c_t^{1-\beta} h_t^{\beta})^{1-\sigma} - 1}{1-\sigma}$$

where $0 < \beta < 1$.

Let us continue assuming a flat-rate income tax, so that the government's budget constraint is:

[24] $$T_t = (\tau_{h,t} + \tau_{g,t}) y_t$$

where $\tau_{h,t} = h_t / y_t$.

Barro obtains that the decentralised choice for consumption and saving (with g_t and h_t taken as given) now lead to the growth rate:

[25] $$\gamma_h = \frac{1}{\sigma}\left[(1 - \tau_{h,t} - \tau_{g,t})\phi\left(\frac{g_t}{k_t}\right)(1 - \eta_t) - \rho\right]$$

The value of $\tau_{g,t}$ which maximises γ_h for a given $\tau_{h,t}$ and a Cobb-Douglas production function is:

[26] $$\tau_{g,t} = \alpha(1 - \tau_{h,t})$$

In other words, the growth-maximising share of productive government spending is smaller if the government is also using the income tax to finance other types of spending. However, Barro proves that this choice turns out not to maximise the utility attained by the representative household.

By using the same sample we discussed in the previous section, Barro provides empirical evidence for this model. Government consumption was measured by the government consumption purchases as reported in the standard national accounts less the amount spent on national defence and education. This quantity was assumed to be a proxy for public services that enter into the household utility functions. He finds a significant negative relation between this quantity expressed as percentage of the real GDP and the growth rate of per capita real GDP.

2.7. Conclusions

In this chapter I have presented some theoretic insights on the endogenous growth theory. In particular, I have presented the famous Ramsey model with government and some important extensions elaborated by Barro. The main conclusion of this theory is that the government plays a negative role since it either discourages the growth or (at most) it does not stimulate the economic performances of a country. The same negative conclusions are implied by a model based on the assumption of government consumption services. In the next pages, I challenge (in a sense) this view. In particular, in the next chapter, I analyse the concept of "Civil Society" from the economic point of view highlighting the role of the state. After this philosophical discussion, in chapter 4, I present a formal model of endogenous growth theory based on the concept of civil society and I show how the government can stimulate the economic performance of the country.

CHAPTER 3

THE CONCEPT OF CIVIL SOCIETY: IS THERE ANY SPACE FOR ECONOMISTS?

3.1. Introduction: the Concept of Civil Society in Economics

In this chapter, I want to focus my attention on the concept of civil society. In particular, I highlight the main constitutive elements of this ideal institutional design which could be analysed from an economic perspective and which can be used to explain how social variables can stimulate the creation of prosperity. On the other side, I try both to emphasise the definition of state and community implicitly assumed by the theoreticians of civil society and to contextualise them into an economic discussion.

The chapter is structured as follows. In section 3.2., I discuss the evolution of the concept of civil society in the thought of famous social philosophers and economists. Moreover, in this section I highlight the three elements of the civil society which are worthy to be analysed by economists. In section 3.4., I analyse the first element which basically refers to the concept of we-rationality. In section 3.4., I present a theory of social reciprocity under the assumption of anonymous contributors to highlight the impersonal mutual assistance which characterises the civil community. Finally, in section 3.5., I consider the most important consequence of a civil and virtuous community: the widespread trust. In particular, I would like to stress the implications of high level of impersonal trust on the economic performance of a country.

3.2. Civil Society and Civil Economy

We live in a time in which both the ideal concepts of state and market have failed to fulfil our expectations of an "ordered" life and a rich existence. Political and ideological walls break down while the assumptions upon which capitalism finds its sense reveal connotations which appear *im*-moral rather than *a*-moral. Much worse, they both fail in guide people in taking their daily decisions. We do not have any rule of action, we do not find any useful receipt for a harmonious social life in those old entities. As Alan Wolfe points out (Wolfe [2000]), neither the market nor a vague concept of state can offer an adequate theory of moral obligation which delimits our freedom of action and which makes the coexistence with our neighbours possible. On one side, the market, a concept which invokes freedom of action of isolated actors and which often tries to persuade people that, through the Smithian "invisible hand," each individual would serve the "common good" by acting for himself. However, by following this principle, we discover ourselves "slaves" of what Martin Hollis called a *"philosophical egoism"* and we become weak and incapable to solve trivial problems of interaction like the well known prisoner dilemma. On the other side the state which at most invades our personal interests by forcing us to follow moral obligations the origins of which are often missed, and at least misunderstands our intentions by appealing to either obscure principles of justice or inappropriate mechanisms of aggregation of preferences. Moreover, when the need of having a State which regulates even the most basic human relation becomes stronger and stronger, we can assist to what Michael Sandel [2000] defines the creation of a "procedural republic" in which individuals are endowed with rights and entitlements but have little civic consciousness. Then, *"liberal democracies face discontents because they tend to rely on either individualistic moral code associated with the market or collective moral codes associated with the state, yet neither set of codes can successfully address all the issues that confront society"* (Wolfe [2000], page 59). We feel abandoned to ourselves in the Dante's *"selva oscura"* (dark forest).

Obviously, accusing both the state and the market of being inefficient and useless does not represent a credible solution since it totally omits to consider what these entities are and why we still need them. Indeed, they are by-products of our social life and they hide deep characteristics of our culture and our social values. As Bellah clearly states *"we are not self-created atoms manipulating or being manipulated by objective institutions. We form institutions and they form us every time we engage in a conversation that matters, and certainly every time we act as parent or child, student or teacher, citizens or official, in each case calling on models and metaphors for the rightness and the wrongness of action"* (Bellah [2000], page 76).

These institutions were created in order to establish an ordered and efficient social life addressed to a wide definition of "common good" which reflects our cultural connotations. Can we imagine a world without these institutions? Do not the idealistic needs which favoured their consolidation continue being actual? Therefore, rather than theorising an anarchic society without these institutions, a more sensate solution would be to give them back their *civil* and *civic* meaning. In this perspective, the state would become the guarantor of a legal system based on democratic representativeness and a shared definition of "common good," while the market would be intended as the place of *"a sequence of encounters"* (Casson [1991], page 3) between moral and cooperative individuals.

The question remains open: if social life influences institutions and institutions are so important for social life that we cannot imagine a world without them, do social scientists have any chance to theorise normative indications to perturb efficiently this self-perpetuating system? As soon as this question became more and more incisive, the idea of a virtuous self-governing community composed by individuals linked one another through a strong civicness and a sense of mutual obligation (re)appeared in the literature and offered new elements to reinterpret those old and inefficient institutions.

The old Greek concept of *"Civil Society"* was reintroduced in the modern language of social scientists.

Sometimes thinkers use this expression in a reductive way, identifying with civil society the set composed by the voluntary associations which are placed between the state and the individual. For instance, in his "The Division of Labor in Society," Emily Durkheim affirms *"[...] A society composed of an infinite number of unorganised individuals, that a hypertrophied State is forced to oppress and contain, constitutes a veritable sociological monstrosity. [...] Moreover, the State is too remote from individuals; its relations with them too external and intermittent to penetrate deeply into individual consciences and socialize them within. [...] A nation can be maintained only if, between the State and the individual, there is interposed a whole series of secondary groups near enough to the individuals to attract them strongly in their sphere of action* *and drag them, in this way, into the general torrent of social life"* (Durkheim [1893/1997], page 28).

However, the most of the times the concept of civil society seems to be melt with the deepest idea of "good society" which *"differs from that of the civil one in that while the former also strongly favors voluntary associations – a rich and strong social fabric, and civility of discourse – it formulates and seeks to uphold some particular social conception of the good. The good society is [...] centered around a core of substantive, particularistic values. For instance, different societies foster different values or at least give much more normative weight to some values than other societies that exhibit a commitment to the same values"* (Etzioni [2000], page132).

Despite the terminological difference, the majority of the "classic" scholars of "civil society" have offered definitions which take into account both the institutional context and the moral values spread within the community.

For instance, in his "The Republic," Plato[11] (who probably represented the first ancient philosopher to develop a consistent theory of civil society) masterly melted the concept of "just man" with the one of "just society." Plato described a person's soul, or personality, as having three parts: an appetite, which seeks physical satisfactions; a spirit, which seeks social approval; and a reason, which seeks truth. A just person is one whose reason, aided by a strong spirit, constrains the demands of the appetite. A just society is one in which people dedicate themselves to the common good, by practicing civic virtues of wisdom, courage, modernisation and justice, and by perform the occupational role to which they are best suited. Plato says: *"And the division of labour which required the carpenter and the shoemaker and the rest of the citizens to be doing each his own business, and not another's, was a shadow of justice, and for that reason it was of use? [...] But in reality justice was such as we were describing, being concerned however, not with the outward man, but with the inward, which is the true self and concernment of man. [...] When he has bound all these [various elements within him] together, and is no longer many, but has become one entirely temperate and perfectly adjusted nature, then he proceeds to act, if he has to act, whether in a matter of*

[11] Plato [c.a. 360 bce/1955].

property, or in the treatment of the body, or in some affair of politics or private business; always thinking and calling that which preserves and co-operates with this harmonious condition, just and good action, and the knowledge which presides over it, wisdom, and that which at any time impairs this condition, he will call unjust action, and the opinion which presides over it ignorance. [...] And if we were to affirm that we had discovered the just man and the just State, and the nature of justice in each of them, we should not be telling a falsehood?" (Book IV, 443).

It is also emblematic to notice that the first attempts of modern thinkers to define the concept of civil society came from those theorists and those intellectuals who played a crucial role in designing the other two institutions, the market and the state.

In his "An Essay on the History of Civil Society" (Ferguson [1767]), Ferguson identified the civil society with the social linkage which defines a nation, with the *brotherhood* between the members of a community which guarantees the respect of law, the protection of the property right and the authority regulation. People naturally desire to live together because their community protects them from the dangerous and fearful situation which characterise the conflictual State of Nature. As Ferguson says: *"Its [referred to the civil society] triumphs and prosperities, its calamities and distresses, bring a variety and a force of emotion, which can only have place in the company of our fellow-creatures. It is here that a man is made to forget his weakness, his cares of safety, and his subsistence; and to act from those passions which make him discover his force. [...] if courage be the gift of society to man, we have reason to consider his union with his species as the noblest part of his fortune"* (Ferguson [1767/1996]).

Note that brotherhood implies mutual obligation and interdependent happiness, strange expressions in the thought of one of the most important representative of the Scottish Enlightenment. However, even David Hume, the cofounder of the concept of instrumental rationality which remains the most important (as well as the cruellest) definition of rationality in the economic thought, recognised the pure necessity of mutual dependence. He says: *"the mutual dependence of men is so great in all societies that scarce any human action is entirely complete in itself, or is performed without some reference to the actions of others [...]. In proportion as men extend their dealings and* *render their intercourse with others more complicated, they always comprehend in their schemes of life a greater variety of voluntary actions which they expect from the proper motives to cooperate with their own"* (Hume [1748/1995]).

The same attitude of people to live in communities and to be mutually interconnected represents the basic anthropologic assumptions of Locke who surely represents one of the most important political thinkers in the seventeenth century. In his "Second Treatise on Government" (Locke [1690/1980]), he developed a reflection on an independent area of socialisation, a *commonwealth* or a social solidarity which emerges from the state of nature and spreads, through the social contract, to the civil law and the social life. Firstly, he recognises that the most important characteristic of human being is the need of socialisation. He says: *"God, having made man such a creature that, in His own judgment, it was not good for him to be alone, put him under strong obligations of necessity, convenience, and inclination, to drive him into society, as well as fitted him with understanding and language to continue and enjoy it."* (§ 77). Secondly, he states that the main source of commonwealth is the civil society in which men are useful to each other and freely accept to postpone their personal interests in name of the social contract. Indeed, he affirms: *"Wherever, therefore, any number of men so unite into one society as to quit every one his executive power of the law of Nature, and so to resign it to the public, there and there only is a political or civil society. [...] And wherever there are any number of men, however associated, that have no such decisive power to appeal to, there they are still in the state of Nature"* (Locke [1690/1980], § 89).

Finally, for Hegel (Hegel [1821/1991]), the civil society was the place of transition from the family, which is the most particularistic stage of human life to the state, which on the other hand represents the unique and fully universalistic reality. As the individual leaves the family and its ethical cohesion for a world wherein individuals pursue diverse interests for personal gain, he or she also creates new social bonds. Hegel intends the civil society as the set of bonds which unifies people as private citizens. A complex network of corporations and private associations emerges along with civil law and equal justice. How can the civil society exist if it is based on individuals' self-interest which clearly represents a disaggregative and antisocial principle? The Hegelian answer to this question comes (again) from the natural need of socialisation which characterises human being. He says: *"The concrete person, who as particular is an end to himself, is a mixture of caprice and physical necessity. As such he is one of the principles of the civic community. But the particular person is essentially connected with others. Hence each establishes and satisfies himself by means of others, and so must call in the assistance of the form of universality"* (Hegel [1821/1991], § 182). People cannot pursue their ambitions without considering themselves in relation with other particularistic realities. Human nature is made of social connections. Although social life is characterised by many contradictions, it is the only universalistic reality within which individuals discover their social nature and define both their needs and their values. *"The self-seeking end is conditioned in its realisation by the universal. Hence is formed a system of mutual dependence, a system which interweaves the subsistence, happiness, and rights of the individual with the subsistence, happiness, and right of all. The general right and well-being form the basis of the individual's right and well-being, which only by this connection receives actuality and security"* (Hegel [1821/1991], § 183).

The community becomes the main generator of moral values, norms of cooperation and "common good." Neither the state nor the market can substitute the community in finding its identity and in defining its ends. The positive effects of what Hirschman calls "shifting involvement" (Hirschman [2002]) represents the heart of the thought of Alexis De Toqueville. In his "Democracy in America" (De Toqueville [1835/2000]), he emphasises the importance of civic association in the American version of civil society.

Firstly, De Toqueville was really impressed by the virtuous tendency shown by Americans to create voluntary associations. He noticed: *"When you see the Americans freely and constantly forming associations [...], you have some difficulty in understanding how men so independent do not constantly fall into the abuse of freedom. If, on the other hand, you survey the infinite number of trading companies in operation in the United States, and perceive that the Americans are on every side unceasingly* *engaged in the execution of important and difficult plans, [...], you will readily comprehend why people so well employed are by no means tempted to perturb the state or to destroy that public tranquillity by which they all profit. [...] They afterwards transfer to civil life the notions they have thus acquired and make them subservient to a thousand purposes"* (volume II, section II, chapter VII).

Secondly, De Toqueville explained the cooperative behaviour of the Americans by referring to what he called "the principle of the self-interest rightly understood." He wrote: *"[Americans] have found out that [...] man is brought home to himself by an irresistible force; and, losing all hope of stopping that force, they turn all their thoughts to the direction of it. They therefore do not deny that every man may follow his own interest, but they endeavour to prove that it is the interest of every man to be virtuous. [...] The Americans [...] are fond of explaining almost all the actions of their lives by the principle of self-interest rightly understood; they show with complacency how an enlightened regard for themselves constantly prompts them to assist one another and inclines them willingly to sacrifice a portion of their time and property to the welfare of the state"* (volume II, section II, chapter VIII).

In other words, Americans voluntary created clubs, religious associations, churches, fraternal order to serve their private interests and their specific needs. However, in addiction to these specific objectives, they also triggered a virtuous process of learning the essential habits of cooperation and trust. In economic terms, they created social capital in the form of social ties, a flourishing democratic life and a feeling of mutual obligation. Using a coloured expression, De Toqueville says that Americans had found the secret key upon which *"the progress of all the rest depends."*

The neo-Toquevillean theorist Robert Putnam uses the same thesis of civic behaviour of citizens used by the French author to explain both the economic and social development in Italy. In his article "The Prosperous Community" (Putnam [1993]), he defines social capital as *"the features of social organization, such as networks, norms, trust that facilitate coordination and cooperation for mutual benefit"* (page 35). After, he compares the northern regions with the southern regions on the basis of the level of civic engagement –voter turnout, newspaper readership, membership in clubs, associations, churches and other realities- and he identifies two explanations of why the northern regions were characterised by both a better quality of government and higher economic performances than the southern ones. Firstly, he links the success in the democratic system in the north with the high level of civic engagement shown by people in that area. He says: *"Some regions of Italy, such as Emilia Romagna and Tuscany, have many active community organizations. Citizens in these regions are engaged by public issues, not by patronage. They trust one another to act fairly and to obey the law. Leaders in these communities are relatively honest and committed to equality. Social and political networks are organized horizontally, not hierarchically. These "civic communities" value solidarity, civic participation and integrity. And here democracy works"* (page 36). Secondly, he states that the better economic performances of the northern regions were directly implied by the high level of social capital accumulated by these regions over time. He says: *"these communities did not become civic because they were rich. The historical record strongly suggests precisely the opposite: they have become rich because they were civic. The social capital embodied in norms and networks of civic engagements seems to be a precondition for economic development"* (page 37).

On the basis of this line of research, Putnam clearly states in his "Bowling Alone" (Putnam [1995]) that the decline in the civic engagement represents one of the most dangerous aspect of the modern social life in USA. He finds that by almost every measure, Americans engagement in politics, in religious associations, in labour unions, in the parent-teacher association, in civic and fraternal organizations has fallen steadily and sharply over the last generation. The author concludes that the erosion of social capital over time could even undermine the economic performance of United States.

The research of Putnam clearly states that there exists a strong relation between the concept of civil society and both the economic performances and the quality of the effective government.

The attention of modern theorists for the concept of civil society, intended as the miraculous entity which reformulates and reinterprets both the market and the state without subverting them, has so increased that nowadays rather than a unique definition, we can affirm that *"[...] civil society is what you want it to do"* (Beem [1999]). Given this, I would like to offer an economic scheme of interpretation of the civil society. Obviously, I am aware of the fact that, being economics an "imperfect" social science, by emphasising only few aspects of civil society which could be interesting for economists, I risk to appear naïve on others or, much worse, to inspire deeper questions to other social scientist (in particular sociologists or political scientists).

Rather than offering a further definition of a concept which probably cannot be defined, I would like to focus my attention on distinctive aspects which, I think, can be interpreted as constituent elements of the civil society. Honestly, in doing this I was inspired by a great economist of the eighteenth century, Antonio Genovesi, who probably remains the most important economic interpreter of the concept of civil society. As Genovesi did, I have identified three main elements the concept of civil society is based on. In the next sections I want to analyse them from an economic point of view. Firstly, I want to describe an alternative concept of rationality used by any individual to act in a cooperative way and to establish mutual obligations. Secondly, I want to present a new theory of reciprocity based on the assumption that individuals are anonymous. Finally, I want to stress the importance of widespread trust which probably represents the most important by-product of a virtuous coexistence based on mutual assistance. In particular, I want to offer an explanation of how trust can spread among man and among different activities.

3.3. Rationality and Civil Society: Rational Egoism, Kantianism, and We-Rationality

The concept of *"rational egoism"* is the most important assumption to explain how an individual behaves when he faces a situation of choice. The two words describe a unique vision of a man who is rational if and only if he maximises his utility function taking into account both his budget constraint and the decisions of the other individuals. Unfortunately, with the development of the modern game theory, the operational limits of this assumption started being highlighted dramatically. In reality, the paradoxical implications of "rational egoism" in contexts of collective interaction had been already noticed by Hume, the philosopher who, by stating the concept of instrumental rationality, implicitly gave philosophical consistence to the behavioural hypothesis. The following story summarises Hume's dilemma: *"Your corn is ripe to-day; mine will be so to-morrow. 'Tis profitable for us both, that I shou'd labour with you to-day, and that you shou'd aid me to-morrow. I have no kindness for you, and know you have so little for me. I will not, therefore, take any pains upon your account; and should I labour with you upon my own account, in expectation of a return, I know I shou'd be disappointed, and that I shou'd in vain depend upon your gratitude. Here then I leave you to labour alone; You treat me in the same manner. The seasons change; and both of us lose our harvests for want of mutual confidence and security"* (Hume [1740/2002]).

Other situations which could be reinterpreted in terms of Humean dilemma are the well known public good game and prisoner's dilemma. In the first case, an individual can benefit from the public good contributed by his community regardless of whether he contributes to its provision. Therefore, he has not any incentive to contribute towards the public good. Since the same holds for everybody in the community, too little public good is produced. In the second case, two accomplices are going to be interviewed by the police in two separate rooms so that they cannot communicate. Each of them is told that if he alone confesses the crime of his partner, he will be free but if he remains silent, while his partner confesses, he will receive the most severe punishment he can imagine. If both remained silent, both would receive a very light punishment. Because of the lackness of communication, they do not manage to coordinate the confessions and therefore each is better off confessing the crime of the partner, no matter what the other does. In both the situations just described, every party would be better off if they could cooperate. However, moved only by his self-interest, everybody has an incentive not to cooperate and, much worse, can rationally expect the other to do the same. The tragic consequence of this concept of rationality is that, at the end of the situation, driven by his self-interest, everybody gets an inefficient pay-off. Each individual is moved solely by what he wants. Using Hollis's expression, those situations are dominated by a *philosophical egoism*.

Antonio Genovesi, contemporary of Hume and Smith, proposed the first concrete alternative to the assumption of rational egoism. First of all, Genovesi postulates a universal human desire for social relationship and takes this to be the primary motive for social cooperation (Genovesi [1766/1973]). This is captured by one proposition of his "*Ragionamento*" which could be paraphrased saying that *no human condition is more unhappy than to be alone, separated from any relations with other people.* As the author says: *"From those things it is possible to understand how stupid they are and how badly they reason those who demand independence at any level [...] This idea is, therefore, a fiction which has ruined and still continues ruining people, families, nations, and sovereigns. When it could be possible not to depend upon people, then could it be possible not to depend upon air, fire, water, soil, plants, animals and upon everything else on the earth?"* (Genovesi [1766/1973], page 38)[12].

Therefore, economic and political cooperation is rational in the same sense that friendship is since it makes possible to reach what he called the *"public happiness."* The adjective "public" captures the structural nature of happiness: happiness has to be public otherwise it is not happiness.

As Bruni and Sugden [2000] have suggested, "*the most useful framework to use [to understand Genovesi] is the rationality of we-rationality as advocates by Hollis*" (page 26). In his "Trust within Reason" (Hollis 1998) Hollis proposes his definition of we-rationality. He says: *"Adam can decide what to do by reflecting that the good of the team requires Adam to do **a** and Eve to do **e**, and then threat this as an unconditional reason to do his bit. It no longer worries him that he does well to do **a** only if Eve will indeed do **e**, because Eve will have a similarly unconditional reason for doing **e** as her bit. Each now has the assurance that the other will not wait to contribute"* (page 137). Then, he stresses the importance that individuals recognise themselves as members of the same body: *"to prevent conditionals from resurfacing, team membership needs to be a stronger relation than membership of a mere association. One way to make the point is to say that members of teams have 'we-intentions': each, if asked 'what do you intend*

[12] The Italian text is: "Dalle quali cose si può comprendere quanto siano sciocchi e quanto ragionino male coloro che pretendono a qualsivoglia grado d'indipendenza ... Questa idea è dunque una chimera, la quale ha rovinato e rovina le persone, le famiglie, le nazioni, i Sovrani. ... Quando si potesse non dipender dagli uomini, si potrebbe non dipendere dall'aria, dal fuoco, dall'acqua, dalla terra, dalle piante, dagli animali e da tutte le altre cose della terra?"

to do?', replies 'We intend to keep left.' This will be no small innovation, if we-intentions presuppose we-desires and we-beliefs, in shorts if teams or groups can be agents only if they have relevant attributes of individual agents" (page 138). Once having accepted that being a person means belonging to a community, it is clear both why and how a person behaves cooperatively in favour of the well-being of the group.

The concept of we-rationality addresses two questions which need to be answered. Firstly, what are the differences between this form of rationality and what we could define the "Kantian rationality?" Secondly, how does a "we-rational" individual defines his *team* of reference?

As a supporter of the Kantian approach to morality, I should try at least to state that the rationality based on a supreme categorical imperative which suggests how we ought to act according to a universal maxim[13] works as well as Hollis's we-rationality. Although the most of the times it does (and in particular in the prisoner dilemma and in the public good game as I will show later on), I agree with Hollis that in some circumstances it could appear obscure because of two main reasons: a) it fails to respect the prerequisite of "unconditional reasoning"; b) it is implicitly based on the standpoint of the common good which, obviously, makes the Kantian morality extremely week from the subjective point of view and inconsistent.

To explain this point, let us refer to the "Common Good" game presented by Hollis (page 99). Suppose the pay-offs matrix of the game is the following one:

		Eve	
		X	Y
Adam	X	1,1	0,1
	Y	1,0	0,0

As it appears clear, Adam's pay-off depends wholly on what Eve chooses and vice versa. Moreover, each is indifferent between X and Y since the expected utility of

[13] In the "Groundwork for the 'Metaphysics of Morals'", Kant summarises the concept of the categorical imperative with the unconditional commitment: "act as though the maxim of your action were to become by your will a universal law of nature" (Kant [1785]).

X is the same of the expected utility of Y and any choice is an equally rational choice. Does the idea that a rational agent always acts on a universal maxim represent the trick?

The answer of the author opens the puzzle: *"Yes it does in the sense that a maxim directing everyone to the common good succeeds if obeyed by all. However, why should Eve adopt the standpoint of the common good? A ready answer is 'because she will do better for herself thereby'. But this answer is open to the objection that, if unconditional, it is false. She does better only if he adopts that standpoint; and, if he does, she still has no reason to do likewise. The right answer has to be 'because the common good is the standpoint implicit in the practical reason'. But that is precisely what is in question"* (page 100).

The author proposes two alternative solutions. The first one is his theory of we-rationality while the second one consists in explicating the elements of the moral theory adopted to solve the collective problems. My personal interpretation is that individual personal commitment to obey to the common good appeals to both Hollis's concept of we-rationality and a particular version of the Kantian categorical principle. The "we-rational" element is expressed by both an objective definition of common good and a sense of personal commitment to act cooperatively. On the other hand, the evangelic Kantianism aspect is summarised by the proposition: "act in the way you would like others to act." The necessity of mixing the two principles comes from the fact that in some circumstances the we-rationality is too vague in determining individual action. For instance, consider the public good context and suppose that an individual has to decide how much to contribute given the information about the number of individuals in his community and the preferences of others. For sure if people were driven by the we-rationality they would choose to contribute. However, if the contribution is voluntary and can be everything ranging from zero to the total income of the individual, I find quite difficult to use this concept to quantify the contribution that the we-rational individual should contribute. The evangelic Kantian principle would help people at least in this.

Let us move to the second point. Accepting the "we-rationality" as a principle of action leaves open another crucial question on the definition of the community of reference. One suggestion is proposed by Hollis. When he explains the differences between the concept of team and the weaker one of, for example, the association he says: *"one [way to conceive of team and of actions done for the good of the team] is to think of the team as an entity transcending its members, with a group which transcends and determines theirs"* (page 138). And later he continues: *"[...] the we is neither a sum of associated individuals nor all humanity but a matter of membership. Titmuss is right, I think, to call the practice one of 'gifts between the strangers' but these are relative strangers – unknown members of our network"* (page 147). This seems to be coherent with the Hegelian vision of a civil society intended as a transition from particularism to universalism in which people who recognise their need of a social life seek to establish strong ties of mutual assistance with their neighbours. Moreover as stressed by Alan Wolfe, *"Both the scope and the specificity of moral obligations change as societies become more modern. The sheer complexity of modern forms of social organization creates an ever-widening circle of newer obligations beyond those of family and locality. Modern liberal democrats, for one, have obligations to perfect strangers [...] [and] to what has been called the 'generalised other' [...]. The scope of moral obligation – especially at a time when issues of possible nuclear war, limitations on economic growth, and ecological destruction are public concerns – seems to be without limits"* (Wolfe [2000], page 52).

Whatever the definition of the "others" consists of, it implicitly refers to a situation in which a group of individuals are, using an economic expression, strategically interconnected to each other. This idea is well-captured by the definition of group assumed by Sugden in his model of reciprocity. He say: *"The individual has an obligations, not to 'society' but to any groups of individuals from whose efforts he derives benefits. Groups need not be formally constituted organisations. The groups that have claims on the individual may be occupational, racial, religious or political; they may be local, national or international."* (Sugden [1984], page 775).

3.4. Social Reciprocity and Anonymous Contributors

Once defined the concept we-rationality, Hollis presents another crucial question. He asks: *"why do people who contribute to public goods fret about free-riders in some cases but not others?"* (page 147). The answer he proposes highlights a new definition of social reciprocity I find particularly coherent with the idea of mutual assistance often linked to the concept of civil society. He says: *"There is a logic of 'enough', I submit, which can overcome the dominance of defection, provided that a sense of membership is in play. [...] Thus, public goods which depend on creative altruism are a matter both of a large enough total to secure the good and of enough contributors for mutual reassurance that contributing is a worthy activity."*

Starting from Hollis I would like to present my theory of reciprocity which shares, in a certain sense, the same idea of "enough."

Suppose that Mr. Jeaves is taking a walk in a public park and he finds a plastic bag on the ground. He has to decide whether to pick the bag up, contributing to the quality of the park but spending a bit of effort to find a bin, or to leave the plastic bag where he has found it. It is reasonable to expect that Mr. Jeaves' decision would be influenced by the actual state of the park: the cleaner it is, the higher the chance that Mr. Jeaves will pick the bag up, contributing towards the respect of nature.

Mr Jeaves' behaviour is an example of what I define as "social reciprocity." With this expression I refer to those situations in which, by observing a "sufficiently high" level of public good, anonymous and unobserved individuals are induced to contribute more than what is usually predicted by the public good models. According to this class of models, in deciding how much to contribute towards a specific social project which affects the well-being of all the contributors, individuals are inexorably bound to fall into "free-riding" and exhibit the "crowding-out" in personal contribution (see e.g. Andreoni [1988]). The puzzle given by the empirical invalidation of these results (in addiction to Andreoni's paper, see e.g. Sugden [1982] and Rose-Ackerman [1996]) has driven economists to take part in the discussion, by building reasonable and elegant models of reciprocal contributions.

Although the economic literature nowadays boasts a large number of these theories, none of them can be easily applied to the concept of "social reciprocity."

Consider for instance the "Inequity Aversion" hypothesis. Extending their theory to many contexts (the public good game being one of them), Fehr and Schmidt [1999] assume that an individual is induced to cooperate with other players, whose material payoffs are below an equitable benchmark (defined as an equal monetary payoff for all players), but he feels envy when their material payoffs exceed this level. However, the implicit assumption of perfect knowledge, which allows individuals to compare others' payoffs with the benchmark, makes this theory not applicable to a context in which people can observe only the total amount of public good collected until that moment. Moreover, as stressed by Bardsley [2000], one of the most doubtful predictions implied by the theory when used to explain private contributions to a public good is that individuals with less than the average income are very likely to behave as free riders because they would experiment disadvantageous inequality (page 214). This implication seems not to be confirmed by the empirical evidence on public goods. For instance, Andreoni [1988] reports that, according to the results of three surveys on the American philanthropic sector in the seventies, over 85% of all the American households support "big" charities with their voluntary donations. Moreover, the average giving is over $200 per household. This shows that the percentage of households who consistently contribute to charities is much higher than the percentage of households with more than the average income.

Another interesting theory of reciprocity is presented in Rabin [1993]. Rabin assumes that individuals' willingness to cooperate depends on the kindness showed by the persons they are interacting with (page 1282). Unfortunately, it can only be applied to simple two-persons, normal-form, complete-information games. As directly suggested by Rabin, an extension to the public good context appears doubtful from the psychological point of view since, in deciding the amount to contribute, an individual is forced *"[...] to choose either to help everybody or to hurt everybody."* This leads the author to the question: *"does one contribute to reward those who have contributed or not contribute to punish those who have not contributed?"* (page 1296).

I want to present a new theory of reciprocity which directly refers to the social reciprocity context. In my theory I assume that individuals contribute their "fair" contribution when they consider that particular behaviour as correct, otherwise they continue behaving as free-riders. Obviously, I should answer at least two questions which the previous behavioural assumption suggests. Firstly, what kind of psychological process do individuals follow in order to judge the correctness of a particular social behaviour? Secondly, how can they define a fair contribution under the assumption of it being anonymous and unobservable?

Cialdini's theory of "Social proof" represents a good answer to the first question. Suppose you have to decide whether or not to support a NGO's social project which could affect the well-being of your community. The only information you have about the project is contained in a brochure. Suppose one of the following two sentences is the title of the brochure. The first one could say: "Would you like to be the first anonymous contributor in supporting our project?" The second could read as: "Would you like to join the three million anonymous supporters who have already financed our project?" According to Cialdini [2001], the second title should be much more appealing than the first one, since *"[...] we view a behaviour as correct in a given situation to the degree that we see others performing it"* (page 95). Moreover, if we interpret Cialdini's theory in terms of social reciprocity[14], it suggests a sort of "Crowding-in" effect, which is not based on any kind of discernability of personal contributions. When an individual has to choose whether to contribute fairly or selfishly, he will base his decision on what the other members of his society have done, even if he knows that his contribution will remain completely indistinguishable within the total amount of public good. However, since the same holds for everybody, the only information each individual can use to infer how the others have behaved is the total quantity of public good collected.

Now consider the second question, the problem of defining a *"fair contribution."*

[14] Cialdini's theory is prevalently accepted as a theory of conformism. As Bardsley clarifies: *"Conformism differs from reciprocity, since appropriate reciprocal behaviour depends on the welfare effects of the stimulus behaviour, whilst conformist behaviour does not. For example, a conformist would contribute to a useless public 'good', which benefits no-one, if he observes enough others making contributions"* (Bardsley et al. [2003], page 4). However, I do not find any problem in adapting Cialdini's psychological criterion (by which individuals judge the correctness of their actions) to the social reciprocity context.

Before explaining the way in which I intend heterogeneity among individuals, I want to illustrate the concept of "fair contribution" I refer to. In particular, according to what said in the previous section, I want to emphasise the following two aspects: a) the fair contribution is the one defined according to the "we-rationality;" b) the "evangelic Kantian" principle can be used to determine the amount one should contribute for.

Although Sugden's theory of reciprocity (Sugden [1984]) is based on the (already discussed) assumption of common knowledge of personal contributions, it contains a little recognised and crucial point which my theory shares: in deciding their contribution towards the public good, individuals are always able to define an unconditional, "fair" contribution that they should contribute regardless of what the others do. Sugden defines individual's obligation to contribute in the following way: *"For any vector of contributions **q**, for any group of individuals G, and for any member of that group i: i is meeting his obligation to G if and only if either (a) $q_i \geq q_i^G$ or (b) for some other person j in G, $q_i \geq q_j$"* (page 777) where q_i^G is the level of contribution that i would choose if he could choose it for all members of G.

Sometimes economists[15] refer to this amount as the "Kantian contribution". According to the concept of Kantian categorical imperative[16] adapted to the public good context, an individual should firstly define the amount he would like others to contribute if they were in his circumstances and, secondly, contribute that amount regardless of what the others do. It is clear that the main implication of this concept, particularly applicable to a context characterised by anonymous and unobservable contributors, is that an individual is able to determine his fair contribution even if he cannot compare it with others' contributions. Moreover, as already stressed in the previous sub-section, the concept of Kantian contribution is coherent with the concept of we-rationality applied to the public good context. Indeed, suppose that individuals are identical in terms of both incomes and preferences. It is clear that, given the

[15] See for example Laffont [1975], Bourdignon [1990].

[16] In the "Groundwork for the 'Metaphysics of Morals'", Kant summarises the concept of the categorical imperative with the unconditional commitment: *"act as though the maxim of your action were to become by your will a universal law of nature"* (Kant [1785]).

previous assumption, each individual defines the same desired level of public good. For how much should a we-rational individual contribute towards this desired level of public good? The good sense should suggest that each individual should contribute 1/N-th of the desired level of public good since everybody will enjoy it in the same way and everybody disposes of the same income. However this coincides with the amount one could determine through the "evangelic Kantian" principle earlier defined. Since "I want to contribute what I want you to contribute," how much should I contribute? I cannot answer "less than 1/N-th of the desired level" because in this case the public good would not be produced at the desired level. On the other hand, I do not want to answer "more than 1/N-th of the desired level" because if everybody did the same we would produce a too high level of public good which is inefficient. Moreover, I cannot appeal to any principle which could imply different contributions since I know that everybody is endowed with both the same preferences and the same income of mine. Therefore the right answer to the initial question should be "for 1/N-th of the desired level of public good."

Given the definition of Kantian contribution, it is reasonable to assume that an individual contributes fairly if his contribution is equal to the higher of the Kantian contribution and the self-interested one. Indeed, if the Kantian contribution is lower than the self-interested one (as it is formally possible given the heterogeneity I am going to discuss), there is not any "ethical or logic" reason why the individual should refuse to contribute the amount which maximising his utility function in favour of the Kantian level.

Let me finally discuss the "heterogeneity" problem. I want to stress the implications of three sources of heterogeneity between individuals: income, preferences and moral attitude to contributing fairly.

The first two (income and preferences) directly affect the size of both the "fair" contribution and the self-interested contribution. According to Andreoni's theorem (Andreoni [1988]), there exists a positive relation between those two parameters and the self-interested contribution[17]. Moving to the "fair" contribution, the higher the income and the preferences for the public good, the higher the Kantian contribution is. In particular, the positive relation between the Kantian contribution and the importance assumed by the public good in the utility function appears "neutral". If an individual does not care about the public good, then probably he will not feel morally obliged to contribute towards it, since he would not have cared if others had not contributed.

The third dimension, one's moral attitude to contributing fairly, represents the real innovative source of differentiation among individuals. This would capture Hollis's concept of "enough." People do not always choose to reciprocate the behaviour adopted by the majority of the others, or at least not all of them contemporaneously. For example they can mistakenly not reciprocate because of their limited rationality (for a general discussion on bounded rationality see Simon [1982]; for the impact of limited rationality on public good experiments see Andreoni [1995]). Alternatively, a much more interesting justification could be that different people respond differently to the "social proof" described before. For instance, I find the following suggestion of Fehr and Schmidt really interesting: *"[...] if all people were alike, it would be difficult to explain why we observe that people sometimes resist "unfair" outcomes or manage to cooperate even thought it is a dominant strategy for a selfish person not to do so, while in other environments fairness concerns or the desire to cooperate do not seem to have much of an effect"* (Fehr and Schmidt [2002], page 15). There are people who start a particular project motivated by their ideals regardless of what the rest of the world does: people who create new NGOs, leaders of religious, political, social movements and so on. On the contrary there are individuals who decide not to conform to the generalised behaviour with the purpose of taking personal advantage. Between these two extreme classes of individuals, there exist people who decide to contribute on the basis of the existing level of the public good. One way to introduce this difference in an economic theory is to assume that each individual is characterised by his personal "attitude to

[17] For our purposes the most important results found by Andreoni are: a) only the richest members of the economy will contribute; b) the set of contributors to the public good will converge to a set containing individuals of a single type (i.e. individuals with the highest preferences for the public good).

contribute fairly," which simply expresses the proportion of fair contributors he would like to observe so as to be induced to contribute "fairly." However, since nobody in the society can observe other personal contributions, we can imagine that each individual applies a simple inferential procedure through which he can infer the proportion of fair contributors by observing the level of public good. If the inferred parameter is greater than his personal attitude to fairness, then he contributes his fair contribution. In other words, when an individual considers that "enough" people have acted cooperatively, then he joins the "teamwork," contributing what should be optimal to contribute if everybody did the same. The definition of "enough" represents a personal characteristic; it can vary from a level associated with an unconditional team-thinker who always acts for the benefits of the community to a level associated with an unconditional egoist who always behaves as a free-rider.

Let me finally highlights three different aspects implied by this particular definition of personal characteristic.

Firstly, it implies the existence of an adjustment process which drives the system to converge to a stable equilibrium. Following the logic of the "information cascade phenomena" (Bikhchandani et al. [1998]), the higher the number of individuals who have adopted behaviour A at a certain time, the higher the inferred percentage of people who behave according to A will be, the higher the percentage of individuals induced to behave according to A the next period will be and, finally, the more self-reinforcing the process will be in the future. As soon as the process starts, it rapidly moves converges to a new stable equilibrium.

Secondly, the last consideration suggests that the dynamic process through which a behaviour spreads in the society determining the final equilibrium depends on the particular distribution of the individual characteristic among people. This aspect is well captured by a class of models based on the concept of individual thresholds (Schelling [1978], Granovetter [1978], Granovetter and Soong [1983])[18]. The main

[18] There are two differences between the models of Schelling and Granovetter and my contribution which are worthy to be noticed. Firstly, in building their models, they assume perfect knowledge of others' actual behaviour. Having offered a reasonable inferential procedure, I have removed this strong assumption in my model. Secondly, they assume that an

conclusion of these models is that the social diffusion of a behaviour assumes specific dimensions in terms of speed of adjustment and characteristics of the equilibrium (in particular the number of followers and the dynamic stability) according to the distribution of the behavioural threshold among individuals. In particular, as noticed by Elster [1989], it is clear that the dynamic process which drives the system to an equilibrium in which somebody contributes fairly, needs some unconditional fair contributors in order to be triggered. He says: *"There are probably not many everyday Kantians, but their presence may be an indispensable catalyst for cooperation"* (page 205).

Finally, according to the distribution of the personal parameter among individuals, the system can present multiple equilibria which could be either stable or unstable. Moreover, it is formally possible that the system converges to equilibria characterised by the coexistence of fair contributors and free-riders.

3.5. Widespread Trust and Economic Performance

This is the most challenging section of the chapter. On one hand, I should delineate a definition of widespread trust which is coherent with both the concepts of rationality and reciprocity I have discussed in the previous sections. On the other hand, I should explain how the civil society creates trust and what its main economic consequences consist of.

The definition of widespread trust I have in mind prevalently comes from two authors already quoted throughout the chapter: Antonio Genovesi and Francis Fukuyama.

As clarified by Bruni and Sugden [2000], Genovesi defines "Fede Pubblica" (literally public trust) as a common and mutually-recognised commitment to the virtues of friendship and reciprocal assistance where these two expressions basically refer to the concept of reciprocity under the principle of we-rationality. In the appendix of his "Lezioni" (Genovesi [1765-1767/1820]), Genovesi clarifies, *"This word, fides, means*

individual faces two possible alternatives defined in terms of "actions" ("act" or "non act") while in my model I assume that he has to decide between two possible "behaviours" ("moral behaviour" and "self-interested" behaviour).

rope, which ties and joins. Public trust is, therefore, the bond of families united in a friendly life." This entity was so important for Genovesi that *"[...] nothing is more necessary than public trust in a wide and easy circulation [...]. Trust is for civil bodies what the law of gravity is for natural bodies [...]. There, because of lack of trust, there is no reciprocal reliability, no society, no industry and no trade among peoples"* (*Lezioni*, II, cap. X, p. 148-149).

In other words, for Genovesi, widespread trust has two main characteristics: a) it is produced by a virtuous community of individuals who share a feeling of mutual obligations and, b) it spreads its effects in every human activity. Given these premises, Genovesi's main suggestion to the governors of Naples was to cultivate the public trust in order to stimulate the economic performances of the country. One mechanism through which the governors would have obtained this ambitious result was to encourage and the civil and the religious education of the citizens.

The concept of trust used by Fukuyama in his book is not dissimilar from the one offered by Genovesi. In particular Fukuyama refers to an "alchemic" combination of two elements which characterise a society: a generalised tendency to cooperate and a shared morality based on the cultural connotations of the society. He defines trust as *"the expectation that arises within a community of regular, honest, and cooperative behaviour, based on commonly shared norms, on the part of other members of that community. Those norms can be about deep "value" questions like the nature of God or justice, but they also encompass secular norms like professional standards and codes of behaviour"* (Fukuyama [1995], page 26).

The virtuous consequence of high level of trust is social capital. Indeed he says: *"Social capital is a capability that arises from the prevalence of trust in a society or in certain parts of it."* After having defined both the concepts of trust and social capital, he states the indissoluble linkage between them and the culture of the society. He says: *"Social capital differs from other forms of human capital insofar as it is usually created and transmitted through cultural mechanism"* where culture is defined as an *inherited ethical habit*. Then, he states the importance of considering the cultural characteristics of a community in delimiting the ethical habits. He says that *"[...] the most important* *habits that make up cultures have [...] to do with the ethical codes by which societies regulate behaviour – what the philosopher Nietzsche called a people's 'language of good and evil'. Despite their variety, all cultures seek to constrain the raw selfishness of human nature in some fashion through the establishment of unwritten moral rules"* (Fukuyama [1995], page 34).

Before analysing the effects of trust on the economic performance of a country, I would like to stress the linkages between trust and rationality emphasising how the former entity appears in contrast with the both the concepts of instrumental rationality and rational egoism. In his "Trust within Reason" (ibidem) Hollis asks a crucial question: *is trust rational?* In other words, given the definition of rationality used by an individual to pass from the desire to the action, can we state that trust is coherent with it? The problem arises from the distinction between the predictive (I predict you will do it) and the normative (I believe that you should do it in force of a social norm or a moral quality) senses of trust since the first one appears more dependent on the definition of rationality than the second one. As affirmed by the author: *"trusting people to act in their self-interest is one thing and trusting them to live up to their obligations is another. The former does not capture the bond of society, since the bond relies on trusting people not to exploit trust. That connects in turn with a dispute about the proper sense of 'rational' and of the rationality involved in strategic action. All this leaves it unclear for the moment whether expectation finally always carries a predictive sense, especially one which would unify the natural and social sciences"* (page 14).

While his definition of "we-rationality" seems to find a coherent and consistent justification for the existence of trust (so that predictive and normative senses of trust coincide), the concept of rational egoism does not. For instance, the Humean example of the two non cooperative farmers (see page 6) suggests how opposite to each other a "right action" and a "actual action" could be when they are seen through the lens of the assumption of self-interest. Even Hollis highlights a paradoxical linkage between trust and self-interest. Firstly he recognises that any society requires a certain level of trust to exist. He says: *"Social life depends on trust, especially on trust that promises will be kept. Yet there would be no institution of promising if we reconsidered our promises* *whenever the moment came to honour them, and then kept them only if we did not better by breaking them. Promising works only if promises are kept just because they have been made"* (page 22). Then, on the same page, he states his "paradox of trust." *"[...] the peculiar problem is to breed an animal capable of keeping promises even on occasions when an assessment of consequences [...] bids us defect. It is posed in the first instance by presenting Adam and Eve as characters drawn by [...] an instrumental notion of rationality. That swiftly makes for a paradox of trust. The stronger the bond of trust, the more a society can progress; the more it progresses, the more rational its members become and hence the more instrumental in their dealings with one another; the more instrumental their relations, the less trustworthy they are. So the progress of reason erodes the bond which made it possible and which it continues to need"* (page 23). In other words, for Hollis self-interest is logically incoherent with the idea of trust. If and only if we enrich our analysis with different concept of rationality, based on a natural tendency to face problems from a collective point of view, we could rely on the concept of trust and on the coincidence between its normative and its predictive sense.

Now, I should explain how the level of trust can affect the economic performances. The idea that widespread trust can influence economic performances has always been accepted by economists. For instance, in his "Principles of Political Economy," J. S. Mill pointed that *"the advantage to mankind of being able to trust one another, penetrates into every crevice and cranny of human life: the economical is perhaps the smallest part of it, yet even this is incalculable"* (Mill [1848/2004], page 131). Moreover, there is a large number of empirical contributions which confirm the positive correlation between growth, efficiency and the level of trust (including the findings of Putnam [1993] and the cultural considerations of Fukuyama [1995], one can also refer to Heliwell et al. [1995], Keefer et al. [1997], Knack et al. [2001]).

According to the theorists of social capital, the channels through which trust would influence the economic performance of the country are: a) reduction of transactional costs (monitoring and preventive activities to protect themselves from being exploited in economic transactions) and legal disputes; b) higher percentage of time devoted to innovation in new products or processes; c) higher reliability of formal institutions like the government and the central bank which implies that people can adopt more appropriate horizons in making investment decisions and choose production technologies that are optimal over the long, rather than short, run; d) a stronger feeling of teamwork due to the sharing of ethical norms which induces cooperative behaviours and organisational innovations. In particular, this sort of linkage represented one of the most important conclusions of Weber's thought. In "The Protestant Sects and the Spirit of Capitalism" (Weber [1946]), Weber argued that an important effect of Protestantism was to heighten the capacity of its adherents to cohere in new communities. Sectarian religious communities like the Baptists, Methodists and Quakers created small, tightly knit groups whose members were bound to each other through common commitments to values like honesty and service. This cohesion served them well in the business world, since business transactions depend to a great degree on trust. The author told the following story: *"On a long railroad journey through what was the Indian territory, the author, sitting next to a travelling salesman of 'undertaker's hardware' (iron letters for tombstones) casually mentioned the still impressively strong church-mindedness. Thereupon the salesman remarked, 'Sir, for my part everybody may believe or not believe as he pleases; but if I saw a farmer or a businessman not belonging to any church at all, I wouldn't trust him with fifty cents. Why pay me, if he doesn't believe in anything?"* (Weber [1946], page 303). Weber noted as well that the small sectarian communities created natural networks through which businessmen could hire employees, find customers, open lines of credit. Precisely because they were members of voluntary rather than established churches, adherents of Protestant sects had a deeper degree of commitment to their religious values and stronger ties with one another.

Although economists have always assumed that there exists a positive relation between trust and economic performance, they have rarely investigated on how this strong linkage can be explained theoretically. In my case, since I have indirectly treated the concept of civil society in terms of a typical situation in which individuals are asked to cooperate in order to enjoy a reasonable level of public good, I should clarify how trust, intended as the virtuous product of cooperative individuals, can spread and positively influence the economic performance of the community. This is an old thesis which clearly appears in the thought of modern economists. For instance, in his "Nature of Rationality" (Nozick [1994]), Nozick says: *"Cooperating in [the Prisoner's Dilemma] situation then may get grouped with other activities of cooperation [...]. Hence, non cooperating in this particular Prisoner's Dilemma situation may come to threaten a person's cooperating in those other situations – the line between them may not be so salient."* How to justify theoretically this kind of, using Elster's language, *spillover effect* (Elster 1998)? I have found suggestive Sugden's mechanism of "diffusion by analogy" (Sugden 1989). Although he directly refers to coordination game like the "chicken and dove," I think that his theory can be easily extended to situations like the prisoner dilemma and the public good game. He says: "*A convention can start to evolve as soon as some people believe that other people are following it. But what gives rise this initial belief? One possibility is that the same forces are at work as enable people to coordinate their actions without communication in unrepeated games. Some forms of coordination are more prominent than others, and people have a prior expectation of finding the most prominent ones. But, [...] prominence is largely a matter of common experience. The implication is that conventions may spread by analogy from one context to another. If it is a matter of common knowledge that a particular convention is followed in one situation, then that convention acquires prominence for other, analogues situations. [...] [Finally], if conventions can spread by analogy, then the conventions that are best able to spread are those that are most susceptible to analogy. Thus we should expect to find family of relationships among conventions, and not just a chaos of arbitrary and unrelated rules*" (page 93).

In other words, by adapting Sugden's theory, if people learn to cooperate in collecting public good, then it is reasonable that the same attitude will spread "by analogy" to the productive sector in which everybody is involved. Individual work becomes more productive because of a higher coordination and a higher cooperation with colleagues and, moreover, production becomes more efficient because of a considerable reduction in transaction costs.

3.6. Conclusions

In this chapter, I have tried to achieve two main goals. Firstly, I have presented a theory of civil society based on three main three elements which can be treated by an economist: the concept of we-rationality, the theory of social reciprocity and the concept of widespread trust. The main economic implication of the combination of these elements is that the coexistence in civil societies of cooperative individuals who freely and mutually assist each other can stimulate the economic performances of the community through the production of widespread trust.

Secondly, in this chapter, I have introduced important elements which will be widely used in the next chapter. Indeed, in chapter 4, I present a formal model of civil society built using the traditional framework of the endogenous growth models.

CHAPTER 4

MORALITY, WIDESPREAD TRUST AND ENDOGENOUS GROWTH: A MODEL OF CIVIL SOCIETY

4.1. Introduction: the Logic of the Model

The purpose of this chapter is to present a formal model of endogenous growth theory which incorporates the distinctive elements of the concept of civil society I have discussed in the previous chapter. The model is formally divided into two parts: a static specification and a dynamic specification. In the static specification, I present a simple theory of social reciprocity to show how anonymous contributors are influenced by others' contributions in deciding their contribution towards a specific public good. In the dynamic specification, I incorporate the main conclusions of the static specification into a model of endogenous growth theory. In particular, I introduce a variable to capture the widespread trust which positively depends on the level of public good collected by the society and positively influences the productivity of the firms of the economy. The basic idea is that, the more the members of the society cooperate in achieving the common good, the more they do the same in the productive sector and, therefore, through the reduction of the transactional costs and a efficient teamwork, the higher the economic performances of the productive sector are. In particular in the "Civil Society," individuals are partitioned between self-interested contributors and fair contributors according to the equilibrium partition obtained in the static specification of the model. In this case, depending on the specification of the production function, the level of growth in the economy can either influence the growth rate of the economy or increase the levels of the variables. Moreover, this state of the world suggests that the government can influence positively the economic performances of the country. In particular, as highlighted by Putnam [1995], Fukuyama [1995] and Himmelfarb [2000], In particular, one way the government can encourage the economic growth is to stimulate the production of social capital by triggering a motivational crowding-in in the society.

The chapter is organised as follows. In section 4.2., I discuss the static specification of the model which directly refers to my theory of social reciprocity. In section 4.3., I introduce the dynamic specification of the model and in sub-section 4.4., I present the solution of the model. In section 4.5., I introduce a government which supports the society in collecting the public good. Finally, in section 4.6., I solve the model under the assumption of Rebelo's production function and I show how this modification influences the main linkage between growth rate and level of widespread trust.

4.2. The Static Specification: Towards a Definition of Social Reciprocity

The main implications of the public good models is that, in deciding how much to contribute towards a specific social project which affects the well-being of all the contributors, individuals are inexorably bound to fall into "free-riding" and to exhibit the "crowding-out" effect (see e.g. Andreoni [1988]). The puzzle arisen by empirical invalidation of these results (in addiction to Andreoni's paper, see e.g. Sugden [1982] and Rose-Ackerman [1996]) has driven economists to take part in the discussion, by building reasonable and elegant models of reciprocal contribution. The main idea of this class of models is that individual's contribution positively depends on others' contributions. Although the psychological assumptions these theories are based on are different, they share the same hypothesis of perfect discernability of individuals' contributions (examples of these theories are Rabin [1993], Fehr and Schmidt [1999], Sugden [1984]). Unfortunately, this assumption sometimes limits the implementability of these theories. There are contexts in which anonymous agents are induced to increase their contribution by observing a sufficiently high level of public good. The environmental preservation and the experience of many NGOs represent good examples of this sort of, by using Cialdini's language, "Social Proof" principle (Cialdini [2001]).

In this section, I present a simplified version of my "Social Reciprocity" theory in which anonymous contributors exhibit a positive attitude to contribute fairly towards a specific public good as long as they perceive that the rest of the society is behaving in the same way. Through a realistic inferential procedure each individual infers the percentage of fair contributors in the society by observing the total quantity of public good produced until that time. Then he decides between contributing fairly or selfishly, by comparing the inferred proportion of fair contributors with his personal propensity to contribute fairly. This personal characteristic consists of a parameter which describes the percentage of "fair" contributors required by the individual to decide to also contribute fairly. In particular, a contribution is "fair" if it is morally defined by the individual through the following Kantian categorical imperative: "contribute by an amount, by which you would like everybody else to contribute, if they were under the same circumstances as you." This definition is coherent with the concept of we-rationality. Indeed, the Kantian contribution represents the fair share of public good an individual should contribute if he wanted to behave cooperatively with the others in order to collect the efficient level of public good.

The section is organised as follows. In sub-section 4.2.1 I discuss the assumptions of the model. In subsection 4.2.2 I present the equilibrium conditions for both a self-interested and a fair contributor taking as given the partition of the society between these classes of contributors and I show how individuals infer the proportion of fair contributors by observing the level of public good. Finally, in sub-section 4.2.3 I describe the equilibrium partition between self-interested and fair contributors.

4.2.1. The Assumptions of the Model

Suppose that there are N individuals in the society. They are identical in terms of both preferences and incomes. Assume that the preferences of a generic agent are described by the following utility function:

$$[1] \qquad U_i = U(\hat{c}_i, \tilde{Q}) = \beta \log \hat{c}_i + (1-\beta) \log \tilde{Q}$$

where $\hat{c}$ represents individual private consumption, $\tilde{Q}$ is the total quantity of public good collected in the society and $0 < \beta < 1$ is the weight individuals assign to the public good in their utility function. In particular the total quantity of public good is an additive function of the personal contributions offered by individuals such that $\widetilde{Q}=\sum_{i=1}^{N}\hat{q}_i$. For simplicity let us normalize both the price for a unit of private consumption and the price for a unit of public good to one so that the budget constraint faced by individual i becomes:

$$[2] \qquad \hat{I}=\hat{q}_i+\hat{c}_i$$

In other words, individual i shares his income $\hat{I}$ between private consumption and personal contribution. Each individual can decide to contribute either morally or selfishly towards the public good. A moral contributor is a person who determines his contribution by maximising his utility function under two different constraints: the budget constraint and the moral constraint. The moral constraint simply induces the individual to choose a contribution at least equal to the Kantian contribution. Each individual computes his Kantian contribution through a "double step" procedure which implements the categorical imperative: "contribute the amount you would like everybody else to do in the same circumstances." Firstly he determines the quantity of public good he would have observed if all the other people had been characterised by his preferences and had contributed fairly. Then he starts contributing for a fair fraction of the Kantian quantity simply computed as the ratio between the Kantian level of public good and the size of the population. Formally, if we indicate with $\hat{q}_i^{kant}$ the fair contribution and with $\widetilde{Q}_i^{kant}$ the Kantian level of public good determined by individual i's, we have:

$$[3] \qquad \hat{q}_i^{kant}=\frac{1}{N}\widetilde{Q}_i^{kant}$$

where $\hat{I}^{tot}$ is the aggregate income and $\widetilde{Q}_i^{kant}$ is the solution of the following problem:

$$[4] \qquad \begin{aligned} &\max_{\hat{c}_i,\widetilde{Q}} \quad U_i=\beta\log\hat{c}_i+(1-\beta)\log\widetilde{Q} \\ &s.t. \quad \hat{I}=\frac{1}{N}\widetilde{Q}+\hat{c}_i \end{aligned}$$

On the other hand a self-interested individual is a contributor who does not take into account the moral constraint when he decides his personal contribution. He only subjects his decision to the budget constraint and to a trivial non negativity constraint. Formally, the self-interested contribution $\hat{q}_i^{self}$ is the solution of the following problem:

$$[5] \qquad \begin{aligned} \max_{\hat{c}_i, \hat{q}_i} \quad & U_i = \beta \log \hat{c}_i + (1-\beta) \log \widetilde{Q} \\ s.t. \quad & \hat{I} = \hat{q}_i + \hat{c}_i \\ & \hat{q}_i \geq 0 \end{aligned}$$

There are two types of information that individual i can observe. *Private Information*: P_i which represents the proportion of fair contributors he wants to observe to do the same. *Public Information*: The total quantity of public good collected in the society, $\widetilde{Q}$, the fact that the individuals are identical both in terms of preferences and incomes. In particular public information are common knowledge while private information are available only to the person they refer to.

Finally, let us assume that P_i is independently and identically distributed according to the distribution $P^{\bullet}$.

4.2.2. Equilibrium Contributions and Inferential Procedure

Given the assumptions just stated, this sub-section is divided into two parts. Firstly I derive the expression for the contributions of both a self-interested contributor and a fair contributor. Secondly I describe the inferential procedure performed by each individual to determine the proportion of fair contributors in the society. Let me indicate with S the set of self-interested contributors the cardinality of which is N_S and with M the set of fair contributors the cardinality of which is N_M. Since individuals can only contribute either fairly or selfishly, the size of the population N is perfectly partitioned between self-interested contributors and fair contributors so that $N = N_S + N_M$.

By solving the maximisation problem [5], we obtain the expression of the equilibrium contribution of a generic self-interested individual $s \in S$:

[6] $\hat{q}_s^{self} = \max[(1-\beta)\hat{I} - \beta\widetilde{Q}_{-s}, 0]$

where $\widetilde{Q}_{-s}$ is the total amount contributed by all the individuals but individual s.

If in equilibrium the first term of the RHS is either positive or null, then the non negativity constraint does not bind and the contribution is equal to the value assumed by that term. On the other hand, if in equilibrium the first term on the RHS the contribution is negative, then the non negativity constraint binds and the contribution is null.

By combining the solution of maximisation problem [4] with expression [3] we obtain the expression of the equilibrium contribution of a generic fair contributor $m \in M$:

[7] $\hat{q}_m^{kant} = (1-\beta)\hat{I}$

There are two mains differences between expressions [6] and [7]. Firstly, as long as $\widetilde{Q}_{-s} > 0$, $\hat{q}_m^{kant} > \hat{q}_s^{self}$. Secondly, while the fair contribution does not depend on others' contributions, the self-interested contribution exhibits the well known "crowding-out" effect.

Given the assumptions of identical preferences and identical incomes, the self-interested contribution is the same $\forall s \in S$, while the fair contribution is the same $\forall m \in M$.

Now, let us turn to the inferential procedure. The following proposition states the existence of a unique, strictly positive relation between the public good and the number of fair contributors.

PROP.1.Given expressions [6] and [7] and the assumptions of both identical incomes and identical preferences, there exists a unique relation between $\widetilde{Q}$ and M. This relation is such that:

If $N_M < \frac{1}{\beta}$, then $$\widetilde{Q} = (1-\beta)\hat{I}\left[\frac{N_M(1-\beta) + N_S}{1 + \beta(N_S - 1)}\right].$$

If $N_M \geq \frac{1}{\beta}$, then $\qquad \tilde{Q} = N_M(1-\beta)\hat{I}$

Moreover, if $N > 1$ and $\beta < 1$, then $\left.\frac{\partial \tilde{Q}}{\partial N_M}\right|_{N\ fix} > 0$

[Proof in appendix]

We can represent the previous relation graphically:

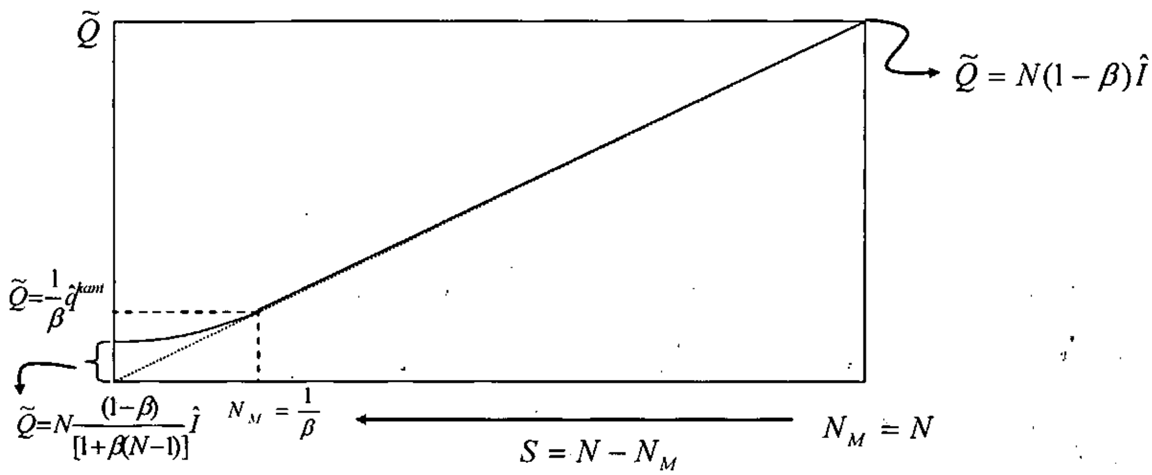

Figure 1. Inferred relation between fair contributors and public good

On the horizontal axis we read the number of fair contributors in the society while on the vertical axis we read the quantity of public good. Given the size of the population, the higher the number of fair contributors, the lower the number of self-interested contributors, and the higher the level of public goods is. The extreme case is represented by a situation in which $N = N_M$ associated with $\tilde{Q} = N(1-\beta)\hat{I}$.

The main implication of PROP.1 is that each individual can always infer the proportion of fair contributors by observing the level of public good collected in the society.

Finally, I want to describe how individuals take their decisions about the behaviour to adopt and what the implications of this decisional rule on the final proportion of fair contributors in the society are.

4.2.3. Equilibrium Partition Between Self-Interested and Fair Contributors

Given the expressions of both the self-interested and the fair contribution and given the inferential procedure just described, we can finally analyse how the proportion of fair contributors is effectively determined in the model.

Firstly, I would like to state the concept of equilibrium I refer to. The economy is in equilibrium when the self-interested contributors contribute according to [6], the fair contributors contribute according to [7] and, finally, everybody behaves according to the following decisional rule: individual i contributes fairly if and only if $P_i \leq \frac{N_M^{\inf}}{N}$ otherwise he contributes selfishly.

To illustrate how to apply the previous definition to this context, I adopt the framework of the "Critical-mass" models (Schelling [1978], Granovetter [1978], Granovetter and Soong [1983]). Each individual can compute the inferred proportion of fair contributors ($P^{\inf}$) by simply dividing the inferred number of fair contributors ($N_M^{\inf}$) by the size of the population (N). Then, he compares this parameter with the one which describes his personal characteristic (P_i). If the value of his personal characteristic is lower than the inferred parameter, he starts contributing fairly.

In aggregate terms, we can represent the proportion of individuals who want to contribute fairly for every value of $P^{\inf}$ using the cumulative distribution function of P_i in the interval [0, 1]. Graphically:

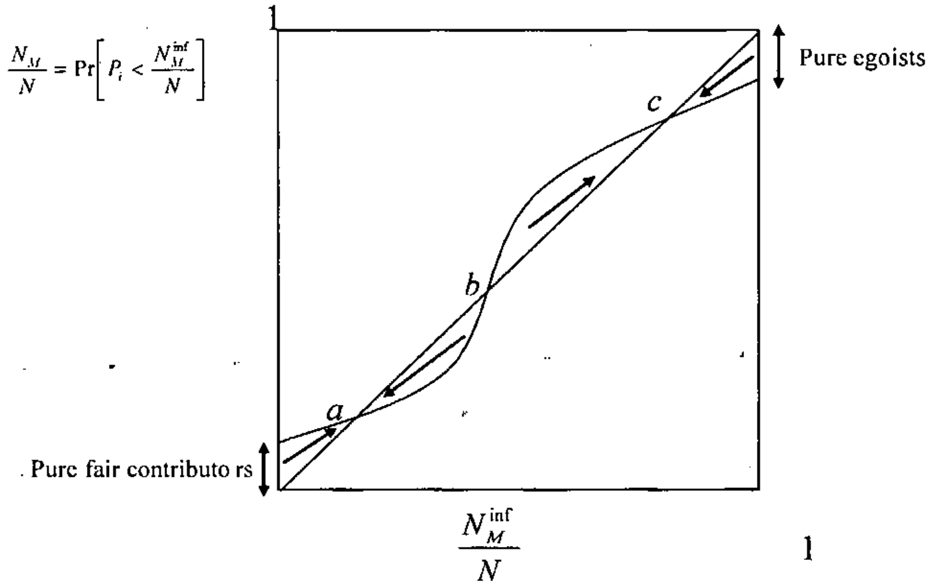

Figure 2. Equilibrium proportion of fair contributors

On the vertical axis we read the value of the cumulative distribution functions for every value of $P^{\inf}$ represented on the horizontal axis. The vertical distance between the cumulative distribution function of P_i and the 45° line when $P^{\inf} = 0$ represents the "pure fair contributors," that is, individuals who contribute fairly regardless what the others do. Similarly the vertical distance between the cumulative distribution function of P_i and the 45° line when $P^{\inf} = 1$ represents the "pure egoists," that is, individuals who contribute selfishly regardless what the others do. An equilibrium occurs when the cumulative distribution function of P^* intersects a 45° line since, only in this case, the proportion of individuals *who contribute fairly* is exactly equal to the proportion of individuals *who desire to contribute fairly* given the inferred parameter. On the other hand, when it does not happen, the situation is characterised by disequilibrium since there are some individuals who behave differently from what they really want to do given the inferred parameter. In this case, the system converges to a stable equilibrium.

The previous graph shows a possible distribution P^* which generates three equilibrium points: a and c are stable equilibria while b is unstable.

A clarification is required. The process just described is based on the implicit assumption that in each moment the adjustment in the personal contribution is faster than the decision of the behaviour to adopt. This simply means that people decide how to contribute on the basis of the effective level of public good.

The determination of the proportion of fair contributors in the society closes the static specification of the model. In the next section I analyse a dynamic extension of this model characterised by the presence of a variable which captures the level of generalised trust in the society.

4.3. The Dynamic Specification

Let us introduce the dynamic specification of the model. The crucial variable of the dynamic specification is the level of widespread trust. The idea is extremely easy. The distribution of the parameter P_i determines the equilibrium partition between free-riders and fair contributors. The level of trust depends positively on the number of fair contributors which characterises the equilibrium partition. In sub-section 4.3.1., I state the assumptions of the dynamic specification of the model. In sub-section 4.3.2., I present the solution of the model assuming that the population is partitioned between both the categories of contributors. Given the "Civil Society" scenario, in sub-section 4.3.5., I emphasise how the government could stimulate the economic performances of the country by encouraging the creation of social capital.

4.3.1. Assumptions of the Model

In this sub-section I present the assumptions on the two main sectors of the economy: individuals and firms. Before continuing with the assumptions, let me introduce a bit of notation. The variables in terms of effective labour for the self-interested contributors and for the fair contributors are indicated with a "hat," so that

$\hat{z}_{s,t} = \dfrac{Z_t}{A_t N_{S,t}}$ and $\hat{z}_{m,t} = \dfrac{Z_t}{A_t N_{M,t}}$. The variables divided by A_t for the self-interested contributors and for the fair contributors are indicated with a "tilde," so that $\widetilde{Z}_t = \dfrac{Z_t}{A_t}$.

I consider a closed economy in which the total size of the population is partitioned between fair and self-interested contributors so that $N_t = N_{M,t} + N_{S,t}$. Suppose that the economy starts from an equilibrium proportion of fair contributors.

Let us assume that, given the equilibrium proportion of fair contributors, $N_{M,t}$ and $N_{S,t}$ grow at the same constant rate n.

The economy is also characterised by technological progress which means that the state of the technology A_t grows at the constant and positive rate $\dfrac{dA_t}{dt}\dfrac{1}{A_t} = x$ with $A_0 = 1$.

The generic infinitely lived self-interested contributor solves the following dynamic optimisation problem:

$$\max_{\{\hat{c}_{s,t},\hat{q}_{s,t}\}_{t=0}^{\infty}} B_S \int_0^{\infty} e^{-\eta t}[\beta \log \hat{c}_{s,t} + (1-\beta)\log \widetilde{Q}_t]dt$$

$$s.t.$$

$$[8] \qquad a)\frac{d\hat{k}_{s,t}}{\mathrm{dt}} = (r_t - n - x)\hat{k}_{s,t} + \widetilde{w}_t - \hat{c}_{s,t} - \hat{q}_{s,t}, \forall t$$

$$b)\hat{q}_{s,t} \geq 0, \forall t$$

$$c)\lim_{t\to\infty} \hat{k}_{s,t} \exp\left[-\int_0^t (r_v - n - x)dv\right] \geq 0$$

while the generic infinitely lived fair contributor solves the following dynamic optimisation problem:

$$\max_{\{\hat{c}_{m,t},\hat{q}_{m,t}\}_{t=0}^{\infty}} B_M \int_0^{\infty} e^{-\eta t}[\beta \log \hat{c}_{m,t} + (1-\beta)\log \widetilde{Q}_t]dt$$

$s.t.$

[9] $$a)\ \frac{d\hat{k}_{m,t}}{\mathrm{dt}} = (r_t - n - x)\hat{k}_{m,t} + \widetilde{w}_t - \hat{c}_{m,t} - \hat{q}_{m,t}, \forall t$$

$b)$moral constraint $,\forall t$

$$c)\lim_{t\to\infty} \hat{k}_{m,t}\exp\left[-\int_0^t (r_v - n - x)dv\right] \geq 0$$

where $B_S = \dfrac{N_{S,0}}{H}$, $B_M = \dfrac{N_{M,0}}{H}$ and H is the number of households. These variables are introduced in order to make the model coherent with the classic Ramsey environment. Regarding the other variables, $\eta = \rho - n$ where ρ is the rate of time preference. The instantaneous utility function in expressions [8] and [9] can be interpreted as the correspondent CRRA $\dfrac{\left(\hat{c}_{i,t}^{\beta}\widetilde{Q}_t^{1-\beta}\right)^{1-\theta}}{1-\theta}$ in which the constant elasticity of substitution is assumed to be equal to 1.

The first constraint of both expression [8] and expression [9] represents the law of movement of capital in terms of units of effective labour. Suppose that individuals' savings are entirely rented to firms which use them as physical capital.[19] Therefore, assuming that the economy starts with some capital (so that in $t=0$ the production is positive), we can write the law of accumulation of physical capital in terms of units of effective labour as follows:

[10] $$\frac{d\hat{k}_{i,t}}{\mathrm{dt}} = (r_t - n - x)\hat{k}_{i,t} + \widetilde{w}_t - \hat{c}_{i,t} - \hat{q}_{i,t} \quad \text{with } i = s,m$$

Individual i's investment in physical capital ($\frac{d\hat{k}_{i,t}}{\mathrm{dt}}$) depends positively on both the net interests on the rented capital ($(r_t - n - x)\hat{k}_{i,t}$) and the income for having supplied inelastically one unit of labour ($\widetilde{w}_t$), while it depends negatively on both his

[19] This assumption is directly implied by the assumption of closed economy combined with the implications of PROP.2 which states that a fair contributor invests the same amount of resources of a self-interested contributor.

consumption and his contribution to the public good. Agents in the economy has perfect foresight which simply means that he knows both current and future values of $\tilde{w}_t$ and r_t and he takes them as given. Expression [9] represents the correspondent dynamic version of [2]. Indeed, by defining $\hat{I}_t = (r_t - n - x)\hat{k}_{i,t} + \tilde{w}_t$ and by considering the steady state, the two expressions are identical. In order to simplify the dynamics of the model, let us add the following assumptions. Regarding the initial conditions of the two categories of contributors, let us assume that $\hat{k}_{m,0} = \hat{k}_{s,0}$. Finally, let us assume absence of "type-specific" shocks in the sense that any shock which perturbs the economy affects both the categories of contributors in the same way. The previous assumption combined with the one on the initial conditions implies that the unique source of differentiation between the two categories of individuals is represented by the nature of their contributions (fair or self-interested).

The third constraint is the "No-Ponzi-Game Condition." Since we assume that the marginal utility of consumption and public good is positive, individuals will not want to have increasing wealth forever. Therefore we can use the condition directly as equality.

Now, let us turn to the productive sector of the economy. There are many identical, profit maximising firms, each of which can access to the same technology characterised by constant returns to scale. Firms are "price taker" which simply means that they consider the prices of the inputs (the real wage and rental rate on capital) as given. More formally, the problem faced by the firm in aggregate terms is to maximise the expression of the profits:

$$[11] \qquad \max_{K_t, L_t} \Pi_t = K_t^{\alpha}\left(A_t \phi_t N_t\right)^{1-\alpha} - (r_t + \delta)K_t - w_t N_t$$

Where $Y_t = K_t^{\alpha}\left(A_t \phi_t N_t\right)^{1-\alpha}$ is the production function which is assumed to be homogenous of degree one,[20] w_t is the wage rate and δ is the rate of depreciation of physical capital.

[20] The production function we have suggested respects the Inada conditions.

Finally, ϕ_t reflects the widespread trust. The way in which this social variable is introduced in the model captures three different aspects of the concept of "trust". Firstly, I assume that trust is the virtuous product of a society composed by fair contributors. The more individuals manage to collect public good, the higher the level of trust is. In particular, what really matters is not the absolute level of public good but its relative dimension with respect to the Kantian level. Secondly, trust is introduced as a positive externality on production. As stressed in the previous chapter, I assume that trust spreads by analogy between activities so that the more individuals are cooperative in collecting public good, the more they are cooperative in the productive sector of the economy. The specification I use throughout the model is the following one:

[12] $$\phi_t = \left(\frac{\tilde{Q}_t}{l \tilde{Q}_t^{kant}} \right)^f \quad \text{with} \quad 0 \leq f < 1 \text{ and } 0 < l < 1.$$

Note that, if $0 < f < 1$, then the production function exhibits decreasing returns of scale in the level of trust. If the level of public good collected by the society is at least equal to a percentage l (with $0 < l < 1$) of what people had produced if all of them would have contributed fairly, then the level of trust is equal to the unity and the production function turns to the usual one. The growth rate of trust implied by expression [12] is given by:

[13] $$\xi_t = \frac{\dot{\phi}_t}{\phi_t} = \frac{d\phi_t}{dt} \frac{1}{\phi_t} f \left(\frac{\dot{\tilde{Q}}_t}{\tilde{Q}_t} - \frac{\dot{\tilde{Q}}_t^{kant}}{\tilde{Q}_t^{kant}} \right)$$

Since $f > 0$, then the level of trust increases every time the growth rate of the public good collected by the society is higher than the growth rate of the Kantian level of public good. Finally, let us assume that individuals consider themselves as too small to affect the level of trust in the economy with their contributions.

4.3.2. The Solution of the Model

The two categories of individuals solve separately their dynamic optimisation problems. However they are linked each other through the interest rate and the wage rate which are the same for both. The Hamiltonian associated with problem [9] is:

[14] $$H_M = B_M e^{-\eta t}[\beta \log \hat{c}_{m,t} + (1-\beta)\log \widetilde{Q}_t] + \lambda_{m,t}\left[(r_t - n - x)\hat{k}_{m,t} + \widetilde{w}_t - \hat{c}_{m,t} - \frac{\widetilde{Q}_t}{N_t}\right]$$

The following first order conditions are implied:

[15] $$H_{M,\hat{c}_{m,t}} = 0 \Leftrightarrow B_M e^{-\eta t}\beta \frac{1}{\hat{c}_{m,t}} - \lambda_{m,t} = 0;$$

[16] $$H_{M,\widetilde{Q}_t} = 0 \Leftrightarrow B_M e^{-\eta t}(1-\beta)\frac{1}{\widetilde{Q}_t} - \lambda_{m,t}\frac{1}{N_t} = 0;$$

[17] $$-H_{M,\hat{k}_{m,t}} = \dot{\lambda}_{m,t} \Leftrightarrow -\lambda_{m,t}(r_t - n - x) = \dot{\lambda}_{m,t};$$

[18] $$\lambda_{m,t} \geq 0, \qquad \hat{k}_{m,t} \geq 0, \qquad \lim_{t\to\infty} \lambda_{m,t}\hat{k}_{m,t} = 0.$$

By combining expression [15] with expression [16] and by solving for a generic t, we obtain:

[19] $$\widetilde{Q}_t^{kant} = \frac{1-\beta}{\beta}\hat{c}_{m,t}N_t$$

Under the moral constraint, the Kantian quantity of public good in t depends positively on the size of the population and is proportional to $\hat{c}_{m,t}$. Expression [19] represents the quantity of public good which would have been produced if everybody had contributed fairly. The Kantian contribution of the representative individual:

[20] $$\hat{q}_{m,t} = \frac{\widetilde{Q}_t^{kant}}{N_t} = \frac{1-\beta}{\beta}\hat{c}_{m,t};$$

The Hamiltonian associated with the problem faced by the representative self-interested contributor (expression [10]) is:

[21] $$H_S = B_S e^{-\eta t}[\beta \log \hat{c}_{s,t} + (1-\beta)\log \widetilde{Q}_t] + \lambda_{s,t}[(r_t - n - x)\hat{k}_{s,t} + \widetilde{w}_t - \hat{c}_{s,t} - \hat{q}_{s,t}]$$

The following expressions represent the first order conditions:

[22] $$H_{S,\hat{c}_{s,t}} = 0 \Leftrightarrow B_S e^{-\eta t}\beta \frac{1}{\hat{c}_{s,t}} - \lambda_{s,t} = 0;$$

[23] $$H_{S,\hat{q}_{s,t}} = 0 \Leftrightarrow B_S e^{-\eta t}(1-\beta)\frac{1}{\widetilde{Q}_t} - \lambda_{s,t} \leq 0,\ \hat{q}_{s,t}H_{S,\hat{q}_{s,t}} = 0,\ \hat{q}_{s,t} \geq 0;$$

[24] $$-H_{S,\hat{k}_{s,t}} = \dot{\lambda}_{s,t} \Leftrightarrow -\lambda_{s,t}(r_t - n - x) = \dot{\lambda}_{s,t};$$

[25] $$\lambda_{s,t} \geq 0, \qquad \hat{k}_{s,t} \geq 0, \qquad \lim_{t\to\infty} \lambda_{s,t}\hat{k}_{s,t} = 0.$$

By combining expression [22] with expression [23] and given the non negativity constraint and the first order condition, we can write the contribution function of the generic self-interested contributor as follows:

[26] $$\hat{q}_{s,t} = \max\left[\frac{1-\beta}{\beta}\hat{c}_{s,t} - \widetilde{Q}_{-s,t};0\right]$$

For simplicity, let us assume that $N_{M,t}$ is such that $\hat{c}_{m,t}N_{M,t} > \hat{c}_{s,t}$,[21] $\forall t$ which implies that $\hat{q}_{s,t} = 0$, $\forall t$.

Therefore, as long as the number of fair contributors is in equilibrium in the static sense, the total quantity of public good in the economy is:

[27] $$\widetilde{Q}_t = \frac{1-\beta}{\beta}\hat{c}_{m,t}N_{M,t}$$

The previous expression implies,

[28] $$\frac{\dot{\widetilde{Q}}_t}{\widetilde{Q}_t} = \frac{\dot{\hat{c}}_{m,t}}{\hat{c}_{m,t}} + n$$

The procedure to compute the laws of movements of both $\hat{c}_{m,t}$ and $\hat{c}_{s,t}$ is the same for both the categories of individuals. For the fair contributors, we take expression [15] in logarithms and we differentiate it with respect time. For the self-interested contributors, we take expression [22] in logarithms and we differentiate it with respect time. By doing this and by considering the expressions of the self-interested contribution and the fair contribution we can specify the following dynamic system which summarises the dynamics in the model:

[21] I introduce this assumption in order to simplify the dynamics of the model. If the number of the fair contributors was lower than that level, we should consider the dynamic adjustment of the self-interested contribution implied by the positive growth rate of the population.

[29] $$\begin{cases} \dot{\hat{c}}_{s,t} = [r_t - \rho - x]\hat{c}_{s,t} \\ \dot{\hat{c}}_{m,t} = [r_t - \rho - x]\hat{c}_{m,t} \\ \dot{\hat{k}}_{s,t} = (r_t - n - x)\hat{k}_{s,t} + \widetilde{w}_t - \hat{c}_{s,t} \\ \dot{\hat{k}}_{m,t} = (r_t - n - x)\hat{k}_{m,t} + \widetilde{w}_t - \frac{1}{\beta}\hat{c}_{m,t} \end{cases}$$

Now, let us analyse the equilibrium conditions of the productive sector. From the optimisation problem faced by the representative firm stated in [12], we obtain the following conditions:

[30] $$\frac{\partial \Pi_t}{\partial K_t} = 0 \Leftrightarrow r_t = \alpha\phi_t^{1-\alpha}\hat{k}_t^{\alpha-1} - \delta$$

[31] $$\frac{\partial \Pi_t}{\partial N_t} = 0 \Leftrightarrow \widetilde{w}_t = (1-\alpha)\phi_t^{1-\alpha}\hat{k}_t^{\alpha}$$

Where $\hat{k}_t = \frac{N_{S,t}}{N_t}\hat{k}_{s,t} + \frac{N_{M,t}}{N_t}\hat{k}_{m,t}$. Let us now compute the steady state of $\hat{k}_{m,t}$, $\hat{k}_{s,t}$, $\hat{c}_{m,t}$ and $\hat{c}_{s,t}$ when the proportion of fair contributors is in equilibrium.

Given that the proportion of fair contributors is in equilibrium, the economy is in steady state when $\dot{\hat{c}}_{s,t} = \dot{\hat{c}}_{m,t} = \dot{\hat{k}}_{s,t} = \dot{\hat{k}}_{m,t} = 0$.

Given the equilibrium expressions of both the interest rate and the wage rate and given the assumptions stated at the beginning of this section we can prove the following proposition:

PROP.2. Both the generic fair contributor and the generic self-interested contributor are characterised by the same steady state level of capital in terms of units of effective labour. Moreover, $\frac{1}{\beta}\hat{c}_{m,t} = \hat{c}_{s,t}$, $\hat{k}_{m,t} = \hat{k}_{s,t}$, $\dot{\hat{k}}_{m,t} = \dot{\hat{k}}_{s,t}$, and $\frac{\dot{\hat{k}}_{m,t}}{\hat{k}_{m,t}} = \frac{\dot{\hat{k}}_{s,t}}{\hat{k}_{s,t}}$, $\forall t$.

[Proof in appendix]

The previous proposition is directly implied by the assumption of homothetic utility function. Indeed, the proportion of income used by a fair contributor for contribution and consumption is the same of the one used by a fair contributor. The only difference is in the size of the contribution which is null for a self-interested contribution and equal to $\frac{1}{\beta}\hat{c}_{m,t}$ for a fair contributor. Moreover, the previous conclusion implies that individuals invest the same amount of savings.

Thanks to PROP.2. we can compute the level of capital in units of effective labour in steady state:

$$[32] \qquad \hat{k}^* = \left(\frac{\alpha\phi^{1-\alpha}}{\delta+\rho+x}\right)^{\frac{1}{1-\alpha}}$$

On the other side, the level of consumption in units of effective labour differs between the two categories:

$$[33] \qquad \dot{\hat{k}}_{m,t} = 0 \Leftrightarrow \hat{c}_m^* = \phi^{1-\alpha}\beta\left(\hat{k}^*\right)^{\alpha} - \beta(\delta+n+x)\hat{k}^*$$

$$[34] \qquad \dot{\hat{k}}_{s,t} = 0 \Leftrightarrow \hat{c}_s^* = \phi_t^{1-\alpha}\left(\hat{k}^*\right)^{\alpha} - (\delta+n+x)\hat{k}^*$$

Note that the only difference between the two categories is that the level of consumption in units of effective labour associated with a Kantian contributor is lower than the one associated with a self-interested contributor.

Consider the transversality conditions of both the categories of individuals. Since $\hat{k}^*$ is constant is steady state, the transversality conditions hold if the steady state value of the interest rate exceeds the steady-state growth rate of the aggregate variables: $n+x$. The steady state conditions for both $\hat{c}_{m,t}$ and $\hat{c}_{s,t}$ imply that $r^* = \rho + x$. Therefore, in order to satisfy the transversality conditions, let us assume that $\rho > n$. Moreover, in appendix, I prove that the steady state associated to the "Civil Society" is locally unstable and that there exists a unique stable saddle path for each category which drives the economy to converge to the steady state.

What can we finally say about the growth rate of the economy? The total quantity of public good depends on the equilibrium proportion of fair contributors obtained in the static specification of the model. Moreover, the growth rate of trust is null. Therefore, $\phi_t = \phi = \left(\frac{N_{M,t}}{lN_t}\right)^f = \left(\frac{N_{M,0}}{lN_0}\right)^f > 0$, it is constant ($\xi_t = \frac{\dot{\phi}_t}{\phi_t} = 0$) and it affects positively the levels of the variables. Finally, all the variables expressed in terms of per capita levels grow at the same constant rate which is equal to the technological progress.

[35] $$\gamma_{y_m} = \gamma_{k_m} = \gamma_{c_m} = \gamma_{q_m} = x$$

4.4. The Government and the Production of Widespread Trust

In this sub-section, I want to show the important role that the government can play in stimulating the economic performance of the society. Suppose to introduce a government which finances its activities by collecting lump-sum taxes τ. From the point of view of the static specification, the expression of the equilibrium contributions changes as follows:

[36] $$\hat{q}_s^{self} = \max[(1-\beta)(\hat{I}-\tau) - \beta\widetilde{Q}_{-s}, 0]$$

[37] $$\hat{q}_m^{kant} = (1-\beta)(\hat{I}-\tau)$$

by using the same procedure applied for proving PROP.1, we can obtain the following results:

If $N_M < \frac{1}{\beta}$, then $\widetilde{Q} = (1-\beta)(\hat{I}-\tau)\left[\frac{N_M(1-\beta)+N_S}{1+\beta(N_S-1)}\right]$.

If $N_M \geq \frac{1}{\beta}$, then $\widetilde{Q} = N_M(1-\beta)(\hat{I}-\tau)$

Moreover, if $N > 1$ and $\beta < 1$, then $\left.\frac{\partial \widetilde{Q}}{\partial N_M}\right|_{N=fix} > 0$

Again, we can represent the relation between total contribution and number of fair contributors in the following way:

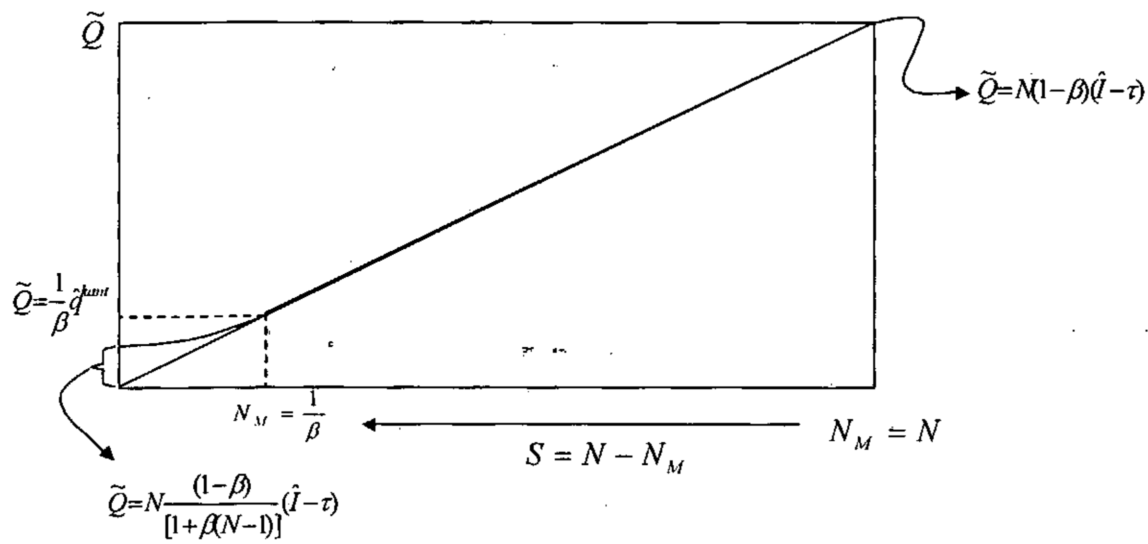

Figure 3. Inferred relation between fair contributors and public good with taxation

In other words, the fiscal policy does not influence the accuracy of the inferential procedure performed by individuals to infer the proportion of fair contributors in the society.

Suppose that the distribution of P_i is such that the static specification of the model implies the following equilibrium proportions:

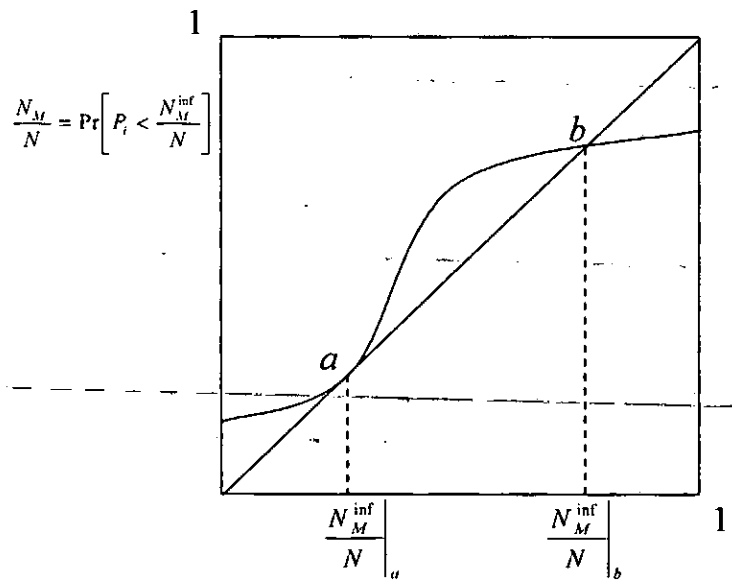

Figure 4. A particular cumulative distribution function of P_i

Suppose that equilibrium a represents a situation characterised by a laissez-faire government which does not help individuals in producing widespread trust while equilibrium b represents a situation characterised by a benevolent government which supports the individuals in producing trust. Given the fact that the lump-sum taxes do not influence the inferential procedure, if the government collects taxes and does not use them to increase $\widetilde{Q}$, then, the equilibrium proportion of fair contributors does not change at all. On the other hand, if the government uses part of the taxes to increase the level of public good $\widetilde{Q}$ and individuals cannot distinguish the public contribution from the contribution of the other members of the community, they are induced to believe that the proportion of fair contributors has increased. Given the decisional rule, the inferred proportion of fair contributors increases. Therefore the number of individuals who desire to contribute fairly given the new proportion inferred increases. Graphically:

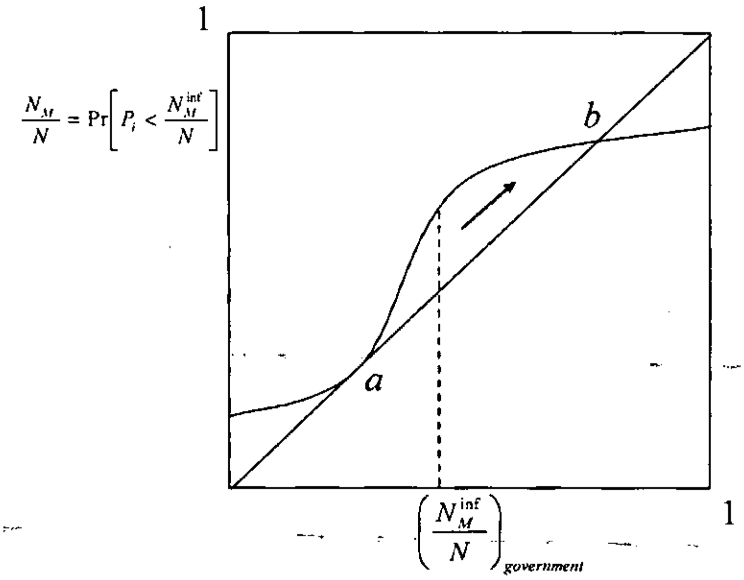

Figure 5. Equilibrium proportion of fair contributors and government activities

Since we have proved that the level of public good is strictly increasing in the proportion of fair contributors in the society, the previous reasoning implies that the level of public good associated with the new equilibrium is higher than the initial one.

How to justify the assumption of non discernability of the government activities? In the real world there are many situations in which the government acts as an "invisible supporter" of social projects. NGO, charities, clubs, philanthropic associations can usually benefit of both tax discounts and financial funds offered by the government. However, by increasing in size, these private institutions also become more visible. Therefore, through the same motivational cascade captured by the "social reciprocity" I have widely discussed above, more and more individuals are induced to behave cooperatively.[22]

For instance, chapter 6 is entirely devoted to analyse the English experience characterised by the coexistence of a multitude of charities and volunteers with a government which supports (rather than replacing) the civil society through its institutional bodies.

From the point of view of the dynamic specification of the model, in the first case the effects of the lump-sum taxes are basically the same of the "classic" Ramsey model. Indeed, a) lump-sum taxes do not bias the individual's decisions of investment, b) the proportion of fair contributors is not influenced by the introduction of lump sum taxes which are not used to finance $\widetilde{Q}_t$ and, finally, c) the lump sum taxes exclusively have effects on the levels of the variables but it does not affect their growth rates. Instead, in the second case the intervention of the government increases the steady state level of widespread trust. Indeed ϕ_t increases to $\left(\left.\frac{N_{M,0}}{lN_0}\right|_{eqb}\right)^f$ which is higher than the level of trust associated to the other equilibrium proportion $\left(\left.\frac{N_{M,0}}{lN_0}\right|_{eqa}\right)^f$. Therefore, in the second case, the levels of the variables evaluated in steady state are higher.

4.5. How Can Widespread Trust Influence the Growth Rate?

Suppose to modify the production function so that problem [11] becomes:

$$[38] \qquad \max_{K_t, L_t} \Pi_t = A_t \phi_t K_t L_t - (r_t + \delta) K_t - w_t L_t$$

[22] For instance, as described in chapter 6, the English experience is characterised by the coexistence of a multitude of charities and volunteers with a government which directly supports the civil society through institutional bodies (like the Charity Commission) and an advantageous tax system.

The main difference in this case is that the marginal productivities of capital and labour are constant. Suppose that the growth rate of the state of technology is null and that the level of widespread trust is fixed to the level implied by the equilibrium proportion of fair contributors computed in the static specification of the model. By rewriting expression [38] in per-capita terms we obtain the following equilibrium conditions:

[39] $$\frac{\partial \Pi_t}{\partial k_t} = 0 \Leftrightarrow r_t = A\phi - \delta$$

where $z_{s,t} = \frac{Z_t}{N_{S,t}}$ and $z_{m,t} = \frac{Z_t}{N_{M,t}}$ indicate variables in per-capita terms.

If the market is competitive, w_t has to be such that firms' profits are null. In this case, we have:

[40] $$w_t = f(k_t) - k_t f'(k_t) = A\phi k_t - A\phi k_t = 0$$

The problem faced by the generic infinitely lived self-interested contributor can be rewritten as follows:

$$\max_{\{c_{s,t}, q_{s,t}\}_{t=0}^{\infty}} B_S \int_0^{\infty} e^{-nt} [\beta \log c_{s,t} + (1-\beta) \log Q_t] dt$$

$s.t.$

[41] $$a) \frac{dk_{s,t}}{\mathrm{dt}} = (r_t - n)k_{s,t} + w_t - c_{s,t} - q_{s,t}, \forall t$$

$$b) q_{s,t} \geq 0, \forall t$$

$$c) \lim_{t \to \infty} k_{s,t} \exp\left[-\int_0^t (r_v - n) dv \right] \geq 0$$

while the generic infinitely lived fair contributor solves the following dynamic optimisation problem:

$$\max_{\{c_{m,t},q_{m,t}\}_{t=0}^{\infty}} B_M \int_0^{\infty} e^{-\eta t}[\beta \log c_{m,t} + (1-\beta)\log Q_t]dt$$

$s.t.$

[42] $a)\ \dfrac{dk_{m,t}}{\text{dt}} = (r_t - n)k_{m,t} + w_t - c_{m,t} - q_{m,t}, \forall t$

$b)$moral constraint $,\forall t$

$c)\lim_{t\to\infty} k_{m,t} \exp\left[-\int_0^t (r_v - n)dv\right] \geq 0$

By computing the first order conditions of these problems, by substituting the equilibrium expressions of w_t and r_t, we obtain the following expressions:

[43] $q_{m,t} = \dfrac{1-\beta}{\beta} c_{m,t}$

[44] $q_{s,t} = \max\left[\dfrac{1-\beta}{\beta} c_{s,t} - Q_{-s,t};0\right]$

Let us assume that $c_{m,t}N_{M,t} > c_{s,t}$, $\forall t$ which implies that $q_{s,t} = 0$, $\forall t$. Given expression [43], expression [44] and the first order conditions, we obtain the following expressions which represent the laws of movements of $c_{m,t}$, $c_{s,t}$, $q_{m,t}$, $k_{m,t}$, $k_{s,t}$:

[45] $\dfrac{\dot{c}_{m,t}}{c_{m,t}} = \dfrac{\dot{c}_{s,t}}{c_{s,t}} = \dfrac{\dot{q}_{m,t}}{q_{m,t}} = A\phi - \delta - \rho$

[46] $\dot{k}_{s,t} = (A\phi - \delta - n)k_{s,t} - c_{s,t}$

[47] $\dot{k}_{m,t} = (A\phi - \delta - n)k_{m,t} - \dfrac{1}{\beta} c_{m,t}$

By adapting the proof of PROP.2., we can easily prove that $\dfrac{1}{\beta}\hat{c}_{m,t} = \hat{c}_{s,t}$, $\hat{k}_{m,t} = \hat{k}_{s,t}$, and $\dot{\hat{k}}_{m,t} = \dot{\hat{k}}_{s,t}$, $\forall t$.

Let us assume that the production function is sufficiently productive to ensure growth in $c_{m,t}$ and $c_{s,t}$ but not so productive as to yield unbounded utility:

[48] $A\phi > \rho + \delta > n + \delta$

The first part of the condition implies that $\frac{\dot{c}_{m,t}}{c_{m,t}} = \frac{\dot{c}_{s,t}}{c_{s,t}} > 0$. The second part of the condition ensures that the attainable utility is bounded and that the transversality condition holds.

I show now that the model has no transition dynamics, that is, the growth rates of $k_{s,t}$, $k_{m,t}$ and y_t are constant and equal to the growth rate of $c_{m,t}$ and $c_{s,t}$. From the laws of movements of $k_{s,t}$ we can write:

[49] $$\dot{k}_{s,t} = (A\phi - \delta - n)k_{s,t} - c_{s,t} = (A\phi - \delta - n)k_{s,t} - c_{s,0}e^{(A\phi-\delta-\rho)t}$$.

The general solutions of the previous first-order, linear differential equation is:

[50] $$k_{s,t} = (const)e^{(A\phi-\delta-n)t} + \left(\frac{c_{s,0}}{\rho - n}\right)e^{(A\phi-\delta-\rho)t}$$

Let us substitute [50] in the transversality condition of the self-interested contributor. We have:

[51] $$\lim_{t\to\infty}\left[const + \frac{c_{s,0}}{\rho - n}e^{-(\rho-n)t}\right] = 0$$

Given the assumption $\rho - n > 0$, the second term in the brackets converges to 0. Therefore, the transversality condition implies that the constant in the brackets is null. This means that [50] can be rewritten:

[52] $$c_{s,t} = (\rho - n)k_{s,t}$$

which implies that $\frac{\dot{c}_{s,t}}{c_{s,t}} = \frac{\dot{k}_{s,t}}{k_{s,t}}$. The same procedure can be repeated for the fair contributors. Therefore, $\frac{\dot{c}_{s,t}}{c_{s,t}} = \frac{\dot{k}_{s,t}}{k_{s,t}} = \frac{\dot{c}_{m,t}}{c_{m,t}} = \frac{\dot{k}_{m,t}}{k_{m,t}} = A\phi - \delta - \rho$.

Under a Rebelo's production function, the growth rate of the economy is proportional to the level of widespread trust in the economy. Moreover, the level of trust in the economy is:

$$[53] \qquad \phi=\left(\frac{\frac{1-\beta}{\beta}c_{m,t}N_{M,t}}{l\frac{1-\beta}{\beta}c_{m,t}N_{t}}\right)^{f}=\left(\frac{N_{M,0}}{lN_{0}}\right)^{f}>0$$

The previous results imply that a society with a laissez-faire government is characterised by a growth rate which is lower than the one of a society with an interventionist government.

4.6. Conclusions

In this chapter, I have presented a model of endogenous growth theory which combines the main elements of the concept of civil society highlighted in the previous chapter. The dynamic structure of the model is based on the equilibrium conditions obtained in a static model of social reciprocity. Individuals have to decide how to share their income between contribution towards a public good and private consumption. They decide either to contribute selfishly or fairly on the basis of a personal parameter which indicates the number of fair contributors an individual want to observe to be induced to contribute fairly. Since individuals are anonymous they do not observe the number of fair contributors in the society but they can only infer it by observing the level of public good collected in the society. Moreover, given the assumption that individuals are identical in terms of both preferences and incomes, they come out with the same inferred proportion. A static equilibrium occurs when the number of fair contributors in the society is exactly equal to the number of individuals who want to contribute fairly given the inferred parameter and their personal attitude to contribute fairly.

Given the equilibrium proportion of fair contributors in the society, I consider an endogenous growth version of the model. The idea is extremely simple. The higher the level of cooperation between individuals in a country, the higher the level of widespread trust in the economy, the higher the economic performances are.

The conclusions of the model are: a) the level of trust can influence both the growth rate of the economy and the levels of the macroeconomic variables; b) depending on the cumulative distribution function of the personal attitude to contribute fairly, the government could stimulate the economic performances of the country by supporting the citizens in achieving the common good.

In the next chapter I present a survey of empirical researches which can be used to support the main implications of my model.

APPENDIX OF CHAPTER. 4

Proof PROP.1.

From expression [6] we have:

[A.1] $\hat{q}_s^{self} = 0 \,, \forall s \in S$ if and only if $\dfrac{(1-\beta)\hat{I}}{\beta} \leq \widetilde{Q}_{-s}$

Given expression [7] and the fact that the fair contribution is the same $\forall m \in M$, the previous expression implies:

[A.2] $\hat{q}_s^{self} = 0 \,, \forall s \in S$ if and only if $N_M \geq \dfrac{1}{\beta}$

What happens to the self-interested contribution when $N_M < \dfrac{1}{\beta}$?

Given both expression [7] and the fact that the self-interested contribution is the same $\forall s \in S$, we can expand expression [6] as follows:

[A.3] $\hat{q}^{self} = (1-\beta)\hat{I} - \beta\widetilde{Q}_{-s} = (1-\beta)\hat{I} - \beta(N_S - 1)\hat{q}^{self} - \beta N_M \hat{q}^{kant}$

From [A.3], we can compute the Symmetric Nash Contribution:

[A.4] $\hat{q}^{self} = \dfrac{(1-\beta N_M)(1-\beta)}{1+\beta(N_S - 1)}\hat{I} \,, \quad \forall s \in S$

Clearly, the expression of the total quantity of public good depends on N_M. In particular, if $N_M \geq \dfrac{1}{\beta}$, the expression of the public good is simply composed by fair contributions:

[A.5] $\widetilde{Q} = N_M (1-\beta)\hat{I}$

If $N_M < \dfrac{1}{\beta}$, the level of public good composed by both the self-interested and the fair contributions:

[A.6] $\quad \tilde{Q} = N_M(1-\beta)\hat{I} + N_S \dfrac{(1-\beta N_M)(1-\beta)}{1+\beta(N_S-1)}\hat{I} = (1-\beta)\hat{I}\left[\dfrac{N_M(1-\beta)+N_S}{1+\beta(N_S-1)}\right]$

When $N_M \geq \dfrac{1}{\beta}$, it is clear that the quantity of public good is strictly increasing in M. What happens in the case $N_M < \dfrac{1}{\beta}$? Thanks to the assumption that the population is partitioned between fair contributors and self-interested ones, we have:

[A.6] $\quad \left.\dfrac{\partial \tilde{Q}}{\partial N_M}\right|_{N\ fix} = (1-\beta)\hat{I}\left[\dfrac{\beta(N-1)(1-\beta)}{[1+\beta(N-N_M-1)]^2}\right]$

Expression [A.6] is strictly positive when both $N > 1$ and $\beta < 1$.

Proof. PROP.2.

Since there are $N_{M,t}$ fair contributors and $N_{S,t}$ self-interested contributors, expression [30] can be rewritten as follows:

[A.10] $\quad r_t = \alpha\phi_t^{1-\alpha}\hat{k}_t^{\alpha-1} - \delta = \alpha\phi_t^{1-\alpha}\left[\dfrac{N_{S,t}}{N_t}\hat{k}_{s,t} + \dfrac{N_{M,t}}{N_t}\hat{k}_{m,t}\right]^{\alpha-1} - \delta$

Given that $\hat{c}_{m,t}$ and $\hat{c}_{s,t}$ have the same growth rate, they imply the same value of steady state of $\hat{k}_t$. Let us define it $\hat{k}^*$.

By definition:

[A.11] $\quad \hat{k}^* = \dfrac{N_{S,t}}{N_t}\hat{k}_{s,t} + \dfrac{N_{M,t}}{N_t}\hat{k}_{m,t} = \dfrac{N_{S,0}e^{nt}}{N_0 e^{nt}}\left(\hat{k}_{s,0}\right)e^{\int_{t=0}^{\infty}\gamma_{\hat{k}_{s,t}}dt} + \dfrac{N_{M,0}e^{nt}}{N_0 e^{nt}}\left(\hat{k}_{m,0}\right)e^{\int_{t=0}^{\infty}\gamma_{\hat{k}_{m,t}}dt}$

From the laws of movement of capital in terms of units of effective labour, we have:

[A.12] $\quad \dot{\hat{k}}_{s,t} = (r_t - n - x)\hat{k}_{s,t} + \tilde{w}_t - \left(\hat{c}_{s,0}\right)e^{\int_{t=0}^{\infty}\gamma_{\hat{c}_{s,t}}dt}$

$$[\text{A.13}] \quad \dot{\hat{k}}_{m,t} = (r_t - n - x)\hat{k}_{m,t} + \widetilde{w}_t - \frac{1}{\beta}(\hat{c}_{m,0})e^{\int_{t=0}^{\infty}\gamma_{\hat{c}_{m,t}}dt}$$

Let us prove that $\frac{1}{\beta}\hat{c}_{m,0} = \hat{c}_{s,0}$. The intertemporal budget constraint of a self-interested contributor under the No-Ponzi-Game condition can be written as follows:

$$[\text{A.14}] \quad \int_0^{\infty}\hat{c}_{s,t}\exp\left[-\int_0^t (r_v - n - x)dv\right]dt = \hat{k}_{s,0} + \int_0^{\infty}\hat{w}_t\exp\left[-\int_0^t (r_v - n - x)dv\right]dt$$

while the intertemporal budget constraint of a fair contributor is:

$$[\text{A.15}] \quad \int_0^{\infty}\frac{1}{\beta}\hat{c}_{m,t}\exp\left[-\int_0^t (r_v - n - x)dv\right]dt = \hat{k}_{m,0} + \int_0^{\infty}\hat{w}_t\exp\left[-\int_0^t (r_v - n - x)dv\right]dt$$

From the law of movements of both $\hat{c}_{s,t}$ and $\hat{c}_{m,t}$ we have:

$$[\text{A.16}] \quad \hat{c}_{s,t} = \hat{c}_{s,0}\exp\left[\int_0^t (r_v - \rho - x)dv\right]$$

$$[\text{A.17}] \quad \hat{c}_{m,t} = \hat{c}_{m,0}\exp\left[\int_0^t (r_v - \rho - x)dv\right]$$

By substituting [A.16] in [A.14] and [A.17] in [A.15], and by remembering that $\hat{k}_{m,0} = \hat{k}_{s,0}$ we obtain that

$$[\text{A.18}] \quad \frac{1}{\beta}\hat{c}_{m,0} = \hat{c}_{s,0} = \frac{1}{\exp[-(\rho - n)t]}\left[\hat{k}_{m,0} + \int_0^{\infty}\hat{w}_t\exp\left[-\int_0^t (r_v - n - x)dv\right]dt\right]$$

Note that, given $\frac{\dot{\hat{c}}_{s,t}}{\hat{c}_{s,t}} = \frac{\dot{\hat{c}}_{s,t}}{\hat{c}_{m,t}}$, $\forall t$, the assumption of absence of type specific shocks, and the previous result, we have that $\frac{1}{\beta}\hat{c}_{m,t} = \hat{c}_{s,t}$, $\forall t$. Given $\hat{k}_{m,0} = \hat{k}_{s,0}$, and the assumption of absence of type specific shocks, we have that $\hat{k}_{m,t} = \hat{k}_{s,t}$, $\dot{\hat{k}}_{m,t} = \dot{\hat{k}}_{s,t}$, and $\frac{\dot{\hat{k}}_{m,t}}{\hat{k}_{m,t}} = \frac{\dot{\hat{k}}_{s,t}}{\hat{k}_{s,t}}$, $\forall t$. Therefore, from [A.11], we have that $\hat{k}_m^{\bullet} = \hat{k}_s^{\bullet} = \hat{k}^{\bullet}$.

Proof of Local non stability of the Equilibria

Given that a) individuals have identical initial conditions, b) $\frac{\dot{\hat{c}}_{s,t}}{\hat{c}_{s,t}} = \frac{\dot{\hat{c}}_{s,t}}{\hat{c}_{m,t}}$ and $\frac{\dot{\hat{k}}_{m,t}}{\hat{k}_{m,t}} = \frac{\dot{\hat{k}}_{s,t}}{\hat{k}_{s,t}}$, $\forall t$, c) in steady state $\hat{k}_m^* = \hat{k}_s^* = \hat{k}^*$ and $\hat{c}_s^* = \frac{1}{\beta}\hat{c}_m^*$, the stability properties of system [29] around its steady state are the same of those of a system composed by a unique category of individuals. Therefore, let us concentrate on the laws of movement of the fair contributors. Let us linearise the non-linear dynamic system expressed by [29] around the steady state values of consumption and capital in unit of effective labour $(\hat{c}^*, \hat{k}^*)$:

$$[A.19] \quad \begin{pmatrix} \dot{\hat{c}}_{m,t} \\ \dot{\hat{k}}_{m,t} \end{pmatrix} = \begin{bmatrix} 0 & \alpha(\alpha-1)\phi^{1-\alpha}\hat{c}^*\hat{k}^{*\alpha-2} \\ -\frac{1}{\beta} & \alpha\phi^{1-\alpha}\hat{k}^{*\alpha-1} - (\delta+n+x) \end{bmatrix} \begin{bmatrix} \hat{c}_t - \hat{c}^* \\ \hat{k}_t - \hat{k}^* \end{bmatrix} + o(1)$$

Where the first element of the first row is zero because evaluated in the equilibrium condition. The determinant of the Jacobian associated to the dynamic system can be written as follows:

$$[A.20] \quad \det \begin{vmatrix} 0 & \alpha(\alpha-1)\phi^{1-\alpha}\hat{c}^*\hat{k}^{*\alpha-2} \\ -\frac{1}{\beta} & \alpha\phi^{1-\alpha}\hat{k}^{*\alpha-1} - (\delta+n+x) \end{vmatrix} = \frac{1}{\beta}\alpha(\alpha-1)\phi^{1-\alpha}\hat{c}^*\hat{k}^{*\alpha-2} < 0$$

Therefore, the equilibrium is locally unstable and there exists a saddle path for the self-interested contributors and a saddle-path for the fair contributors which drive the system to converge to the equilibrium.

CHAPTER 5

FREE-RIDING, CROWDING-OUT AND TRUST: AN EMPIRICAL INVESTIGATION

5.1. Introduction: Implications of the Model Under Empirical Evidence

In this chapter, I present the results of some important empirical researches which empirically support the implications of my model. In particular, I consider three implications: the coexistence of fair and self-interested contributors, the confutation of the crowding-out effect and, finally, the positive relation between trust and economic performances.

Regarding the first implication, in section 4.2., I show that the free-riding result implied by the traditional theory of public goods in not supported by data. In particular, both the generalised tendency to support social projects through voluntary work, money and time and the large number of experimental contributions which confirm individuals attitude to cooperate represent an empirical puzzle with respect the result of absolute free-riding implied by the traditional public good models.

Referring to the second implication, in section 4.3., I analyse the results of an experimental research which shows that the intervention of an external agent like the government stimulates individual contributions rather than crowding-out them.

Finally in section 4.4., I discuss the findings of some empirical researches which confirm the third implication. In particular, these researches state that trust a) positively depends on situation of cooperation in typical social dilemma and, b) it positively affects the economic performances of a country.

5.2. Is There Total Free-Riding? Data from USA

The first empirical consideration which represents an embarrassment for the traditional public good theory is the fact that many social projects of philanthropic associations, cultural and religious organisations and non governmental organisations involved in social projects could be implemented thanks to the voluntary provision of time, effort and money of individuals. On the basis of the annual statistics of the Independent Sector, Rose-Ackerman [1996] reports that total monetary contributions in 1990 were $122.6 billion. Of the total, $109.6 billion or almost 90% was personal giving. In particular, giving from living donors was $101.8 billion and bequests totaled $7.8 billion. Most monetary donations were given to charitable non profit organisations. In 1993 the value of volunteer labour provided to organisations was estimated $182.23 billion.[23] According to the same source, monetary donations were 1.7% of household income in 1993 or $646 per household. A more recent analysis based on the same source of data was produced by Andreoni (Andreoni [2004]). In 2002 individuals gave over $183 billion to charity which represents the 76% of the total dollars donated.

The following graph presents the trends of both giving and giving as percentage of personal income:

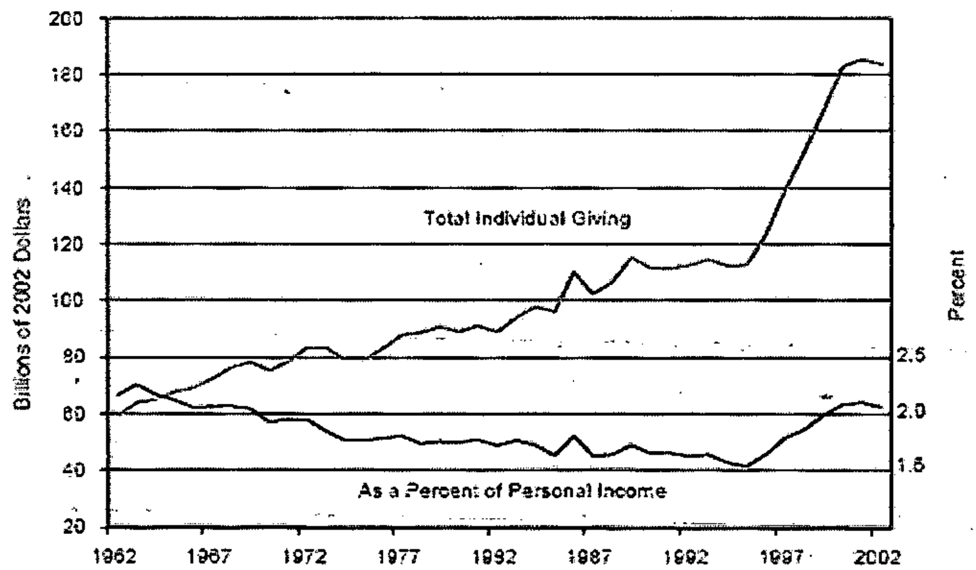

Figure 1. Trends of both giving and giving as percentage of personal income in USA

The trends in giving over the last 30 years presents a steady rise, with temporary jumps coming in 1986, along with a pronounced rise starting in 1996 trough 2001. When measured as a percent of income, however, giving seems much more stable.

[23] The estimate computer the opportunity cost of volunteers' time using the average non agricultural hourly wage plus 12% for fringe benefits.

Since 1968 giving has varied from 1.5% to 2.1% of income. In the most recent years, however, giving has risen from 1.5% of income in 1995 to 2.1% in 2001. The data in 1995 show that the 68.5% of all households gave to charity and that the average gift among those giving was $1081.

Clearly, these results represent a concrete invalidation of the absolute free-riding result predicted by the traditional theory of private contributions to public goods.

Similar results emerge from several experimental researches on voluntary contributions to public goods. For instance, Bohm [1972] examined five alternative contribution mechanisms to ascertain the demand for a public good. He found that individuals frequently contributed. However, he did not employ direct controls for fundamental parameters. Dawes [1980] examined the influence of communications on public good contributions in groups. Some 31% contributed in the absence of communications, while 72% contributed in the presence of communications. Marwell and Ames [1981] found that in single-shot games, subjects did not free-ride, but they provided a contribution about halfway between the Pareto-optimal level and free riding. They also found little relationship between group size and provision. Similar patterns of cooperation are observed by Isaac and Walker [1988] in experiments where subjects participate in a second public good game. Starting from the last result, Andreoni [1995] tried to separate the hypothesis that cooperation is due to kindness, altruism or warm glow from the hypothesis that cooperation is simply the result of errors or confusion. He found that on average about half of all the cooperation comes from subjects who understood free-riding but chose to cooperate out of some form of kindness.

Summarising the main conclusions of these experimental researches, individuals who participate in public good games tend to cooperate more than what predicted by the public goods theory.

5.3. An Empirical Invalidation of the "Crowding-Out" Result

One of the most important implications of the traditional public good model is that government policies towards privately provided public goods may be completely neutral because they crowd-out private contributions dollar by dollar.[24] However, there are several econometric works which invalidate this theoretical result. Using aggregate data, Abrams et al [1978], [1984] suggest that government grants crowd out private contributions at the rate of about 28%. Using similar data, Clotfelter [1985] put crowding-out on the order of only 5%. Finally, Kingma [1989], on the basis of data on individual contributions to public radio, estimates a crowding-out effect of roughly 13%. Other two studies use panel data on donations received by charities. Khanna et al. [1995] used observations on 159 charities in the UK and found that government grants actually encouraged rather than displaced private giving. Payne [1998], using a 10-year panel of 430 US charities, applied special statistical techniques to account for the fact that government grants to charities may be caused by the same needs and interests as private giving. Payne's analysis predicts about 50% crowding-out.

Unfortunately, as suggested by Andreoni, it is impossible to infer from those researches whether the incomplete crowding-out effect is the result of certain institutional features not captured by the model, or whether it is due to individual preferences that are different from those assumed in public-good models. In order to highlight this aspect, Andreoni [1993] performed an original experiment based on a "modified" version of the usual public goods game. Each subject was given a budget of seven tokens. Each subject could contribute from 0 to 7 of these tokens, with the payoff from any play depending on the number of tokens contributed by all of the group members. All subjects moved simultaneously. Subjects in the "no-tax" group were told that payoffs would be determined from the payoff matrix given in the following table:

	Your investment	0	1	2	3	4	5	6	7
Total investment by the other 2 group members									
0		0	1	3	6	9	10	11	10
1		1	4	8	11	14	15	15	14
2		5	9	14	18	20	21	20	17
3		12	17	22	26	28	28	25	22
4		21	28	33	36	37	35	32	27
5		34	40	45	48	47	44	39	32

[24] The reader can refer to Bergstrom, Blume and Varian (Bergstrom et al. [1986]). See also Warr [1983].

6	49	56	60	61	59	54	47	38
7	68	74	77	76	72	64	55	44
8	90	95	96	93	86	76	64	51
9	115	118	117	111	102	89	74	58
10	143	144	140	131	119	103	85	66
11	175	173	166	153	137	118	97	75
12	210	205	193	177	157	134	109	84
13	248	239	223	203	178	151	122	93
14	290	276	256	230	201	169	136	103

Table 1. Payoff matrix without government

This matrix was generated from a Cobb-Douglas function of the type:

[1] $$U_i = A[(I - q_i)^{1-\alpha} Q^{\alpha}]^{\gamma}$$

where q_i represents personal contribution, Q the total amount of public good, I the endowment and A, α, γ are chosen to meet specifications of the Nash equilibrium outcome, Pareto efficient outcome, equilibrium payoff levels, and concavity of utility. As can be easily verified, the parameters of the utility function were set such that the unique Nash equilibrium is for each subject to play three tokens, and the symmetric Pareto efficient point is where each individual plays six tokens. This feature is needed to test complete crowding-out and it represents the main difference with the usual public goods game in which the Nash equilibrium is to contribute nothing and the symmetric Pareto point is to contribute the entire endowment. To test crowding-out, a second group of subjects was presented with identical instructions, but was given the following payoff matrix:

Your investment		0	1	2	3	4	5
Total investment by the other 2 group members							
	0	33	36	37	35	32	27
	1	45	48	47	44	39	32
	2	60	61	59	54	47	38
	3	77	76	72	64	55	44
	4	96	93	86	76	64	51
	5	117	111	102	89	74	58
	6	140	131	119	103	85	66
	7	166	153	137	118	97	75
	8	193	177	157	134	109	84

9	223	203	178	151	122	93
10	256	230	201	169	136	103

Table 2. Payoff matrix with government

This matrix was generated from the first payoff matrix by simply making the minimum possible contribution of each subject two tokens, rather than zero. This is meant to simulate a tax of two tokens on all the subjects which is then donated to the public good. To present the game in terms of voluntary contributions to the public good, the cells were relabelled to start at zero. While the equilibrium in the no-tax condition was three tokens for all, the equilibrium in the tax condition was one token for all. Likewise, while the symmetric Pareto efficient allocation in the no-tax condition was six tokens for all, in the tax condition it was four tokens for all. Hence, taxation did not alter or eliminate the equilibrium outcome for any of the (symmetric or nonsymmetric) Pareto efficient allocations.

Each trial of the experiment required 18 subjects. Four trials were conducted: two of the no-tax condition, two of the tax condition. Subjects were always recruited in groups of 36 and were then randomly divided into two groups of 18. To diminish the possibility for strategic play, subjects were told that they would be randomly assigned to a group of three subjects and that they would play the game with those same two other subjects for four decision rounds. After that they would be randomly reassigned to a new group of three subjects for an additional four rounds. This would continue for a total of 20 rounds. After each round, subjects were told their choice in the last round, the sum of their partners' choices, and their payoff in that round. Subjects were not allowed to communicate, and at no time in the experiment did the subjects know which two of the remaining 17 subjects were in their group, nor did they know the exact choices of payoffs of any other subjects.

Let us move to the results of the experiment. The following table contains the average contributions by round:

	NO TAX			TAX			
round	trial 1	trial 2	average	trial 1	trial 2	average	overall difference
1	2.94	2.83	2.89	4.05	3.66	3.86	0.97
2	2.66	2.55	2.61	3.72	3.72	3.72	1.12

3	3.33	2.61	2.97	3.38	3.72	3.55	0.58
4	3.11	2.38	2.75	2.77	2.77	2.77	0.02
5	2.72	3.33	3.03	4.27	3.61	3.94	0.91
6	2.72	2.72	2.72	3.44	3.38	3.41	0.69
7	2.88	3.05	2.97	4.11	2.94	3.53	0.56
8	2.72	2.66	2.69	3.22	2.88	3.05	0.36
9	2.88	2.55	2.72	4.05	3.55	3.8	1.09
10	3.22	3.11	3.17	3.77	3.11	3.44	0.27
11	2.88	2.83	2.86	3.61	3.22	3.42	0.56
12	2.61	2.55	2.58	3	3	3	0.42
13	2.77	2.83	2.8	3.77	3.33	3.55	0.75
14	2.61	2.66	2.64	3.44	2.83	3.14	0.5
15	2.77	2.61	2.69	3.27	2.94	3.11	0.42
16	3.05	2.72	2.89	2.94	2.88	2.91	0.02
17	3.27	2.77	3.02	3.5	3.61	3.56	0.54
18	2.44	3.05	2.75	3.72	2.72	3.22	0.48
19	3.05	2.38	2.72	3.38	2.83	3.11	0.39
20	2.11	2.38	2.25	3.16	2.83	3	0.75
average	2.84	2.73	2.78	3.53	3.18	3.35	0.57

Table 3. Results of the experiment

The average contributions in the tax condition were written to include the tax. Looking first at the contributions by round, averaged over both trials, one sees that the no-tax group, on average, reached or exceeded its equilibrium of three tokens per subject in only three of 20 rounds. On the other hand, the tax group reached or exceeded its equilibrium of three tokens per subject in 18 of 20 rounds. This difference is highly significant. The second thing to notice from the table is that the tax was not crowed out on average. Complete crowding-out would have predicted that average contributions, including the tax, should have been the same. However, giving differed by 0.57 and this indicated an average crowding-out of 71.5%. The difference between the no-tax and tax conditions was significant at a significance level of 0.01. This provided some evidence that crowding-out was incomplete.

The following table lists the frequency of contributions at every level for the two groups:

Condition	0	1	2	3	4	5	6	7
NO TAX trial 1	0.097	0.086	0.202	0.35	0.138	0.041	0.047	0.036
NO TAX trial 2	0.086	0.058	0.269	0.338	0.152	0.069	0.013	0.011

Average	0.091	0.072	0.236	0.334	0.145	0.055	0.03	0.024
TAX trial 1			0.327	0.23	0.186	0.141	0.063	0.05
TAX trial 2			0.413	0.25	0.169	0.108	0.025	0.033
Average			0.371	0.24	0.177	0.125	0.044	0.042

Table 4. Frequency of contributions at every level for the two groups

The contributions of the tax group were again restated to include the tax.

By collapsing the data into three categories identified by contributions below the standard payoff matrix (0-2), contributions within the standard payoff matrix (3-6) and contributions above the standard payoff matrix (7), the author tested whether the existence of the tax made it more or less likely for the subjects to choose moves outside the standard payoff matrix. By doing this and by testing the difference between the two structures, the author obtained that it was not significant. This suggests that shifting the border around the standard payoff matrix did not affect the probability that choices strayed out of the standard payoff matrix.

Then, the author tested whether taxation altered their choices among the elements within the standard matrix. To test this, he collapsed the cells outside of the standard payoff matrix, and considered the distribution of moves over the cells 0-2, 3, 4, 5, 6, and 7. By simply looking at the previous table, one sees that the tax group played 3 much less often, but played 4, 5, 6 much more often. A test for the difference between conditions revealed that it was significant. This suggests that tax encouraged cooperative behaviour.

These results continued holding if the data were organised by subjects. For each subject, tally the number of times the person chose 4 or more. This gave a total of 36 observations each for the no-tax and tax conditions. By comparing the means of these two groups the author found that it was significant at the confidence level 0.01. This again indicates that tax subjects were significantly more likely to make cooperative moves.

The author also found that the results of the full sample continued holding when he considered only the end games.

The main conclusion of the paper which can be used as an evidence for the result of crowding-in implied by my model is that when the group is taxed, it is more likely to choose cooperative moves as opposed to equilibrium moves.

5.4. Trust and Economic Performance

This section is divided into two sub-sections. In sub-section 4.4.1., I summarise the main findings of two empirical papers which highlight the determinants of individuals' attitude to trust others. In sub-section 4.4.2., I report the results of two papers which show the impact of the indicator of trust on the economic performances of a country.

5.4.1. The Determinants of Trust

In this sub-section I present the main findings of two important papers which try to identify the elements which determine individual's attitude to trust others. In particular, I refer to both "Measuring Trust" by Glaeser, Laibson, Scheinkman and Soutter (Glaeser et al [2000]) and "Who Trust Others?" by Alesina and La Ferrara (Alesina et al [2002]).

In the first paper, the authors combine the results of two experiments and a survey to measure trust and trustworthy. Subjects were recruited from Harvard's introductory economics course during the first week of class. 189 students completed all parts of the study.

Regarding the survey, subjects filled out an anonymous 137-question survey half of which contains attitudinal and self-reported behavioural measures of subjects' trustfulness. In particular, parts of the questions about trust were taken from the National Opinion Research Center's General Social Survey (GSS) for the years 1974-1994. This survey interviews about 1.500 individuals every year from a nationally representative sample, and contains a variety of indicators on the respondent's political views, social behaviour, and demographic characteristics. The most used question of the survey to conduct economic researches is: "Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?" In addition, the authors designed numerous trust questions of their own, including three questions to elicit past trusting behaviours. Indeed, this sort of information is not elicited by any of the GSS questions.

Three to four weeks after the survey, subjects participated in two experiments: the "Trust Game," and the "Envelope Drop." Let us start with the former. After having paired together and jointly filled a social connection survey, the subjects were told that they would not have seen each other again during the course of the experiment. Throughout the experiment, one subject identified the "sender" while the other identified "the recipient." The five steps of the game were:

1) The sender was given $15.
2) The recipient sent the sender a message/promise about the recipient's intended future actions in the game.
3) The sender chose to send all, some, or none of his/her $15 to the recipient. Let us call this transfer the "amount sent."
4) The experimenter doubled whatever the sender chose to send.
5) The recipient chose to send all, some or none of the received money back to the sender.

After completing the trust game, subjects participated in a second experimental procedure called the "Envelope Drop" that provides an additional behavioural measure of trust. In this game, subjects reported valuations for a series of "envelope drops." Specifically, subjects were told that an experimental assistant would have intentionally dropped in a public place an envelope containing $ 10 that was addressed to the subject. As pointed out by the authors, the subject's valuation of such an envelope drop primarily measured confidence that a random pedestrian in that location will return the envelope to the subjects. To elicit truthful subject reporting, the authors used a standard revelation mechanism. Indeed, they randomly generated a payoff that was independent of the subject's valuation. They would have given the subject this payoff if the subject's had reported was below the payoff value. If the subject's reported valuation had been above the payoff value, they would have carried out the envelope drop. Finally, authors varied properties of the envelope drop such as location where the envelope was dropped, time of the day, stamp on envelope, envelope sealed. Each subject provided valuations for fifteen different envelope drop conditions. The average of these valuations was defined mean reservation value.

Authors used the amount sent in the "Trust Game" and the mean reservation value in the "Envelope Drop Game" as the two experimental measures of trust. On the other hand, to measure trustworthiness, authors used the following indicator computed using data from the "Trust game:"

[2] *return ratio = (amount returned)/(amount available to return)*

The previous indicator was used only for those pairs with a positive value for the amount available to return. Moreover, it was always bounded between 0 and 1.

Now, let us analyse the results of this research.

As follows I include the description of the variables used by the authors in their regressions:

VARIABLE	DESCRIPTION
Amount sent	Amount sent from the sender to the recipient in the trust game. Range 0 – 15
Behavioural index	Normalised index of lend money, lend possessions, and leave door unlocked. Positive real number
Different sex	"Are the participants in the trust game of opposite sex?" Values: No – 0, Yes – 1
Door unlocked	"How often do toy leave your door unlocked?" Values: Very often – 1, Often – 2, Sometimes – 3, Rarely – 4, Never – 5
Freshman	Freshman. Values: No – 0, Yes – 1
GSS fair	"Do you think most people would try to take advantage of you if they got a chance, or would they try to be fair?" Values: Would take advantage of you – 1, Would try to be fair – 2
GSS help	"Would you say that most of the time people try to be helpful, or that they are mostly just looking for themselves?" Values: Try to be helpful – 1, Looking for themselves – 2
GSS trust	"Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?" Values: Most people can be trusted – 1 Cannot be too careful – 2

GSS index (trust index)	Normalised average of GSS fair, GSS help, GSS trust. Positive real number
Lend money	"How often do you lend money to friends?" Values: More than once a week – 1, About once a week – 2, About once a month – 3, Once a year or less – 4
Lend possessions	"How often do you lend personal possessions to friends?" Values: More than once a week – 1, About once a week – 2, About once a month – 3, Once a year or less – 4
Lost mail	"Have you or someone close to you recently lost something in the mail?" Values: Never – 1, Not in several years – 2, Within 1 or 2 years – 3, Within the last six months – 4
Male	Male. Values: No – 0, Yes – 1
Mean reservation value	Average of reservation values over all the envelope drop conditions. Values: 0 – 10
Months since first meeting	Months since first meeting between sender and recipient. Values: 0 – 36
Number of common friends	Number of common friends. Values: 0 – 30
Only child	Only child. Values: No – 0, Yes – 1
Past windfall	"Have you ever spontaneously benefited from the generosity of someone you never knew before?" Values: No – 0, Yes – 1
Promise	Promise to return at least as much to the sender as sent. Values: Agreed – 0, Did not agree – 1
Return ratio	(amount returned to sender)/(amount recipient received). Values in the interval [0, 1]
Stranger (trust stranger)	"You cannot count on strangers anymore." Values: More or less agree – 1, More or less disagree – 2
White	White. Values: No – 0, Yes – 1

Table 5. Description of the variables

The average amount sent was \$ 12.41, which is the 83% of the maximal amount that could be sent (\$ 15). The 71% of the senders chose to send exactly \$ 15. However, the data on the amount sent exhibited a substantial variation, with a standard deviation of \$ 4.54. The average amount returned is \$ 12.30 and the average value of return ratio was 45.5%. The average mean reservation value from the Envelope Drop was normalised to 0 and it presented a standard deviation of $ 1.77. The distribution of mean reservation values approximated a bell curve with little or no apparent truncation at the endpoints.

Let us start by investigating the determinants of trust displayed by the senders towards their partners. The following table summarises the results of some regressions performed by the authors in which the dependent variable was the amount sent in the Trust Game.

Dependent Variables: Amount sent						
Independent Variables refer to sender characteristics						
Regressions		1	2	3	4	5
Different sexes	coeff	-0.670	-0.128	-1.043	-0.358	-0.643
	se	1.130	1.112	1.120	1.106	1.082
Promise	coeff	0.040	-0.097	0.440	-0.038	-0.153
	se	1.024	1.015	1.040	0.992	0.995
Male	coeff	0.147	0.623	-0.028	0.457	-0.013
	se	1.197	1.174	1.148	1.149	1.138
White	coeff	-0.330	-0.640	0.055	-0.227	-0.329
	se	1.030	1.025	1.031	1.003	1.006
Freshman	coeff	-0.205	-0.434	-0.254	-0.970	-0.305
					1.081	
	se	1.136	1.125	1.092		1.086
Only child	coeff	-1.620	-1.724	-1.555	-1.775	-1.569
	se	1.53	1.474	1.496	1.530	1.492
GSS trust	coeff	0.220				
	se	1.022				
Trust index	coeff		-0.094			
	se		0.222			
Trust strangers	coeff			2.209		
	se			1.060		
Trusting behaviour index	Coeff				0.403	
					0.214	
	se					
Mean reservation value	coeff					0.417
	se					0.312
Constant	coeff	13.361	13.009	9.836	12.707	13.336
	se	2.448	1.735	2.272	1.648	1.639

N. obs.		93	90	92	93	95
Adjusted Rsq		-0.059	-0.050	-0.009	-0.007	-0.034

se: standard errors. All regressions are ordinary least square

Table 6. Results of regressions in which the dependent variable was the amount sent in the Trust Game

The first six variables in each regression represent control variables. Generally, they were insignificant and their inclusion or exclusion did not affect any of the results. Regression (1) shows that the positive coefficient on GSS trust was statistically insignificant. Analogously, regression (2) shows that the negative coefficient on the Trust index appeared statistically insignificant. Regression (3) shows that the positive coefficient on Trust Strangers was statistically significant. In particular, people who disagreed with the statement "you cannot trust strangers anymore" were more trusting and sent over an average of $ 2.21 more than comparable individuals who agreed with the statement. Disagreement with another statement from the survey – "when dealing with strangers, one is better off using caution before trusting them" – was also significantly correlated with the amount of trust observed in the experiment. In other words, a trusting individual was also more cooperative. Regression (4) shows the linkage between an index of past trusting behaviour and the amount sent. In particular, the behaviour index was significantly and positively correlated with the amount sent. Finally, regression (5) shows a positive but insignificant correlation between the amount sent and the mean reservation value. In other words, a person who trusted strangers to send the envelope back was more able to cooperate and to send money to the recipient.

The following table reports some regressions performed by the authors to examine the determinants of the mean reservation value of the "Envelope Drop game."

Dependent Variables: Mean reservation values						
Independent Variables: subject characteristics						
Regressions		1	2	3	4	5
Male	Coeff	0.1680	0.0975	0.1469	0.1923	0.1716
	Se	0.2810	0.2890	0.2820	0.2850	0.2870
White	Coeff	0.1599	0.1590	0.2028	0.1535	0.1865
	Se	0.2740	0.2810	0.2760	0.2780	0.2860
Freshman	coeff	-0.0857	-0.0924	-0.0633	-0.0059	0.1792

	se	0.2880	0.2990	0.2880	0.2910	0.2930
Lost mail	coeff	-0.2336	-0.2487	-0.2124	-0.2488	-0.2559
	se	0.1370	0.1390	0.1370	0.1380	0.1380
Only child	coeff	0.0243	0.0203	-0.2483	0.2049	-0.1429
					0.4420	
	se	0.4380	0.4400	0.4330		0.4290
GSS trust	coeff	0.2020				
	se	0.2620				
Trust index	coeff		0.0396			
	se		0.0610			
Trust strangers	coeff			0.6774		
	se			0.2740		
Trusting behaviour index	coeff				0.1354	0.1324
	se				0.0640	0.0650
Past windfall	coeff					0.8779
	se					0.2720
Constant	coeff	0.7239	0.5187	-0.5439	0.4486	1.6145
	se	0.6360	0.5240	0.6680	0.5180	0.6290
N. obs.		182	177	183	183	166
Adjusted Rsq		-0.004	-0.005	0.029	0.022	0.076

se: standard errors. All regressions are ordinary least square

Table 7. Results of regressions in which the dependent variable was mean reservation value

Analogously to the previous case, regressions (1) and (2) show that mean reservation value was positively and insignificantly correlated with both the GSS trust and the Trust index. Even the results on trusting strangers were coherent with the previous findings. Indeed, from regression (3), there existed a significant positive relation between Trust Strangers and the mean reservation value. Regression (4) shows that there existed a positive and significant relation between mean reservation value and the behaviour index. Finally, regression (5) shows that people who said that they benefited from the generosity of an anonymous stranger in the past gave more. Trust did not just reflect altruism but also beliefs about others which were formed by past experiences.

Let us turn to the recipients' trustworthiness. The following table reports some regressions performed by authors to examine the determinants of the return ratio.

Dependent Variables: Return Ratio			
Independent Variables: recipient characteristics			
Regressions		1	2
Amount sent	coeff	0.018	0.018
	Se	0.007	0.006
Different sexes	coeff	0.003	-0.007
	Se	0.053	0.0052
Promise	coeff	-0.043	-0.007
	Se	0.051	0.0051
Male	coeff	0.027	0.048
	Se	0.059	0.058
White	coeff	0.075	0.072
	Se	0.054	0.052
Freshman	coeff	-0.072	-0.052
	Se	0.055	0.055
Only Child	coeff	-0.217	-0.242
	Se	0.092	0.089
GSS trust	coeff	0.106	
	Se	0.051	
Trust Index	coeff		0.043
	Se		0.012
Constant	coeff	0.414	0.212
	Se	0.149	0.120
N. obs.		90	88
Adjusted Rsq		0.161	0.232

All the regressions are OLS

Table 8. Results of regressions in which the dependent variable was the Return Ratio

Authors used eight control variables, one of which (amount sent) has a statistically significant but economically small positive effect on return ratio. Regression (1) shows that GSS trust was positively and significantly correlated with return ratio. Moreover, in this regression, some of the control variables appeared significant (being non-white, being freshman, only child). Regression (2) shows that there existed a positive and significant correlation between the return ratio and the trust index. In a sense this result suggested that people were more cooperative and trustworthy when they trusted others. This finding suggested that the standard trust questions could be picking up trustworthiness rather than trust.

Finally, the authors focused their attention on the social connections. Indeed, the social capital literature assumes that social connections (e.g., clubs, organisations, friendship, etc.) mitigate the free-rider problem and facilitate cooperative social interaction. The following table reports the regressions performed by the authors in order to determine whether social connection between sender and recipient increased trust and trustworthiness.

		Amount sent as function of sender and pair charactheteristics		Return ratio as function of recipient and pair characteristics	
Regression		1	2	3	4
Amount sent	coeff			0,0143	0,0151
	se			0,0069	0,0069
Promise	coeff	-0,0796	0,0308	-0,0548	-0,0539
	se	1,0060	1,0153	0,0511	0,0515
Different sexes	coeff	-0,2899	0,0455	0,0067	0,0331
	se	1,1372	1,1890	0,0530	0,0577
Male	coeff	0,3777	0,5750	0,0477	0,0622
	se	1,1950	1,2007	0,0589	0,0621
White	coeff	-0,3568	-0,1940	0,0589	0,0497
	se	1,0082	1,0203	0,0541	0,0553
Freshman	coeff	0,3029	-0,0344	-0,0557	-0,0668
	se	1,1270	1,1251	0,0549	0,0550
Only child	coeff	-1,9766	-1,6304	-0,2222	-0,2447
	se	1,5499	1,5724	0,0933	0,0944
Trusting Behaviour index	coeff	0,3997	0,3788	0,0027	0,0061
	se	0,2157	0,2199	0,0153	0,0153
GSS trust	coeff	0,1581	0,1978	-0,1004	-0,1057
	se	1,0136	1,0260	0,0530	0,0537
Months since first meating	coeff	0,1016		0,0060	
	se	0,0614		0,0032	
Number of common friends	coeff		0,0310		0,0026
	Se		0,0321		0,0017
Constant	coeff	12,0169	11,6161	0,4327	0,4058
	se	2,4486	2,5578	0,1501	0,1527
N obs		92	92	89	89
Adjusted Rsq		-0,0006	-0,0224	0,159	0,1457

All regressions are OLS

Table 9. Results of regressions to determine whether social connection between sender and recipient increased trust and trustworthiness

The authors used two basic measures of social connections: month since first meeting and number of friends that the sender and the recipient had in common. To lessen the impact of outliers, they had dropped the number of months at 36 and the number of friends at 30. Regression (1) and regression (3) show the effect of months since the first meeting on amount sent and return ratio. The coefficient in the amount sent regression was significant at the 90% level; the coefficient in the return ratio regression was significant at the 95%. The authors used regression (2) and in regression (4) to look at the number of friends in common. There was a positive, insignificant effect of this variable on both the dependent variables.

The main conclusions of the paper which can be used to test the implications of my model are:

1) Trusting others and trustworthiness are both significantly and positively correlated with trusting strangers. In particular, people who benefited from the generosity of strangers are more trustworthy;
2) Trusting others is associated with a virtuous attitude to cooperate in different contexts;
3) Social connections strongly predict trustworthiness and weakly predicts trust.

Let us move to the second paper. The authors performed many regressions in order to identify which individual and social characteristics mostly influence interpersonal trust. In particular, let us focus on the relations between individual attitude to trust others and individual characteristics. The dependent variable used by the authors, "Trust," was obtained by elaborating respondents' answers to GSS question "Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?" In particular, it consisted of a dummy variable which took the value 1 if the respondent was trusting and 0 elsewhere. Among the explanatory variables they included several individual characteristics like education, income, marital status, racial group, religion, etc. The GSS contained also information about the recent and not so recent history of the respondent. In particular, the authors could check how recent traumas like divorce, accidents, financial misfortune, affected people's trust.

The following table summarises the regressions performed by the authors:

Dependent Variables		1 if trust others; 0 otherwise			
Regressions		1	2	3	4
Age	coeff	0.007**	0.009**	0.009**	0.011**
	se	0.002	0.002	0.002	0.002
Age^2 a)	coeff	-0.034*	-0.052**	-0.052**	-0.074**
	se	0.020	0.019	0.019	0.018
Married	coeff	-0.006	-0.025	-0.026	0.002
	se	0.013	0.016	0.017	0.015
Female	coeff	-0.028**	-0.028**	-0.028**	-0.033**
	se	0.013	0.013	0.013	0.013
Black	coeff	-0.241**	-0.240**	-0.245**	-0.260**
	se	0.016	0.016	0.017	0.016
Educ<12 yrs	coeff	-0.128**	-0.127**	-0.127**	-0.147**
	se	0.017	0.017	0.017	0.016
Educ>16 yrs	coeff	0.182**	0.179**	0.180**	0.195**
	se	0.013	0.013	0.013	0.013
Children	coeff	0.017	0.023*	0.023*	0.027**
	se	0.013	0.013	0.013	0.013
Log(real income)	coeff	0.058**	0.056**	0.056**	
	se	0.008	0.008	0.008	
Fulltime	Coeff	0.001	-0.000	0.000	0.022
	se	0.018	0.018	0.018	0.017
Partime	coeff	0.061**	0.059**	0.059**	0.064**
	se	0.025	0.025	0.025	0.025
Divorced/separated	coeff		-0.045**	-0.046**	-0.052**
	se		0.021	0.021	0.021
Trauma	coeff		-0.024**	-0.024**	-0.032**
	se		0.012	0.012	0.012
Protestant	coeff			0.017	0.019
	se			0.028	0.028
Catholic	coeff			-0.007	-0.004
	se			0.29	0.030

Jewish	coeff			-0.015	-0.005
	se			0.045	0.046
Other religions	coeff			-0.007	-0.013
	se			0.044	0.044
N. obs.		7326	7326	7326	7326
Pseudo Rsq		0.10	0.10	0.10	0.10
Observed Prob		0.42	0.42	0.42	0.42
Predicted Prob		0.40	0.40	0.40	0.40

*: significance at 10%; **: significant at 5%; coeff are marginal probit coefficients calculated at means; se are standard errors corrected for heteroskedasticity and clustering of the residuals at the MSA level. a) Coeff and se are multiplied by 1000

Table 10. Results of regressions to determine the determinants of trust

Regression (1) reports the minimal specification. The age variables indicate that trust in others increased with age, though a declining rate. Both the coefficients on Black and Female were negative and highly significant. The size of the coefficient on Black was very large in absolute value: a black person is 24% less likely to trust others that a non black. This evidence was consistent with the view that groups that historically have been discriminated against trust less. Income and education were positively and significantly correlated with trust. In regression (2), authors added two further variables. The variable capturing whether the respondent was divorced or separated was significant and negative. The variable trauma (a dummy equal to 1 if the individual had suffered a major negative experience in the past year) had a negative and significant coefficient. The authors did not think that the endogeneity problem associated with the variable trauma (indeed, some occurrences included in the index like divorce can be considered as endogenous to trust) could influence the regression since they had verified that the occurrence of traumas to close relatives had similar effects on the respondent's trust to his traumas. In regressions (3) and (4), authors added variables that capture the religious affiliation of the respondent. Surprisingly, they obtained that these variables were not significant. They justified this result with interreligious nature of the American society which does not allow identifying the significant effect of each singular affiliation.

The fact that situations characterised by lackness of cooperation (racial discrimination, relational trauma) influenced negatively and significantly the level of trust indicates that lackness of cooperation discourages individual trust.

5.4.2. The Economic Impact of Trust

In this sub-section, I present the main findings of three papers which test the impact of trust on growth and economic levels of the main macroeconomic variables econometrically. These papers are "Trust in Large Organisations" by La Porta, Lopez-de-Silanes, Shleifer and Vishny (La Porta et al [1997]) and "Does Social Capital Have an Economic Payoff" by Knack and Keefer (Knack et al [1997]).

Regarding the first paper, the authors were interested in the effect of trust on the performance of large organisations measured in the paper by government effectiveness, participation in civic organisations, size of the largest firms relative to GNP, and the performance of a society more generally. The following table contains the description of the variables used by the authors.

VARIABLE	DESCRIPTION
Trust in people (TRUST)	Percentage of respondents who answered that most of the people can be trusted when asked: "Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?" (GSS)
Efficiency of the judiciary (EFFJUD)	Assessment of the "efficiency and integrity of the legal environment as it affects business, particularly foreign firms." Average between 1980 and 1983. Scale from 0 to 10, with lower scores indicating lower efficiency levels.
Corruption (CORIND)	Low ratings if "high government officials are likely to demand special payments and illegal payments are generally expected throughout lower levels of government in the form of bribes connected with import and export licences, exchange controls, tax assessment, policy protection, or loans." Scale from 0 to 10. Average of the months April and October of the monthly index between 1982 and 1995.

Bureaucratic Quality (BURQ)	High scores indicate "autonomy from political pressure" and "strength and expertise to govern without drastic changes in policy or interruptions in government services." Scale from 0 to 10, with higher scores for greater efficiency. Average of the months April and October of the monthly index between 1982 and 1995.
Tax compliance (TAXCOM)	Assessment of the level of tax compliance. Scale from 0 to 6, where higher scores indicate higher compliance.
Civic participation (CIVIC)	Percentage of civic activities in which an average individual participates. The activities included are: a) social-welfare services for elderly and deprived, b) education, art, and cultural activities, c) local community affairs, d) conservation, environment, ecology, e) work with youth, f) sports or recreation, and f) voluntary associations for health.
Participation in professional associations (PPASS)	Percentage of responders who answered positively when asked if they belonged to professional associations.
(Sales' top 20)/GNP (SALES/GDP)	The ratio of sales generated by the top 20 publicly traded firms to GNP for 1994. Firms within a country are ranked by sales.
Infrastructure quality (INFR)	Assessment of the "facilities for and ease of communication between headquarters and the operation, and within the country," as well as the quality of the transportation. Average data for the year 1972 – 1995. Scale from 0 to 10 with higher scores for superior quality.
Adequacy of infrastructure (ADEQINFR)	Average of 5 scores measuring the extent to which a country's infrastructure meets business needs in each of the following areas: a) roads, b) air transport, c) ports, d) telecommunications, e) power supply. Scale from 0 to 6 where higher scores are for a superior infrastructure.
Log infant mortality (LOGINFMORT)	Log of the number of deaths of infants under one year of age per 1000 live births for 1993 or the most recent year available.
Completed high school (COMPLHS)	Percentage of the 1985 male population aged 25 and over that has completed high school.
Adequacy of educational system (ADEQEDU)	Assessment of the extent to which the educational system meets the needs of a competitive economy. Score from 0 to 6 where higher scores are for superior educational system.

Log inflation (LOGINF)	Log of the geometric average annual growth rate of the implicit price deflator for the time period 1970 – 1993.
GDP growth (GROWTH)	Average annual growth in per capita GDP for the period 1970 – 1993.
Log GNP per capita (LOGGNP)	Log of the per-capita income

Table 11. Description of the variables

Note that the variable used by authors to capture the level of trust is the same of the one used by Glaeser et al [2000] and Alesina et al [2002]. The following table summarises the econometric results of the regressions performed by the authors:

Independent Variables		LOGGNP	TRUST	Constant	Rsquared [N]
Dependent Variable					
Governement efficiency					
EFFJUD	coeff	0,2959	8,2093**	2,2769	0,6343
	se	0,2213	1,3652	1,7766	[27]
CORRIND	coeff	0,9214**	4,80068**	-2,3608**	0,7316
	se	0,1022	0,7509	0,9050	[33]
BURQ	coeff	1,1596**	3,9797**	-4,0842	0,6806
	se	0,1927	1,3544	1,6763	[33]
TAXCOM	coeff	0,3595**	1,7330**	-0,9124	0,3540
	se	0,0913	0,5840	0,7873	[32]
Participation					
CIVIC	coeff	0,0127**	0,1224**	-0,0921	0,4614
	se	0,0038	0,0329	0,0308	[33]
PPASS	coeff	-0,0072	0,3056**	0,0330	0,5492
	se	0,0099	0,0669	0,0730	[33]

Large Organisations					
SALES/GDP	coeff	0,0103	0,4927**	-0,0374	0,2433
	se	0,0325	0,1657	0,2798	[26]
Social Efficiency					
INFR	coeff	1,0269**	2,3261**	-3,7162**	0,6783
	se	0,1413	0,7970	1,2331	[33]
ADEQINFR	coeff	0,5943**	1,2511**	-1,6559**	0,7222
	se	0,0604	0,4200	0,5837	[32]
LOGINFMORT	coeff	0,4598**	-1,0283*	6,9682**	0,7141
	se	0,0484	0,5176	0,4495	[40]
COMPLHS	coeff	1,2884**	10,9714**	-7,4405*	0,3474
	se	0,4416	3,4633	3,5336	[29]
ADEQEDU	coeff	0,22**	1,2334*	0,8525	0,2107
	se	0,0858	0,6771	0,7736	[32]
LOGINF	coeff	0,0371	-3,4128**	3,1306**	0,2059
	se	0,0787	1,1502	0,6494	[37]
GROWTH	coeff	-0,2738°	2,0266°	3,5947	0,0072
	se	0,1548	1,2152	1,3625	[39]

*Se: standard errors. °: statistically significant 10%; *: statistically significant 5%; **: statistically significant 1%. All the regressions are OLS.*

Table 12. Regressions performed by Alesina et al [2002]

The effects of trust on economic performances were both statistically significant and quantitatively large. In particular, trust was strongly correlated with large firms' share of the economy: a one-standard-deviation increase in trust raised that share by 7 percentage points or half of a standard deviation. As the authors pointed out, these results supported Fukuyama's argument that trust facilitates all large-scale activities. Trust was also associated with lower inflation and weakly associated with higher per capita GNP growth.

The results of this research are coherent with the main implications of my model under a Cobb-Douglas production function. Trust influences the levels of the macroeconomic variables but can be ininfluent in explaining their growth rates.

In the second paper, the authors used data from 29 market economies to study on the relation between growth, civic participation and trust. The trust variable used by the authors, TRUST, has the same structure of the one used by La Porta et al [1997]. The strength of norms of civic cooperation was assessed from responses to question which asked whether the following behaviours "could always be justified, never be justified or something in between:"

a) "claiming government benefits which you are not entitled to;"
b) "avoiding a fare on public transport;"
c) "cheating on taxes if you have the chance;"
d) "keeping money that you have found;"
e) "failing to report damage you have done accidentally to a parked vehicle."

Respondents chose a number from 1 (never justifiable) to 10 (always justifiable). Authors reversed the scales, so that larger values indicated greater cooperation, and summed values over the five items to create CIVIC.

TRUST and CIVIC appeared strongly correlated to each other. The simple correlation was 0.39; the partial correlation was 0.33.

TRUST and CIVIC represented the most important independent variables used by the authors in their regressions. Other explanatory variables included the proportion of eligible students enrolled in secondary (SEC60) and in primary (PRIM60) schools in 1960, per capita income at the beginning of the period (GDP80) and the price level of investment goods (PI80). The authors performed many regressions using two dependent variables. The first one was the average annual growth in per capita income over the 1980-1992 period. The second one consisted of the ratio between per capita investment and GDP , averaged over the 1980 – 1992 period, controlling for other determinants of investment.

The following table summarises the results of the regressions performed by the authors:

Dependent Variable		Growth 1980-1992	Growth 1980-1993	Growth 1980-1994	Growth 1980-1995	Investment/GDP 1980-1992	Investment/GDP 1980-1993
Constant	coeff	-0.935	-10.476	-9.593	-1.037	9.617	-23.893
	Se	1.28	4.73	4.52	1.898	3.82	11.998

GDP80	coeff	-0.361	-0.273	-0.375	-0.366	0.162	0.273
	Se	0.131	0.126	0.127	0.127	0.403	0.364
PRIM60	coeff	6.192	5.93	7.061	6.27	11.655	13.03
	Se	1.051	1.164	1.224	1.759	3.558	3.274
SEC60	coeff	2.194	3.457	1.648	2.085	-0.431	0.495
	Se	1.632	1.543	1.485	2.133	8.286	7.067
PI80	coeff	-3.693	-3.117	-3.535	-3.713	-4.435	-3.17
	Se	0.867	1.1	0.935	0.809	1.993	2.154
TRUST	coeff	0.082		0.076	0.086	0.146	
	Se	0.03		0.03	0.039	0.078	
CIVIC	coeff		0.272	0.207			0.872
	Se		0.098	0.092			0.301
Adj. Rsquared		0.55	0.44	0.56	0.52	0.37	0.38
SEE		1.37	1.52	1.35	1.37	4.43	4.38
Mean, D.V.		1.45	1.45	1.45	1.45	22.4	22.4

se: White correlated standard errors; 29 observations. Regressions 1), 2), 3), 5) and 6) are OLS. Regression 4) is a 2SLS

Table 13. Regressions performed by Glaeser et al [2000]

Equations (1) and (2) show that the social capital variables were positively and significantly correlated with growth. When both social capital variables were entered together in equation (3), their coefficients dropped slightly but remained significant. In equation (4), authors instrumented for TRUST to correct for endogeneity problems, or possible measurement error. They used as instrumental variables SEC60, PRIM60, GDP80, PI80, the number of law students in 1963 as a percentage of all the postsecondary students and the percentage of population belonging to the largest "ethnolinguistic" group, where groups were identified by race, language, or religion depending on which of these appeared to be the most important cleavage in the society. By instrumenting for TRUST, this variable remained a significant predictor of growth. Equations (5) and (6) examined the impact of social capital on the ratio Investment/GDP. Referring to the former regression, trust was positively correlated with investment but it was significant at the 5% level only. From the latter regression, we have that civic norms were positively correlated with investments and that their coefficient was highly significant.

The authors also analysed the relationship between TRUST and levels of output per worker, physical and human capital per worker, and total factor productivity. The following table reports the relationship of TRUST with a) the log of output per worker, net of mineral production, for 1988, b) the log of capital per worker for 1988, c) human capital per worker and d) the log of TFP for 1988:

Dependent variable		log(output/worker)	log(capital/worker)	log(School/worker)	log(TFP)
TRUST	coeff	0.0258	0.0336	0.1533	0.0023
	se	0.0061	0.0062	0.0156	0.0038
					Sample size 29

se: White correlated standard errors; 29 observations. Regression is OLS

Table 14. Regressions to analyse the relationship between TRUST and levels of output per worker, physical and human capital per worker, and total factor productivity

Trust was positively and significantly correlated with output, capital and schooling, while the correlation with TFP was positive but insignificant.

Concluding, the positive relation between the levels of the macroeconomic variables and the level of trust highlighted by the empirical researches is coherent with the main implications of both the version of my model (under Cobb-Douglas production function and under Rebelo's production function). On the other hand, my model implies a positive correlation between the growth rate of the economy and the level of widespread trust only if we assume a production function with constant marginal productivities.

5.5. Conclusions

In this chapter, I have discussed the results of some important empirical researches which validate the implications of my model. In particular, I have referred to three implications: the coexistence of cooperative contributors and free-riders, the confutation of the crowding-out effect and, finally, the positive correlation between the level of widespread trust in a country and its economic performances.

CHAPTER 6

THE NON PROFIT SECTOR IN UNITED KINGDOM: THE ROLE OF THE CHARITY COMMISSION[25]

6.1. Introduction: Why the English Experience?

One of the most important conclusions of my model is that the government can stimulate the creation of widespread trust by supporting the civil society in achieving the common good. Indeed, by creating an institutional context in which charities, clubs, philanthropic associations, NGO can express their social involvement, it can trigger a virtuous "motivational cascade" which drives the system to converge to an equilibrium characterised by a higher proportion of fair contributors. In this chapter, I focus my attention on both the English Non Profit sector and the institutional instruments implemented by the English Government to support the Non Profit.

Basically, there are three reasons of my interest for the English context. Firstly, the English experience reflects the cultural connotations of the English civil society. Indeed, United Kingdom is by definition a reality where multiculturalism has played an important role in determining the size of the voluntary participation in social projects.

Secondly, the English experience can be interpreted as the output of the virtuous dialogue between an institutional actor (the State) and the civil community. The Charity Commission probably represents the most important instrument used by the English government to support the civil community in achieving the common good. Any charity who needs legal or organisational support to conduct its activities efficiently can address its problems to this professional body. On the other hand, by creating a formal office devoted to the charities' problems, the English government has implicitly declared its intention to offer the best legal and institutional environment in which any

[25] The references used for this chapter are Taylor [2004], Spear [2001], Fries [2000] and the documents available on the website of the Charity Commission (www.charity-commission.gov.uk/).

individual involved in the charities or affected by their activities can express his entrepreneurship or his rights.

Thirdly, my interest for the English non profit sector has been inspired by my personal experience in United Kingdom. I was really impressed by the different approach and pragmatism shown by English people in leading their charities and their voluntary organisations. Rather than representing an expression of political ideologies and the religious affiliation of the volunteers who work for them, *Charities exist because of their goals* which have to be achieved with the same organisational efficiency and excellence required by any other economic activity.

The chapter is organised as follows. In section 6.2., I briefly describe the historical background in which the Non Profit in United Kingdom has developed. In section 6.3., I present an overview of the sector in United Kingdom. In the next sections (6.4., 6.5., 6.6., 6.7.), I describe the structure and the main powers of the Charity Commission.

6.2. The Third Sector in United Kingdom: an Historical Overview

The history of the UK voluntary sector reflects the continuous interaction between religion, commerce and the state. Prior to the Reformation in the sixteenth century, the Catholic Church was the dominant institution for meeting social need and exercising social control in the UK, interwoven with the support mechanisms of the informal sector and the feudal system and supplemented by the activities of the guilds in the towns. The Reformation overturned this accommodation and the Church of England continued to dominate social life and civil society well into the eighteenth century as the institutionalised religion of the governing elite. The view of the state was that its role should be minimal and regulatory. Thus, the 1601 *Statute of Charitable Uses* enshrined a division of labour between the state and charity whereby local elites were expected to attend to the welfare of their local population, but the assumption was that this could be done voluntarily, keeping taxation to a minimum. The organisation of the Church of England and its close links with the localities in which it operated gave it the capacity to act as "moral policeman" through the ecclesiastic courts, to run schools, administer local endowed charities, pioneer social insurance schemes and providing education for the poor. The nineteenth century was characterised by a tremendous flourishing of philanthropic organisations. Each religious sect had its full complement of organisations, particularly in education and youth development. Alarmed by indiscriminate alms giving, a national Charity Organisation Society was set up in 1869 to bring a more rational, coordinated and "scientific" approach to philanthropy which continued being inspired to principle of laissez faire dictated by the statue of the 1601. The belief that local philanthropy was the appropriate way to deliver welfare and control domestic society was to continue well into the early twentieth century, even though the influence of organised religion declining.

Mutuality had an equally strong tradition. The traditions of equality among members, self-government by general consent and universal participation in elections had their origins in the medieval guild system and where taken over by working class organisations in later centuries, providing the base not only for the development of mutuality over the centuries but also of the structures of local government. Indeed, the growth of friendly societies from the seventeenth century onwards provided a thread of continuity between the craftsmen's guilds of earlier centuries and the modern trade union movement, as a mean of pooling risk, insuring against unemployment and ill-health and of saving. Equally strong was the growth of the cooperative movement, led by consumer cooperatives, which sought to ensure the availability of healthy and affordable food for the working classes. Mutualism flowered through a host of working class organisations – building societies, consumer and producer cooperatives, friendly societies, housing associations, burial societies, trades unions and so on, and became an increasingly important part of working class culture in the late eighteenth and the nineteenth century. Moreover, mutuals were given a robust legal framework in the Industrial and Provident Society laws of 1843 and 1862, including limited liability. Although these positive aspects, the organised mutuality of the nineteenth century had its limitations. Firstly, mutuals were predominantly a resource for the artisan class (the better off working class) and were supported by the political elite who saw that, in so far as they gave potential revolutionaries a stake in the status quo, they separated the artisan working class from the really poor. They were also a resource for working males and largely failed to provide fro woman and children. Secondly, by the mid-nineteenth century, mutualism was already under way to surmount the limits of localism and rather informal styles of organising. Building societies were less and less likely to be run by members and become more and more commercial. Increased life expectancy placed an intolerable burden on friendly societies, while competition for members meant they could not increase their premiums. Worker cooperatives reach their peak in 1880 and were hard hit by the recession of the mid-1880s.

By the turn of the century, the balance in the welfare mix was beginning to shifts towards the state. Britain had been the first nation to embrace the industrial revolution, but it no longer had this advantage; it was also in between two major wars, the Boer War and the First World War. The nation needed to have a workforce and a military force that could compete on both the economic and the military front and it was becoming increasingly obvious that it did not have them. The insufficiency of the voluntary action, both philanthropic and mutual, had become increasingly apparent. This incapacity of mutuality at the local level to meet the health and security needs of the working classes arose the necessity of an incisive intervention of the state. By the early 1900s, even friendly societies were beginning to see the advantages of a state pension, although as complement to their provision rather than alternative. Despite some continued resistance, the entry of the state seemed to offer them a lifeline. Both friendly societies and trade unions were approved as administrators for health insurance in the *National Insurance Act* of 1911. However, the opposition of the medical profession significantly limited their role. Furthermore, the depression of the 1930s put renewed pressure on their health insurance role and proved fatal to unemployment insurance. Trade unions lost members and many found the insurance burden severe. They increasingly saw their future in negotiation rather than savings. Only the centralised collecting societies and the commercial insurance organisations were able to survive. However they became more official and less personal, more of insurance agencies and less of social agencies. The working class habit of saving for old age through the mutual decline and members were largely passive by the end of World War

II. The mutual tradition had been a crucial building block for the rise of the Labour Party in Britain, yet some would argue that the rise of the Labour Party, with its formal access to the political process, probably diverted the political and cultural energies of mutualism into new channels. This was of benefit to the trade unions, once they redefined their role away from insurance and towards political. However, as the Labour Party and the unions gained in strength, local mutual traditions faltered and the party itself forsook its local cooperative roots for a more centralist/statist ideology.

The years between 1942 and 1948 saw the surge of legislation that would put the state at the centre of the welfare mix. Nonetheless, traditional voluntary organisations demonstrated their resilience over the 1950s and 1960s, maintaining a specialist role in some fields, continuing to provide services in areas which were not seen as a priority by the state, and developing a complementary role in others. Cooperative and mutual enterprises were at their height in terms of sheer size in the 1950s and the durability of the cooperative movement, which had always been dominated by retail societies, is illustrated by the fact that the Cooperative Society was the market leader in retailing in 1968. As dissatisfaction with state welfare grew in the 1960s and 1970s, a new wave of voluntary action developed, drawing on the inspiration of the civil rights movement and other social movements of the 1960s across the world. Poverty, homelessness, peace, environment, education, equality were the most important areas in which the social movements could express this new entrepreneurial energy. More succinctly, these entities were looking for newer and clearer alternatives to the insensitive and inefficient governmental bureaucracy. There was also a new impetus for social enterprise, with the formation of the Industrial Common Ownership Movement in 1971 and legislation later in the decade to promote common ownership, housing cooperatives and credit unions. In 1979, the government set up a National Cooperative Development Agency. Meanwhile government schemes to tackle increasing unemployment provided new resources for community activity and acted as a seedbed for new forms of community enterprise, although it was only in Scotland and Wales that these community businesses established any significant presence. Although some of the movements were "alternative" in character, promoting new anti-capitalistic ways of organising and new forms of politics, they never tried to take over responsibility from the state. Their aims were to complement state provision and to act as a watchdog to force the state to improve its own policies and provision. Nonetheless, the voluntary sector was pushing for change. By the end of the 1970s, the National Council for Social Service and other influential advocates for the sector were advocating a much more central role for the third sector. The state would continue to provide funding, but the voluntary sector would provide the services. However, public disillusionment with state welfare was already far advanced. The idea of 'Welfare Pluralism' consisted in a much more radical departure from what thought. With the election of a Conservative government in 1979, the stage was set for the advance of the New Right and the welfare market. Although Labour municipalities managed to resist for a while to the new agenda, by the late 1980s the commercial sector had already established itself as a significant player in social care and government policies were seeking to shift the burden of finance from the state to private insurance. Privatisation was to give the service-providing agencies within the third sector a much greater role in the welfare mix. This was particularly true in the fields of social housing and social services, where there was a clear intention to transfer service delivery to the voluntary and commercial sectors. Financial support for voluntary organisations more than doubled in the years from 1979 to 1987 and, after a few hiccups, shot up again in the early 1990s. Finally, the role of cooperator and supporter of the charities assigned to the *Charity Commission* by the 1993 *Charity Act* represented a further expression of the public desire to identify charities as *free entities in the free market*. Although some problems concerning the new market-based culture, charities were positively affected by the new paradigm. Large charities became more entrepreneurial in response to funding pressures, adopting more aggressive approaches to the fund-raising marketplace and developing trading arms to generate earned income, whether from government contracts or from the sales of goods and services. Parallel developments have taken place amongst mutuals. Moreover, the welfare market has brought new opportunities for service users to influence and even manage their own services. As the 1990s progressed, for example, tenant management organisations were actively encouraged in social housing, and control of schools was devolved to local governing bodies, although in the latter case under strict central government controls. Disability organisations were drawn into the care-planning and policy-making process and some began to develop radical new approaches to service delivery which gave service users more power as co-producers. Black and minority ethnic organisations developed services that would be more sensitive to their cultural traditions and needs. On the other hand, Trade union membership started declining. Some, like the housing associations, started losing their identification with the voluntary sector; a growing number of building societies and insurance association were demutualised.

By 1997, the English public was becoming as disillusioned with the excesses of the market as it had been with the state in 1979. The New Labour government, which it elected in 1997, was searching for a 'third way' between market and state which presented three main key elements: a) a commitment to a partnership rather than a contract culture; b) a commitment to tackle social exclusion; c) a positive climate for enterprise and the mobilising of citizens and communities under a banner of rights and responsibilities. This policy offered new opportunities to the third sector which was to enjoy increasing prominence under the new administration. This was underlined by the priority given to establishing a written "compact" with the voluntary and community sector (Home Office, 1998) and by the increased profile and additional funding given to the former Voluntary and Community Unit in government. It was further strengthened by the requirement imposed by central government on local public bodies to consult voluntary organisations, communities and service users in developing services and in defining a best value framework to which public services should conform.

6.3. Overview of the Third Sector in United Kingdom: What is the Actual Situation?

Traditionally, the third sector in United Kingdom may be considered as comprising co-operatives, mutual and voluntary organisations (which includes charities and foundations). In terms of overall employment, third-sector organisations play a significant role in the economic landscape. Cooperatives employ about 131,197 employees, mutual organisations provide work for some 27,500 people and voluntary organisations for 1,473,000 people. The co-operative sector is still dominated by consumer societies, with 9.2 million members, and 104,000 staff. Among these, the Co-operative Wholesale Society (the largest retail society) also own very successful co-operative financial services which were initially an extension of the large of services provided to retail customer/members, but have now grown beyond that. Similarly, the growth of the mutuals in financial services may be seen as a response to the excessive market power and profits private providers of the last century. The agricultural co-op sector, with its 300,000 members and 12,243 employees, was built on a spirit of self-help in a context of growing urban markets, and on the need to counter emerging economic power of whole-salers, and a growing class of retailers. It has moved to a certain extent towards more privatised forms of ownership. In terms of social impact, the retail societies, although declining economically, have a good record of retaining shopping outlets in a wide range of communities; the CIS (Co-op Insurance Society) has a network of local community-based representatives who perform a similar function. On the other hand, the Co-operative Bank has strong ethical and environmental policies, and sponsors a number of ethical projects that support disadvantaged groups. And although, until recently, CWS (Co-op Wholesale Society) and other retailer societies have suffered a degeneration of values, there is currently a regeneration underway in the sector, which is developing a community shopping strategy, strengthening community-based activities and building social capital.

Voluntary organisations form the largest part of the third sector in terms of staff employed (paid and volunteers). The voluntary sector counts a very small presence in the health sector, but a relatively large impact in social services, education and research, and culture/recreation sectors.

The new co-operative and mutual organisations are more closely linked to the voluntary sector in terms of commonality of activities. They operate in a range of sectors responding in the failures in state housing provision, labour-market range failures (leading to exclusion), failures in macro-economic policies leading to high unemployment, and local government failures to manage community development. But the largest area arises from welfare failures, and restructuring arising from the breakdown of the post-war consensus on the welfare state.

Sometimes co-operatives, mutual and voluntary organisations are called *social enterprises*. This expression has a general meaning, usually associated with the idea of a trading enterprise having a social purpose. UK law in not tailored particularly to the idea of social enterprise. There is no law for co-operatives or specifically for mutual or voluntary organisations. On the other hand, the law is quite flexible with regard to such enterprises. There are two relevant types of law – company law and industrial and provident society law. Social enterprises would usually be formed as companies limited by guarantee under the former and as industrial and provident societies under the latter. The *Registrar of Friendly Societies*, which caters for industrial and provident societies, offers more protection to bona fide co-operatives than to entities registering under company law. Industrial and provident societies allow shareholding by members but they are democratically controlled, since members have only one vote each. The usual form of registration under company law is a company limited by guarantee, where the company is controlled by members (one person, one vote) with (usually) nominal shareholding and liability is limited to the amount initially agreed to be provided by the member if the company is liquidated. It is also possible to register social enterprises under the branch of company law where a company is limited by shares. Social enterprises (voluntary organisations) can also be registered as charities with the Charity Commission under the Charity Act 1992 – 1993. Charitable status exempts the organisation from corporation tax, but this must be balanced against value added tax which cannot be reclaimed.

Formally, we can categorise the English social enterprises in 4 main families: new co-operatives and mutuals, trading voluntary organisations, intermediate labour-market organisations, community business. Let us briefly examine those classes separately.

i) New cooperatives and mutuals

There are four main institutions which can be classified as new co-operatives and mutuals. The ***worker co-operatives*** have always been a small but influential part of the UK co-op sector. Since 1980s they experienced a substantial growth (from 279 in 1980 to over 1,100 in 1992). They operate in many sectors, and are especially prevalent in the service sector. They are typically small firms with an average size of ten workers. A large part of the success of these worker co-ops is due to the network of small locally based co-operative development agencies (CDAs) that exist to help set up co-ops, often by working with the unemployed and with disadvantaged groups. The ***social co-ops*** are similar to worker co-ops, but with some differences. Firstly, because of the nature of the service which is personal, users may have some level of participation in the affairs of the co-op, though this may often be consultative rather than formal. Secondly, in the social employment co-ops, the status, terms and conditions of employment of people with disabilities is problematic and tends to be different to other members because of the risk of losing their state benefits. In some cases they are volunteers and in others employees, but in neither case are they paid normal wages. They are usually paid only expenses because otherwise they would risk losing their benefits if they were ever made unemployed. Although in some co-ops, there are different types of stake-holders, there is still no evidence of the creation of consumer/user co-ops. The number of home-care and nursery co-ops has continued to increase since 1993, but the exact figures are difficult to establish (about 50 care co-ops and 39 nursery co-ops). There are a certain number of doctors' co-ops which provide emergency healthcare services to general practices in local communities. There are about 30-40 social employment co-ops in the manufacturing and retail sectors in the UK. Co-ops have a good record as employers of people with disabilities. The ***social firms*** are enterprises with a social purpose that try to provide real jobs for people with disabilities. These firms are oriented to the market, and their main client-group has been people with mental illnesses. There are about 30-40 social firms in the UK and they have been sponsored or developed through public and voluntary sector partnerships, often with EU funding. Finally, there are some new examples of ***mutuals*** often much more radical than the traditional established ones, for example in ethical investment and social investment. They result in new employment and might be important in developing strategies to help address financial exclusion.

ii) Trading voluntary organisations

Trading voluntary organisations are adapting towards a contracting culture, and increasing their role as service providers in a range of areas including welfare, training and enterprise development. There is a strong trend to professionalisation and the acquisition of managerial competencies in the sector. Voluntary organisations are active in a number of sectors, particularly culture/recreation, education and training, and welfare, as well as housing and social/environmental sectors such as recycling of clothing for fundraising. Voluntary organisations carrying out non-traded advocacy and redistribution activities are not considered social enterprises. Voluntary organisations may be charitable trusts, in which case they either rely on fundraising or endowed assets (financial or buildings). They may also be instruments for development activity, as in the case of development trusts, which are quite numerous. Major charities are playing an increasingly important role in providing welfare services – they already run residential homes, day centres, and domiciliary services such as "meals on wheels." Charities and voluntary organisations often specialise in supporting a particular target group, and this may be regarded as a traditional strength of the voluntary sector.

iii) Intermediate labour-market organisations (ILM)

In the UK recently there has been considerable interest in intermediate labour markets. These are waged or salaried, full or part-time jobs with training, which are only available to unemployed people for a limited time period, and where the product of their work has either a direct social purpose or is a trading for a social purpose where that work or trading would not normally de undertaken. The key features of these ILM organisations are that: a) they are intermediate (i.e. leading to the normal labour market); b) they pay the rate for the job; c) they provide a temporary job; d) they trade for a social purpose and provide added value (i.e. avoiding substitution/displacement effects).

iv) Community businesses

Community businesses share many of the principles of co-operatives but they are usually non-profit. Members of the community take a share in the community business and thereby own and control it. The overall community business then spawns various projects, which are accountable to the community business. This idea which first developed in rural areas was then successfully transferred to inner-city areas, most extensively in Glasgow. It has been taken up to a certain extent in the rest of the UK, as an approach for addressing problems in the most severely disadvantaged inner-city areas, in order to establish and strengthen community structures and services. It has also been used elsewhere in initiatives that might benefit from a sense of community ownership.

As it appears clear from what said, social enterprises respond to failures in state housing provision, labour-market failures (which result in exclusion), local government failures in the management of community development (multi-racial/ethnic, inner-city and rural areas), and of course the large area of welfare failures. With regard to the dynamics of social enterprises in relation to the market, state and community, it is clear that some sectors are quasi-markets, while some are conventional markets with services paid by the consumers/users. In addition there are associative relations (reciprocity) and, in many cases, there will be mixtures of these varied types of exchanges. As follows there are listed the sectors where social enterprises have emerged.

a) Work integration and employment services

The following types of labour-market integration initiatives may be identified:

a) work initiatives (with training) for people with disabilities, often run by charities serving the group;

b) work initiatives (with training) for people recovering from mental illness, often by charities serving that group;

c) community regeneration projects creating jobs (full and part-time), often run by development trusts;

d) work projects run by multi-project community-based organisations (such as settlements);

e) employment, training and advice projects run by housing associations.

Co-operatives continue to offer the most economically viable model for such initiatives, but other initiatives have different strengths. For example, community businesses are best at targeting disadvantaged communities, voluntary organisations for assisting the types of groups they specialise in supporting, while intermediate labour-market organisations have a well-defined philosophy for giving transitional support to both communities and disadvantaged groups. Moreover, the state funds numerous schemes through contract-like arrangements or through partnerships.

Projects to improve labour-market functioning fall into three main categories, all aimed at improving the matching of people to jobs and vacancies: placement, job search and promoting equality of opportunity, for example to women, youth and ethnic minorities.

b) Housing

Low cost housing is increasingly provided by housing associations rather than local authorities. A relatively small part of this provision in through over 500 housing co-ops. A large portions of these housing associations operates in the social housing market for disadvantaged groups. There is an increasing amount of interest and projects which focus on providing services for the most disadvantaged people in a housing association, and such employment projects are becoming a more and more important part of housing association activities. Most schemes are for the single homeless, young people, and people with disabilities or mental illness.

c) Local development

Local development includes a wide variety of social enterprises. Primarily concerned with community economic and social development, it covers some of the other categories as well as community services, environmental improvement/development, cultural development (media and entertainment), transport services with a local orientation and special educational services (e.g. for ethnic minorities). All types of initiatives are found here, especially worker co-ops, trading voluntary organisations and community businesses.

There are over 160 development trusts, i.e. enterprises with social objectives which are actively engaged in the regeneration of an area – a valley, a housing estate, a town centre or a wasteland – whilst ensuring that the benefits are returned to the community. There are partnership organisations often involving public, private and community partners in funding and governance. They promote and manage a variety of types of projects, including managed workspace for small enterprises, environmental improvement, community transport, training and advice to small businesses, housing improvements and city farms.

Another interesting area of development activity can be seen in the work of settlements. These are multi-purpose organisations committed to tackling poverty and injustice in urban inner-city areas. They are trusts governed by trustees, and many have been established for over 100 years, having been endowed with a large property to house their projects and provide some income. They carry out a wide range of projects, some of which are related to training and work integration. Many operate in poor inner-city areas and support ethnic minorities among others.

d) Credit and exchange

There is enormous interest in micro-credit schemes for individuals, as well as credit/finance schemes for enterprises. There has been some development of such schemes and increasing development of credit unions for assisting disadvantaged groups and communities. There has also been innovative development of mutual guarantee societies among SMEs for assisting in the raising of financial capital. Many of these initiatives prepare the ground for employment generation, and indeed may be vital to the sustainability of social enterprises, but they are not currently significant employers. Finally, several hundred LETS schemes (local exchange trading systems) have been developed for assisting disadvantaged groups. LETS operate through a barter system that allows a large number of people to make exchanges. Thereby they facilitate economic development from a low base and they keep money or exchanges within the community.

e) Ethical trade

A number of ethical trading organisations are social enterprises. These entities have strong ethical trade statements and usually they have development aims linking the third world and the developed world.

f) Welfare and personal services

A major policy shift in welfare services was brought about through the Health Services and Care in the Community Act, implemented in 1993. The main policy impact of this Act was that there should be a move away from caring for people (older people, mentally ill, physically disabled people, etc.) in a large institutions towards more community-based care, either in people's own homes or in smaller local units or day centres. This has resulted in a process of de-institutionalisation. A second important feature of the Act was that there should be a transfer of direct responsibility for funding these welfare services from the central Department of Social Security to Local Authority Social Services Departments, and that they would contract out most of the services required.

State benefits have played an important role in the development of social enterprises providing welfare services. Between 1979 and 1992 the numbers claiming invalidity benefit rose from 600,000 to 1,585,000, attendance allowance from 95,000 to 1,090,000. Benefits have an important role in helping people to pay for welfare services, such as home care, but they may also have a negative influence on the possibility of individuals (e.g. people with disabilities) moving into employment. For example they can create a poverty trap preventing people with substantial benefits from getting a job.

The outcome of the major policy shifts has been growth of the private, voluntary and co-operative organisation provision of the welfare sector. Growing private sector provision has been particularly pronounced in the residential care sector, and more recently it has developed a growing presence in the home-care sector. The voluntary sector has reacted to these policy changes and has itself undergone major changes in the last few years, with a greater professional and market orientation. Social enterprises in the form of voluntary organisations, and small co-operatives, have expanded their service provision activities and taken on contracts for services. However, relative to the private sector this has been quite slow, and in general market share has been lost. Co-operative provision has not developed as quickly as anticipated, while voluntary sector provision has focused on its strength of serving specific target groups, and has consolidated or developed complementary domiciliary services, such as meals on wheels. In some cases such services also make use of other facilities in the social economy such as voluntary sector transport provision, i.e. community transport.

6.4. The Charity Commission

The Charity Commission is established by the 1853 Charities Act as the regulator and registrar for charities in England and Wales. As anticipated, charities in United Kingdom play an important social and institutional role. At the end of March 2004, there were around 165,000 "main" charities listed in the Commission's Central Register of Charities, together with over 27,000 subsidiary charities. The gross annual income of the main charities exceeded £32 billion and they had assets over £70 billion.

The Commission is part of the Government although it is a non ministerial Department technically and the most important reason of its existence consists of offering an "independent" and efficient alternative to the more bureaucratic Supreme Court. For this reason, it maintains complete independence from the political process and its powers are attributed by law.

The Charity Commissioners are appointed by the Home Secretary. The Chief Charity Commissioner is the permanent head of the department as well as its Accounting Officer. There are four non-executive Commissioners, two of whom are legally qualified.

The Board comprises all five Commissioners, and four Directors responsible respectively for legal services, operations, policy and strategy, and resources. The Board is responsible for the strategy and future direction of the Commission. Corporate decisions affecting the day to day operations of the Commission are delegated to the Executive Group which comprises the Chief Commissioner, the Directors and the Head of Strategy and Change. The Directors' duties include implementing the programmes and policies arising from the Board and ensuring effective service delivery.

The high level management structure of the Commission as at March 2004 is shown as follows:

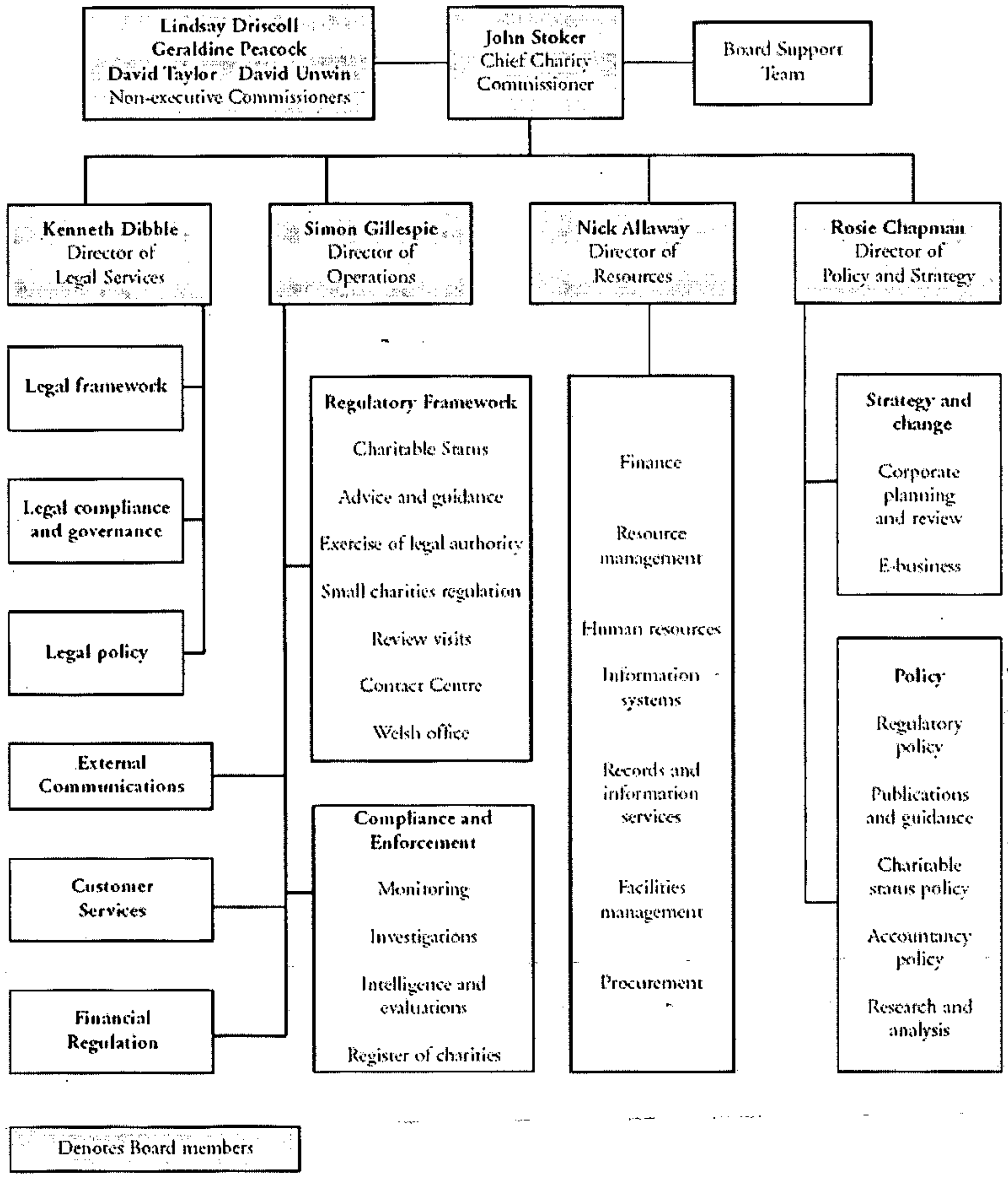

Figure 1. The structure of the Charity Commission

The Commission employs some 590 staff at its London, Liverpool and Taunton offices. In the year 2003-2004 the allocation and deployment of staff resources was as follows:

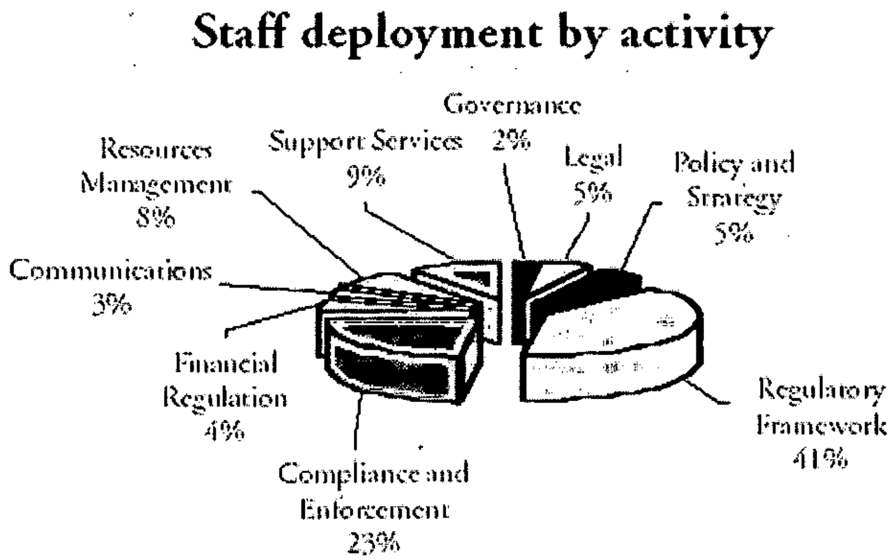

Figure 2. Staff deployment by activity in the Charity Commission

The Commission's aim is to provide the best possible regulation of charities in England and Wales in order to increase charities' efficiency and effectiveness and public confidence and trust. The main objectives of the Commission and the correspondent activities implemented in order to fulfil them can be listed as follows:

Objectives	Key activities
1. Enabling charities to maximise their potential within an effective legal, accounting and governance framework, keeping pace with developments in society, the economy and the law	• Determining the charitable status of organisations • Taking legal decisions in order to empower transactions or change governing provisions, where doing so will improve the administration of charities or allow their resources to be used more effectively • Working with charities, umbrella bodies and the rest of Government to develop the legal and accounting framework within which charities operate, and to develop and promote appropriate standards • Undertaking a programme of review visits to larger charities
2. Promoting sound governance, better working and accountability	• Promoting efficiency, good trusteeship and effective administration by providing trustees and others with information in the form of leaflets, presentations and - increasingly - by electronic means • Providing guidance and advice to trustees and others on matters affecting the efficiency and proper administration of particular charities, and charities in general • Keeping the Register of Charities up-to-date and accurate, and providing public access • Requiring the submission of annual accounts and returns; monitoring, and pursuing the issues arising • Publishing and monitoring compliance with regulatory reports on best practice and accountability within the sector
3. Securing compliance with charity law and dealing with abuse and poor practice.	• Evaluating, and where appropriate investigating, allegations and suspicions of maladministration or abuse • Enforcing the submission of late annual returns and accounts • Working in partnership with other regulators and cooperating with prosecuting authorities • Protecting charity assets through the use of statutory powers • Developing intelligence systems

Table 1. Objectives and activities of the Charity Commission

The Commission approaches its work in many ways. In particular it is possible to distinguish four main areas of activity:

1. Provision of information and advice in order to influence behaviour

The Commission provides information and advice on what the law requires and on good practice. This process basically consists of two activities:

1.a) Gathering information on charities individually and collective. The Commission does this to make particular decision, such as whether to register an organisation as a charity, or to judge the extent to which a charity is complying with regulatory requirements, or, finally, in order to publish a register of charities and their activities.

1.b) Making information about charities public. There are basically two reasons for making public information about charities. Firstly, it is intended to make people aware of regulation and activities of the charities. In particular, the Commission makes the register of charities available online and supply copies of charity constitutions, annual reports and accounts to anyone who asks. Secondly, it wants to draw attention to good as well as to bad practice. It names charities that have seriously defaulted on legal obligations, such as submitting their annual report and accounts.

2. Assistance to charities to work better

There are many ways in which the Commission can assist charities: a) through its registration procedure; b) by offering advice and instructions through the Commission's call centre; c) by visiting charities each year to review their activities, constitutions and administration; d) by preparing legal schemes or by ordering to modernise the constitutions of existing charities.

3. Promotion of legal compliance

The Commission offers publications and casework in order to give charities every reasonable opportunity to comply with their legal obligations. In particular, people can find directly on the website of the Charity Commission all the information concerning the registration, the management and the financial report of a charity.

4. Intervention and enforcement

The Commission evaluates complaints or other evidence of possible causes for concern and, where this shows that something may have gone seriously wrong, by opening a formal investigation. Possible infractions include misconduct (i.e. any at which the person committing it knew was criminal, unlawful or improper) and mismanagement (i.e. any act which may result in significant charitable resources being misused, in a charity's reputation being seriously undermined, or in the people who benefit from the charity being put at risk) and any other action which puts charitable assets at risk of loss, damage or misuse. In the evaluation process the Commission can count on the partnership with other regulators.

The Commission have powers to intervene to protect charities' aims and assets. In particular, the Commission can intervene through formal investigation in order:

4.a) to prevent any misconduct or mismanagement from continuing or being repeated, if necessary by removing those responsible or by placing charities assets under other control;

4.b) to ensure that the charity's assets are secure and that it will be properly administered in future.

Finally, whilst the Commission is not a prosecuting authority, it is authorised to work with the police, the Crown Prosecution Service, and other authorities (such as the Inland Revenue).

In exploiting its activities, the Commission observes seven principles:

I. Accountability

This principle is basically summarised in the following nine points.

I.a) The Commission reports to the Home Secretary and to the Parliament each year on its work during the previous financial year.

I.b) The Commission is audited annually by the National Audit Office and examined periodically by Parliament's Committee on Public Accounts.

I.c) The Commission publishes regular reports on its website, along with the reasons for important decisions.

I.d) The Commission publishes its Service Delivery Agreement with the Treasury showing how it can meet future targets and improve its performance.

I.e) The Commission always gives reasons for its decisions to people or charities affected by them, unless there are compelling reasons of financial or personal confidentiality for not doing so.

I.f) The Commission consults before introducing major policies or operational practices.

I.g) The Commission is accountable for its legal decisions throughout the High Court, which can overturn them. Its decisions can also be challenged without going to court by asking for an internal review.

I.h) The Commission survey customer satisfaction about the services it offers through the Independent Complaints Reviewer which assesses the complaints about the Commission's services if they cannot be resolved by the internal complaints procedure.

I.i) The Commission comes with the remit of the Parliamentary Ombudsman.

II. Independence

The Commission acts in the public interest in carrying out its independent role. It works in partnership with charities, umbrella bodies, local and central Government bodies, and to others to whom it is accountable. Although the Commission is receptive and responsive to the views of these interests, it arrives to its decisions without fear of favour.

III. Proportionality

The Commission focus its priorities and resources where it believes its intervention as regulator can mostly affect charities' conduct and well-being of the people who benefit from them. However, in deciding its interventions, the Commission tries to take into account both the capacity of organisations to comply with requirements for change and whether its actions are proportionate to the issue and to the risk of harm involved by charities' activities.

The definition of harm the Commission refers to is wide and it basically refers to: a) detrimental effects on the people or causes the charity serves; b) loss or misuse of significant assets or resources; c) damage to the public reputation of a charity or charities generally; d) damage to public confidence in charity regulation.

Where none of these harm factors is present, the Commission is likely to conclude that it can use its resources elsewhere to greater effect in the public interest, and that it should not take regulatory action. This approach implies that the Commission is usually less likely to take up issues in relation to very small charities than to larger ones.

IV. Fairness

In exercising its legal powers, the Commission seeks to act with impartiality, fairness, independence and honesty. It follows the principles of natural justice and acting proportionately and reasonably.

V. Consistency

The Commission assures that the decisions and actions it takes in any particular case are accurate and consistent with the law, with its published policies, and with other decisions. Moreover, this principle is reflected by the fact that the Commission works with other regulators so that, as far as possible, it never duplicates nor conflicts with their actions.

VI. Diversity and Equality

The Commission complies with all diversity and equalities legislation and works to promote diversity and equality in all its dealings, both with charities and within the Commission itself. Moreover, the Commission publishes, and update annually, a Race Equality Scheme showing how it works to eliminate discrimination and promote equality of opportunity and good race relations in all the dealings, both with charities and within the Commission itself.

VII. Transparency

In its publications, statements and dealings with individual charities, the Commission seeks to guarantees transparency through the following activities. Firstly, it explains legal requirements in plain terms. Secondly, it openly sets out the criteria by which it makes decisions. Thirdly, it explains what it expects from charities by way of good practice over and above legal obligations. Finally, it draws attention to rights of appeal and other ways in which people can challenge the decisions of the Commission affecting them.

6.5. Registering as a Charity: Status and Procedure

As already said, one of the most important activity of the Charity Commission consists of registering a body as a charity. The main advantages of being a charity can be summarised as follows:

a) A charity does not normally have to pay income/corporation tax (in the case of some types of income), capital gains tax, stamp duty, and gifts to charities are free of inheritance tax;
b) A charity pays no more than 20% of normal business rates on the buildings which they use and occupy to further their charitable purposes;
c) A charity can get special VAT treatment in some circumstances;
d) A charity is often able to raise funds from the public, grant-making trusts and local government more easily than non-charitable bodies;
e) A charity can formally represent and help to meet the needs of the community;
f) A charity is able to give the public the assurance that they are being monitored and advised by the Charity Commission;
g) A charity can get information from the Charity Commission.

These advantages, in a sense, are counterbalanced by restrictions on what charities can do. These are expressed both in terms of the types of work they do, and the ways in which they can operate. Schematically, they are:

a) A charity must have exclusively charitable purposes. Some organisations may have a range of activities, some of them charitable, some of them not. To become a charity that organisation would have to stop its non-charitable activities. (The non-charitable activities can, of course, continue if carried on by a separate non-charitable organisation.) Promoters will need to consider carefully if becoming a charity will severely restrict their planned activities. If so, charitable status may not be right for the organisation.

b) The extents of political or campaigning activities which a charity can take on are limited.

c) Strict rules apply to trading by charities.

d) Trustees are not allowed to receive financial benefits from the charity which they manage unless this is specifically authorised by the governing document of the charity or by the Commission. Financial benefits include salaries, services, or the awarding of business contracts to a trustee's own business from the charity. Benefits which are incompatible with the establishment of an organisation for exclusively charitable purposes cannot be authorised at all. There are similar problems where the spouse, relative or partner of a trustee receives such benefits. Trustees are, however, entitled to be reimbursed for their reasonable out-of-pocket expenses, for example, train fares to trustee meetings.

e) Trustees need to avoid any situation where charitable and personal interests conflict.

f) Charity law imposes certain financial reporting obligations; these vary with the size of the charity.

Let us move to the definition of charity used by the English law. Legally speaking, a body is a charity if 1) *it is set up under the law of England and Wales* and 2) *it is established for exclusively charitable purposes.*

Regarding the first requirement, this normally means that candidates must themselves be registered in England and Wales. In other cases, if the governing document itself does not make this clear, the law which applies will be that of the country with which the organisation has its closest connection. This will depend on the extent to which a) the organisation's centre of administration is in England and Wales,

b) most of the trustees live in England and Wales, c) most of the organisation's property is in England or Wales.

Concerning the second requirement, an organisation is a charity if it falls within the law's understanding of "charity" and it is subject to the jurisdiction of the High Court (Charities Act 1993, s. 96(1)). In particular, an organisation must have purposes which are exclusively charitable and must be set up for the benefit of the public. In other words, a purpose is not charitable if it is mainly for the benefit of a named person or specific individuals. It will also not be charitable if the people who will benefit from it are defined by a personal or contractual relationship with each other. For example this happens when the beneficiaries are related or connected to the person who is setting up the charity, or when they are defined by common employment or by membership of a non-charitable body like a professional institute. An exception to this general rule is mentioned in the case of the relief of financial hardship, where the people to benefit can come from a more restricted group, such as people having the same employer.

The extent of public benefit may vary between different types of charity. Although it may not be possible neither to quantify exactly the size of the benefit nor to identify clearly what the benefit of the public consists of, no organisation can be charitable if a) its purposes are illegal or could be said to further illegal purposes; b) it is set up for the personal benefit of its trustees, its employees (other than in the case of relieving need - for example, there would normally be no reason why a firm or business should not operate a benevolent fund for its staff), other specific individuals; c) it is created for the specific purpose of carrying out political or propagandist activities; d) its purposes are against the public interest.

In order to determine which purposes are charitable the law uses a process of precedent and analogy. The courts have decided that those purposes are charitable which fall within the objects set out in the Preamble to the Charitable Uses Act 1601 or have been held to be analogous to those objects. The Preamble contains a list of purposes which were regarded as charitable in Elizabethan times. This list was widely enriched over the years and in 1891 Lord Macnaghten in the Pemsel case (Income Tax

Special Purpose Commissioners vs Pemsel [1891] AC 531) classified charitable purposes under four heads:

a) **the relief of poverty (1st head).** Financial hardship is not defined by a specified amount of money which the beneficiaries have, although the person must be in genuine financial need. Relief of financial hardship also includes, for example, help to people who are suffering from the effects of old age, sickness or from a disability, where, in each case, there is also financial need. The hardship being suffered does not have to be long-term. Temporary hardship caused by job loss or sickness, for example, can be qualified for help. Charities may relieve hardship in many different ways, for instance:
    1. by giving money to beneficiaries;
    2. by providing food, clothing or housing;
    3. by giving advisory or other services to those in need;
    4. by providing support for other organisations which give help to people suffering hardship.

b) **the advancement of education (2rd head).** The advancement of education is not limited to formal education at schools, colleges or universities. It can also include playgroups, organisations providing work-related training (for example, nursing or engineering), and research institutions. Education in the charitable sense cannot include neither propagandist or political activities nor the study of subjects which have no educational value. If research is being done, it needs to be carried out in an objective and impartial way and the useful results must be made available, or accessible, to the public.

c) **the advancement of religion (3rd head).** In general, no distinction is made between one religion and another. There is a general assumption that the advancement of religion is for the public benefit. For the advancement of religion to be charitable, a religion has to a) be founded on a belief in a supreme being or beings; and b) involve expression of that belief through worship. The advancement of religion can include the provision and upkeep of places of worship, paying ministers or priests, and holding services. In some cases the advancement of religion is not charitable.

This is where public benefit is clearly lacking. Examples of this situation include organisations where the benefit is wholly private (such as an entirely enclosed religious order where the activities consist only of private prayer) and organisations which are set up to promote the beliefs of a particular faith which either undermine the accepted foundations of religion and morality, or are otherwise contrary to the public interest.

d) **other purposes which benefit the community (4th head).** Purposes which benefit the community and are considered to be charitable include:

1. the relief of old age, sickness or disability, where there is no financial need;
2. promoting racial harmony;
3. the resettlement and rehabilitation of offenders and drug abusers;
4. providing help for victims of natural or civil disasters;
5. promoting human rights;
6. the provision of recreational facilities which are open to everyone (for example, a sports centre) or which are for particular beneficiary groups such as people with disabilities or the elderly;
7. urban and rural regeneration and community capacity building;
8. promotion of health (eg through education, access to medical facilities or the pursuit of healthy recreation through sport).

The classification has been used since as a matter of convenience but it is not a definition. Although the courts still use the Preamble as a touchstone and refer to the Pamsel classification, they have long recognised that what is accepted as a charitable purpose must change to reflect current social and economic circumstances. So a purpose will be charitable not only if it is within the list in the Preamble but also if it is analogous to any charitable purpose included in the list or held to be charitable. Nowadays many charities are set up for purposes that are not mentioned in the Preamble. In this way charitable purposes have been extended and developed, by decisions of the courts and of the Charity Commissioners, so that the development of the law has reflected changes in social and economic circumstances. Moreover, under section 3(1) of the Charities Act 1993, the Charity Commission has an obligation to keep a Register of institutions that are charities. In fulfilling this obligation it can recognise a new purpose as charitable in circumstances where it believes the court would do so.

In addiction to the previous main requirements, there are other minimum requirements for registering a charity. In particular a candidate charity must have one or more of the following characteristics:

a) an income of more than £1000 a year;
b) the use or occupation of any land or buildings;
c) assets which constitute permanent endowment (i.e. where there is a restriction on the expenditure of the capital and (normally) only the income can be spent on the charity's purposes).

Those bodies which meet both the main and the minimum requirements described above can register as charities.

Before starting the registration procedure charities have to design their *trustees* and they have to prepare their *governing document*. The term "charity trustee" is defined in section 97 of the 1993 Act as "the persons having the general control and management of the administration of a charity". This is a legal definition of those people who will run and be responsible for the charity. All charities must have a clearly identifiable body of trustees, but they are often called various names depending upon what type of governing document the charity has. Some examples are in the following table:

Type of governing document	**Charity trustees will usually be called**
Constitution or Rules	Executive or management committee members
Trust deed	Trustees

Memorandum & Articles of Association	Board, council of management or directors

Table 2. Types of governing documents and denominations

Whatever the trustees are actually called, their responsibilities are the same. It is a general legal principle that those who run the charity (the trustees) should not financially benefit from it, unless they are specifically authorised to do so either by the charity's governing document or by the Charity Commission. Trustees must avoid being placed in a position where their duties as a trustee conflict with their own personal interests. However, this legal principle does not prevent the charity trustees of a community charity (eg a temple) from enjoying the benefits of that charity as a member of the community. No-one under the age of 18 can be appointed as a trustee unless the charity is a registered company. Some people are disqualified by law from acting as charity trustees, including anyone described in section 72(1) of the Charities Act 1993. Broadly these limitations cover: a) anyone who has been convicted of an offence involving deception or dishonesty, unless the conviction is spent; b) anyone who is an undischarged bankrupt; c) anyone who has previously been removed from trusteeship of a charity by the Court or by the Commission; d) anyone who is subject to a disqualification order under the Company Directors Disqualification Act 1986. It is important that organisations working with children and vulnerable adults make the appropriate checks on trustees and/or employees with the Criminal Records Bureau (an agency of the Home Office).

Trustees need to be able and willing to give time to the efficient administration of the charity and the fulfilment of its trusts. They should be selected on the basis of their relevant experience and skills and need to be prepared to take an active part in the running of the charity. They ought not to be appointed for their status or position in the community alone since it is the function of patrons.

Trustees need to follow certain guiding principles:

a) The income and property of the charity must be used or applied for the purposes set out in the governing document and for no other purpose, and must be applied (including where the application is by way of providing services) fairly between persons who are properly qualified to benefit from it.

b) The trustees should only retain the charity's income as a reserve if they have a clear policy covering reserves (for example to cover a contingency).

c) Trustees are required to act reasonably and prudently in all matters relating to the charity and need always to bear in mind the interests of the charity. They cannot let their personal views or prejudices affect their conduct as trustees.

d) They need to exercise the same degree of care in dealing with the administration of their charity as a prudent business person would exercise in managing their own affairs or those of someone else for whom they are responsible.

e) It is good practice that where trustees are required to make a decision which affects the personal interests of one of their number, that person should not be present at any discussion or vote on the matter.

In matters of doubt, trustees should seek their own professional advice.

If trustees act prudently, lawfully and in accordance with their governing document then any liabilities they incur as trustees can be met out of the charity's resources. But if they act otherwise they may be in breach of trust and liable to meet any liabilities of the charity which are a consequence of their own actions, or to make good any loss to the charity. Since trustees must act jointly in administering a charity, they will also be responsible jointly to meet any liability incurred by them or on their behalf. We are able to take proceedings in court for the recovery, from trustees personally, of funds lost to a charity as a result of a breach of trust by the trustees. If trustees enter into contracts in the course of administering the charity, and as a result incur liabilities or debts which amount in total to more than the value of the charity's assets they may be sued personally for the difference by the charity's creditors.

The charity's governing document is the formal document which sets up a charity and which we recommend contains all the information about:

a) what the charity is set up to do (objects);

b) how the charity will do those things (powers);

c) who will run it (charity trustees);

d) what happens if changes to the administrative provisions need to be made (amendment provision);

e) what happens if the charity wishes to wind up (dissolution provision).

It should also contain the following administrative provisions:

f) how the charity trustees will run it;

g) internal arrangements for meetings, voting, looking after money, etc.

A governing document is obviously important. It is not just something that a charity has to have in order to be a registered charity. It is the charity trustees' "instruction manual" for the charity, as well as a legal document. Each trustee should be given a full copy of the governing document on appointment.

There are three main types of governing document, and the type the trustees choose will determine the type of organisation the charity will be. The three main types of governing document are:

A. Constitution or rules

Constitutions are sometimes referred to as "rules". The terms are interchangeable but the type of governing document is the same. A constitution or rules will create an **unincorporated association**. The "association" part of this description means that it is an organisation consisting of a group of people who have decided to co-operate in furthering what the organisation is set up to do, and who have certain parts to play in its administration. The "unincorporated" part of the description means that the organisation is not a company (which is incorporated). This means that the association will not: a) (unlike a company) have limited liability and a legal personality of its own (i.e. the charity trustees may be liable for the repayment of any debts which they have incurred on behalf of the charity: such debts can be met from the charity's own funds (if they are sufficient) unless the charity trustees had not acted prudently, lawfully, and in accordance with the charity's governing document); b) be able to own land (and usually investments) in its own name. It will need to appoint either a custodian or holding trustee(s) to do this. It may be appropriate to establish an unincorporated association where any one or more of the following applies: a) the organisation is to be relatively small in terms of assets; b) the organisation is to be a local branch of a national charity, and a standard constitution exists for branches; c) it has a membership; d) the charity trustees are elected or appointed to hold office for a fixed period of time - usually one year; e) the charity trustees are to be elected by members; f) the views of local residents, local councils, and other bodies need to be represented through membership, or as users of the facilities; g) the objects of the organisation are to be carried out wholly or partly by, or through, the members (i.e. where the members undertake office or voluntary work on behalf of the organisation). The constitution is normally put into operation by being **adopted** (accepted for use) at a formal meeting of those people who are, or will be, the charity trustees and the general membership. This means that a final typed version of the constitution has to be signed by all the charity trustees (e.g. the committee members) and it has to be dated the day of the meeting at which it was agreed.

B. Trust deed

A trust deed will create a **trust**. A trust cannot own land or sign documents in its own name. It will need to provide for holding or custodian trustee(s) if it is planned that the charity will own or lease land. Trust deeds can be known by other names, such as a declaration or deed of trust, deed of settlement, or will trust. It may be appropriate to establish a trust where some or all of the following conditions apply: a) the organisation is going to be run by a fairly small group of people; b) there is no time limit on how long the charity trustees will be in office (although we recommend that the composition of the trustee body is reviewed regularly); c) new charity trustees are going to be appointed by the continuing charity trustees; d) the organisation is not going to rely on a membership for any part of its administration; e) the administration of the organisation is going to be simple; f) the organisation is going to be a grant-making body only; g) land and buildings are going to be held on trust for permanent use for the purposes of the charity; h) there is a restriction on spending capital.

A trust deed is an **executed document** which means that it needs to be signed and dated, in the presence of an independent witness, by those who are setting up the trust. The witnesses must then sign their name against each of those signatures and give their address. The reason of this procedure is to verify the identity of those signing. The trust deed should refer to a specific amount of money or some other asset which will belong to the trust at the time that the trust deed is executed. It is acceptable for a nominal sum of money to be declared, say £5 or £10. If the trust deed declares charitable trusts but does not refer to any actual assets which are held on those trusts at the time the deed is executed, then it is said to be "in vacuo." The Charity Commission would not register the charity unless and until there was independent evidence that some property has actually been settled on the trusts of the deed. The minimum requirements for registration will still need to be met (e.g. an annual income of £1,000 or more).

C. memorandum and articles of association

The *memorandum and articles of association* create a company. A company has an advantage over a trust and an unincorporated association in that it is "incorporated." This means that the law considers it to be a person, in the same way as an individual. Therefore a company, like an individual, can own land and enter into contracts in its own name. A company is a legal person quite separate from its members and directors (who, in the case of charitable companies are usually called members of the council of management). The directors are agents of the company and as such are not normally liable personally for its debts. A person who acts as a director whilst disqualified from being one commits a criminal offence and may be personally liable. A director may be liable to make payments to the company: a) if he or she acts in breach of trust or duty to the company; b) if he or she is responsible for fraudulent or wrongful trading by the company (sections 213/214 Insolvency Act 1986). The company will also have "limited liability" which means, in the case of a typical charitable company, that its members are normally only liable for the debts of the company to the extent which they have undertaken to guarantee them (usually the limit of liability stated in the memorandum of association is a nominal amount). A company is subject to company law, as well as to charity law, and there are certain duties which must be observed, such as the annual filing of accounts with the Registrar of Companies. However, charitable companies can never be the same as commercial companies. The main purpose of commercial companies is to make profits for distribution to their members. The constitution of a charitable company always precludes the distribution of profits to members. All the property of a charitable company is applicable for charitable purposes. It may be appropriate to establish a company where some or all of the following apply: a) the organisation is to be quite large; b) it will have employees; c) it will deliver charitable services under contractual agreements; d) it will regularly enter into commercial contracts; e) it will be a substantial owner of freehold or leasehold land or other property. A memorandum is put into operation by being subscribed by one or more people in accordance with the provisions of Part I of the Companies Act 1985 and by registration with the Registrar of Companies at Companies House who will issue a **certificate of incorporation**.

Some large national charities produce a standard governing document which can be used by organisations associated with that charity. These standard governing documents contain both agreed objects and administrative provisions which are specific to a particular type of organisation.

As said, once having identified trustees and having prepared the governing document, a body which satisfies both the main and the minimum requirements can apply to the Charity Commission for the registration as a charity. The Charity Commission must apply charity law in making its judgments as to whether an organisation is charitable. This includes:

a) Checking that the objects are charitable in law. This normally involves considering whether the objects are currently recognised as being charitable.
b) Checking its activities or proposed activities to see whether these are capable of furthering the stated purpose.
c) Being satisfied that the public benefit test is satisfied.

The Commission must be satisfied that the organisation is both eligible to be registered and not *exempt* or *excepted* from registration.

For the purposes of the 1993 Act an *exempt* charity is a) any institution established for charitable purposes which is included in Schedule 2 to the 1993 Act; b) a common investment fund or a common deposit fund established by a Scheme of the Commissioners which permits only exempt charities to participate.

Certain charities are exempt from the supervision of the Charity Commission because they are considered to be adequately supervised by, or accountable to, some other body or authority. Although not subject to the jurisdiction of the Charity Commission, an exempt charity is subject to:

1. the legal rules generally applicable to charities;
2. the provisions of the 1993 Act (unless specifically excluded).

Moreover, there are some additional statutory provisions to which certain types of exempt charity are subject. The table below gives some examples:

Type of exempt charity	**Statutory provisions**
Companies	Companies Acts and the legal rules relating to companies.
Higher education corporations	s.125A of the Education Reform Act 1988, as inserted by s.41 of The teaching and Higher Education Act 1998
Registered Industrial and Provident Societies	The Industrial and Provident Societies Acts
Registered Friendly Societies	Financial Services and Markets Acts 2000 and the Mutual Societies Order 2001

Table 3. Statury provisions of some exempt charities

Excepted charities fall into three main groups:

a) charities excepted by Order or Regulation;
b) very small charities (income of £1000 a year or less and having no permanent endowment and no use or occupation of land);
c) registered places of worship (the place of worship only, not other charities in connection with them).

If the organisation is excepted and the trustees wish to be voluntarily registered, the Commission considers the case made for voluntary registration on its merits. If the organisation cannot operate and has no plans to enable it to operate in the foreseeable future then it cannot remain on the Register. In addition the Commission must be satisfied that each of the trustees is eligible to act as a trustee. The Commission carries out checks with other agencies (e.g. the Insolvency Service), and where children are involved the Commission needs to be satisfied that any necessary checks have been made through the Criminal Records Bureau against the lists it administers under the Protection of Children Act 1999.

The Commission has a general function under the 1993 Act to promote the effective use of charitable resources by encouraging the development of better methods of administration, by giving trustees information and advice on any matter affecting the charity and by investigating and checking abuses. Its aim as the regulator of charities is to give the public confidence in the integrity of charity. As a result where the Commission considers the charity appropriate, it offers guidance on governance and good practice issues at this stage. Once having received the application to become a charity, the Charity Commission provides a reply within fifteen working days of receipt. This letter either approves the application, or asks for additional information so that it can be considered in greater depth, or rejects the application. If the Commission rejects the application because it does not consider the organisation charitable, it notifies the decision by letter explaining the reasons of the decision. The organisation can ask for reconsidering the application if it disagrees with the opinion of the Commission. It has also the right of appeal to the Court where, despite a review of the decision, the Commission is unable to register the organisation as a charity.

If the application is successful, the date of registration is the date on which the Commission enters the organisation on the Register of Charities. The Charity Commission sends each trustee a letter and leaflet welcoming them to trusteeship and reminding them of the duties they have to respect after the registration, and it also writes to the nominated correspondent confirming the charity's entry on the Register of Charities. Note that Charitable status does not depend on registration but on the date that the organisation was set up as a charity (for example, the date charitable objects were adopted). The Inland Revenue may backdate tax exemption to the date on which the organisation started to carry out exclusively charitable purposes, even if this was before the date of registration.

As said, registration is not the end of the process. The new charity has a number of ongoing duties and responsibilities, some of which may involve regular contact with the Charity Commission. This contact will not only provide the charity with advice and help when it needs it, but provides the general public with confidence that charities are being effectively monitored and checked to make sure they are doing what they should. The following is a list of some of the things a trustee of a charity will has to do:

a) keep the charity's accounts;
b) inform the Charity Commission about any changes to the governing document (for example, changing the specified date of an Annual General Meeting or changing the number of trustee meetings);
c) inform the Charity Commission about any changes to the details of the charity shown on the Register of Charities (for example the correspondent's address);
d) inform the Charity Commission if the charity no longer exists or operates;
e) return the Register Check Form (RCF) the Charity Commission sends out each year;
f) charities with an income or expenditure over £10,000 have a legal duty to send the Charity Commission the Annual return it issues each year. This should be accompanied by the Accounts, Examiner's or Auditor's Report and Trustees' Annual Report. These documents must be sent to the Commission within 10 months of the end of the charity's financial year.

6.6. Accounting and Reporting by Charities

There are three major influences of the Charity Commission on how charities report and are regulated:

a) The minimum requirements for all charities (other than charitable companies) in terms of the records to be kept are set out in the Charities Act 1993.
b) Every charity must also comply with the legal requirements for the preparation of accounts and reports. In the case of some categories of charity (for example,

charitable companies or those registered social landlords which are exempt charities) these requirements will be set out in legislation appropriate to that type of organisation. Charities which are not covered by specific legislation must comply with the requirements set out in Part VI of the Charities Act 1993 and, where appropriate, the related **Accounts** and Reports Regulations issued in 1995 and 2000 ("the Regulations").

The framework is designed to meet the need for consistent and transparent public accountability for the resources held by charities without adding unnecessarily to the burden on trustees. That is why the requirements to be met by smaller charities are less than those for larger charities.

There are two bases on which charity accounts may be prepared: the *receipts* and *payments* basis and the accruals basis. Briefly:

1. Accounts prepared on the receipts and payments basis consist of an account summarising all money received and paid out by the charity in the year in question, and a statement giving details of its assets and liabilities at the end of the year. This is the simpler of the two bases and may be adopted where a non-company charity has a gross income of £100,000 or less during the year.
2. Accounts prepared on the **accruals** basis contain a balance sheet showing the charity's financial position at the end of the year in question, a statement of financial activities (SOFA) during the year (and sometimes an income and expenditure account) and explanatory notes. Such accounts for charities are normally required, in accountancy terms, to show a "true and fair view". Non-company charities with gross income over £100,000 during the year and all charitable companies must prepare their accounts on the accruals basis.

Obviously, there are some basic requirements that apply to all charities. Indeed, all charities must:

a) Prepare and maintain accounting records. These records (cash books, invoices, receipts etc) must be retained for at least six years (at least three years in the case of charitable companies).
b) Prepare accounts.

c) Make the accounts available to the public on request. This is vital underpinning to the principle of public accountability, and must be complied with in all cases. It is open to trustees to make a reasonable charge to cover the costs of complying with the request (eg photocopying and postage).

All registered charities will receive a Register Check Form from the Commission. Although trustees are not required to complete and return this form, by doing it they will meet their legal obligation to keep the Commission informed of any changes to the Register.

There are also additional requirements depending on the income or expenditure of the charity - broadly, the bigger the charity the greater the requirements. The precise details depend on the type of charity. Moreover, there are special requirements for certain types of charity. Let us analyse these particular cases one by one.

I. Registered non-company charities

Within this class of charities, we can distinguish three categories on the basis of the gross income:

I.1. Charities such that neither gross income nor total expenditures in the charity's relevant financial year are higher than £10,000. Within this band, the various requirements are as follows:

- *Basis of preparation*. Accounts may be prepared on either the receipts and payments or the accruals basis - if the latter, they must be prepared in accordance with the Regulations.
- *External scrutiny*. There is no requirement to have the accounts independently examined or audited, unless the charity's governing document stipulates it, but the Commission has the power to require an audit in exceptional circumstances. The only other exceptions to this are for charities which have an income of less than £10,000 but whose total expenditure exceeding £250,000 in the same year; or have an income of less than £10,000 in the year for which accounts are being prepared but which in either of the two previous financial

years have had a gross income or total expenditure exceeding £250,000. In these circumstances, an audit by a registered auditor must be carried out.

- *Type of Annual Report*. An Annual Report must be prepared but it may be simplified.
- *Information to be sent to the Commission.* An Annual Return is not required and the charity should not send to the Commission a copy of their Annual Report and accounts unless it asks for them.

I.2. Charities such that gross income or total expenditure in the relevant financial year are higher than (but gross income not over £100,000). Within this band, the various requirements are as follows:

- *Basis of preparation.* Accounts may be prepared on either the receipts and payments or the accruals basis - if the latter, they must be prepared in accordance with the Regulations.
- *External scrutiny.* Accounts must be subject to outside scrutiny but trustees may choose either independent examination or audit by a registered auditor, unless the charity's governing document stipulates one or the other (also, the Commission has the power to require an audit in exceptional circumstances). The exception with regard to the £250,000 threshold also applies to charities in this income band and in these cases an audit will be required by a registered auditor.
- *Type of Annual Report.* An Annual Report must be prepared but it may be simplified.
- *Information to be sent to the Commission.* An Annual Return and the charity's Annual Report and accounts must be sent to the Commission normally within 10 months of the end of the charity's financial year.

I.3. Charities such that gross income in the relevant financial year is higher than £100,000. For charities falling within this band:

- *Basis of preparation.* Accounts must be prepared on the accruals basis in accordance with the Regulations.
- *External scrutiny.* Accounts must be subject to outside scrutiny but trustees may choose either independent examination or audit by a registered auditor, unless the charity's governing document stipulates one or the other - if an independent examination is chosen then the Commission recommends that the examiner is a qualified accountant (also, it has the power to require an audit in exceptional circumstances). The exception regarding to the £250,000 threshold applies and in these cases an audit by a registered auditor is required.
- *Type of Annual Report.* An Annual Report must be prepared but it may be simplified.
- *Information to be sent to the Commission.* An Annual Return and the Annual Report and accounts must be sent to the Commission normally within 10 months of the end of the charity's financial year.

I.4. Charities such that gross income in the relevant financial year is higher than £250,000. For charities falling within this band:

- *Basis of preparation.* Accounts must be prepared on the accruals basis and in accordance with the Regulations.
- *External scrutiny.* Accounts must be audited by a registered auditor.
- *Type of Annual Report.* A full Annual Report must be prepared.
- *Information to be sent to the Commission.* An Annual Return and the Annual Report and accounts must be sent to the Commission normally within 10 months of the end of the charity's financial year.

II. Registered charitable companies

A charitable company must prepare a directors' report and the accounts under the Companies Acts and must file these with Companies House. The accounts must be prepared on an accruals basis. The requirements for the Annual Report are same as those for other charities and therefore the charity must comply with the Regulations. In practice companies normally produce a directors' report and that report is expected to contain all the information required to be included by the Regulations in the Annual Report. If the charitable company's income or expenditure is over £10,000, the trustees must also send to the Commission an Annual Report (or and suitably modified directors' report), the accounts and its annual return. Charitable companies are required to have their accounts audited by a registered auditor if their gross income is over £250,000. However if the gross income is in the range £90,001 to £250,000, an audit exemption report may normally be prepared instead of a full audit report. If gross income is £90,000 or less, no external scrutiny is normally required.

III. Excepted charities

If the trustees have chosen to register they will have to fulfil the same accounting and reporting requirements as any other registered charity. If they do not register they must still produce annual accounts in the same way as a registered charity of the same type (company or non-company). They must provide copies of their accounts to members of the public on request, but should not send them to the Commission unless it asks for them.

IV. Exempt charities

Exempt charities have to keep proper accounting records and prepare accounts. Where they are required to prepare accounts giving a true and fair view, they should follow the same accounting system of the other charities, unless a more specialised procedure applies. They must provide copies of their accounts to members of the public on request.

The following tables summarise the contents of the Annual Report:

Requirement
The financial year to which the report relates.
A brief summary of the main activities and achievements of the charity during the

year in relation to the charity's objects.
The name of the charity as it appears in the register of charities and any other name by which it makes itself known. *Note: Excepted charities which are not registered should provide the name as set out in their governing document and any other name by which they are known.*
The number assigned to it in the register and, in the case of a charitable company, the number with which it is registered as a company. *Note: Excepted charities which are not registered do not have a charity registration number.*
The principal address of the charity and, in the case of a charitable company, the address of its registered office. *Notes: The Charity Commissioners may dispense with the requirement to disclose the address of the charity if it could lead to any person being placed in any personal danger.*
Particulars, including the date if known, of any deed or other document containing provisions which regulate the purposes and administration of the charity.
A description of the objects of the charity.
Where applicable, details of any specific restrictions imposed by the governing document concerning the way in which the charity can operate.
The names and addresses of other relevant organisations or persons including those acting as bankers, solicitors, auditor (or independent examiner or reporting accountant) or other principal advisers.
The name of any person or body of persons entitled by the trusts of the charity to appoint one or more new charity trustees, and a description of the method provided by those trusts for such appointment.
The name of any person who is a charity trustee of the charity on the date when the report is signed, and, where any charity trustee on the date is a body corporate, the name of any person who is a director of the body corporate on that date. The name of any other person who has, at any time during the financial year in question, been a charity trustee of the charity.

Notes: The Charity Commissioners may dispense with the requirement to disclose the names of charity trustee(s) if it could lead to that person/(those people) being placed in any personal danger. If the charity has more than 50 trustees then the names of not less than 50 trustees must be disclosed.
The name of any person who is a trustee for the charity (that is those holding property on behalf of the charity) on the date the report is signed. **The name of any other person who has, at any time during the financial year in question, been a trustee for the charity (that is those holding property on behalf of the charity).**
A description of the policies (if any) which have been adopted by the charity trustees – i. for the purpose of determining the level of income reserves which it is appropriate for the charity to maintain in order to meet effectively the needs designated by its trusts; ii. for the selection of investments for the charity; and iii. for the selection of individuals and institutions who are to receive grants out of the assets of the charity.
Details of any specific investment powers and their authority.
A statement regarding the relationships between the charity and related parties and with any other charities and organisations with which it co-operates in pursuit of its charitable objects.
The report shall be dated and be signed by one or more of the charity trustees, each of whom has been authorised to do so.

Table 4. Contents of the annual report

Additional requirements for charities with gross income of more than £250,000.

Requirement
Instead of a brief summary of achievements and activities there should be: A review of all activities, including:

▪ material transactions, significant developments and achievements of the charity during the year in relation to its objects; ▪ any significant changes in those activities during the year; ▪ any important events affecting those activities which have occurred since the end of the year and any likely future developments in those activities; ▪ where any fund of the charity was in deficit at the beginning of the financial year, the steps taken by the charity trustees to eliminate that deficit.
A statement regarding the performance during the financial year of the investments belonging to the charity (if any).
A description of the organisational structure of the charity.
A description of any assets held by the charity or by any charity trustee of, or trustee for, the charity, on behalf of another charity, and particulars of any special arrangements made with respect to the safe custody of such assets and their segregation from assets of the charity not so held and a description of the objects of the charity on whose behalf the assets are held.

Table 5. Additional requirements for charities with gross income of more than £ 250,000

The governing document of any charity may contain specific provisions about the external scrutiny of the charity's accounts. In such cases the charity must follow the statutory framework and must observe the higher standard of scrutiny required by the governing document. In governing documents the word "audit" might be intended to cover a range of different types of external scrutiny from full audit by a registered auditor to an independent check by a non-accountant. Trustees will need to interpret the precise wording of the governing document. For example "audit by a bank manager" would not normally mean a full statutory audit. On the other hand "audit by a qualified accountant" suggests that a statutory audit by a registered auditor is required, even if the charity is small and is not required to have an audit by legislation.

6.7. Inquiries, Disputes, Mediations, and Complaints about Charities

The Commission's powers of intervention are specifically designed for use in circumstances where there is some grave, general risk to a charity's interests and are designed principally to protect the charity and its assets.

The Commission usually disposes its intervention powers on the basis of complaint received from people who have contacts with the charities. Complaints that the Commission takes up as regulator are, generally speaking, those a) where there is a serious risk of significant harm or abuse to the charity, its assets, beneficiaries or reputation, b) where the use of the Commission's powers of intervention is necessary to protect them, and c) where this represents a proportionate response to the issues in the case. By "harm" the Commission means:

a) serious detriment to the people or causes the charity serves;
b) loss or misuse of significant assets or resources; and
c) serious damage to the reputation of a charity or charities generally.

Circumstances in which the Commission can see serious risk of harm include those where there is evidence of the following situations:

a) fraud or criminality;
b) maladministration putting significant assets or funds at risk;
c) the charity's assets being applied in significant breach of the terms of the governing document;
d) trustees acting in significant breach of the provisions of the charity's governing document or of charity or trust law;
e) risk of the charity being brought into serious disrepute, for example through association with public disorder or links to terrorist organisations;
f) the administration of the charity having broken down to such an extent that it is not working effectively;
g) the trustees seriously misleading the public, or the Commission, or others with an interest in the charity (e.g. funders, beneficiaries or employees) about matters of material importance;
h) adequate accounts not being kept;
i) trustees receiving unauthorised benefits from the charity;
j) fund-raising or administration costs that are excessive; or
k) the charity undertaking improper political activities.

The Commission also takes up cases where there are serious doubts about the charity's charitable status.

Except where it is clearly inappropriate to do so, the Commission expects complainants to have tried first to resolve their concern directly with the charity before involving the Commission.

The Commission does not have power to investigate criminal or taxation matters. If an inquiry uncovers possible criminal offences, the Commission notifies the police. The Commission also has close contacts with other bodies such as the Inland Revenue, Customs and Excise and the Department of Trade and Industry. If the complainant suspects that a charity has been affected by a crime, he should report the matter to the police and inform the Commission, so that it can consider whether there are any issues relating to the protection of the charity that are worthy of investigation. The Commission cannot normally assist in legal proceedings taken by another party against a charity, including those for the collection of debts, except in a few very rare cases where the Attorney General has specifically asked to the Commission to do so. The Commission does not normally reconsider complaints that it has already dealt with unless circumstances have changed materially or significant new evidence has become available.

The Commission expects those involved in the charity's disputes to do all they can to settle them responsibly and with goodwill. Charity's disputes come in all shapes and sizes, ranging from disagreements about policy, via employment disputes, to disagreements with funders or suppliers. Where necessary, the Commission advises on the financial, accounting and governance matters at issue. Where the effects of a dispute threaten a charity with harm, the Commission may decide (if the criteria already explained are met) to intervene. But it always concerns primarily with putting the charity on a sound and effective footing. This is more important from the point of view of the charity's beneficiaries than either identifying who is in the wrong in a dispute (especially where matters of judgement are concerned) or than punishing a person involved in the dispute who may have erred in good faith. The only "side" that the Commission seeks to take is that of the charity and its beneficiaries.

While the Commission does not seek to intervene in disputes which charities ought to settle for themselves, there are various forms of alternative disputes resolution which could be used instead of court action. The most common is mediation, which can often help resolve issues before they escalate. The National Council for Voluntary Organisations (NCVO) runs a mediation service in partnership with the Centre for Effective Dispute Resolution (CEDR). There is a charge for this service. CEDR also runs another mediation service designed specifically to resolve disputes relating to the Compact between Government and the voluntary sector. The mediation process is private and confidential. While a neutral third party is involved in producing a solution between the disputing parties, the power and responsibility for reaching it belong to those directly involved. As the solution is agreed to by those directly affected, rather than imposed externally, it is more likely to provide a long-term resolution.

All complaints will be evaluated objectively and open-mindedly in order to decide whether there is an issue for the Commission to take up. This may involve, gathering more evidence. The officer conducting the evaluation examines the information provided, the extent of any risk to the charity and decides whether the Commission should look into it further. The decision may be either:

1. that regulatory issues do not arise, or that they are not such as to justify action by the Commission; or
2. that regulatory issues do arise, and are likely to be best resolved through advice and assistance; or
3. that issues arise that are serious or complex enough to warrant consideration of opening an inquiry.

If the Commission decides to take the case forward, it writes and informs the complainant. Generally, in the interests of fairness, the Commission invites the trustees to respond to the concerns keeping, however, the anonymity of the complainant. In some more serious cases it may be necessary for the Commission to take action to protect the assets of the charity before raising the concerns with the trustees. Once the Commission has concluded the case, it does not reopen the same issues unless the circumstances have changed materially or significant new evidence becomes available.

If the Commission considers that the charity is potentially at significant risk, it may open an inquiry under section 8 of the Charities Act 1993. This does not necessarily imply that the charity or any of its trustees have been involved in deliberate wrongdoing. The trustee of a charity into which the Commission is inquiring normally be sent a copy of the Commission's companion guidance which briefly explains him his rights and obligations. Inquiries are carried out by specially trained staff; in a few cases where it is deemed necessary or appropriate, specialists from outside the Commission may conduct some or all of the inquiry. Officers carrying out inquiries are under a duty to act fairly. They are concerned solely with the best interests of the charity and its beneficiaries. They do not represent the interests of either the complainant or the trustees. Once the Commission has opened an inquiry and are satisfied that it is necessary to act to protect the charity, it can take action in a number of ways. If the Commission finds there has been misconduct or mismanagement or if it considers the assets of the charity are at risk, it can, for example:

a) suspend trustees and employees;
b) appoint new or additional trustees;
c) "freeze" bank accounts;
d) prohibit all further fund-raising;
e) stop, or restrict, actions by the trustees in dealing with the charity's assets (which includes land, buildings, investments and cash); or
f) temporarily appoint a person known as a receiver and manager to manage some or all of the affairs of the charity instead of the trustees.

Where appropriate (for example where there is evidence of child abuse, tax evasion or other serious crime) the Commission consults the police or other regulatory authorities.

If the Commission ascertains both that there has been misconduct or mismanagement and that the assets of the charity are at risk, it can both remove trustees or employees, or make a Scheme detailing new arrangements for the administration of the charity, or do both. Where necessary, the Commission can take legal proceedings (with the Attorney General's consent), or it can ask the appropriate authorities to consider legal proceedings for the recovery of charity property or for compensation to be paid to the charity for any loss. In less serious cases, particularly of mismanagement, the Commission can simply give charities a warning and ensure that faults are put right.

At the end of the inquiry, the Commission produces an inquiry report and, in some exceptional cases, it publishes them. Its aim in doing so is to illustrate potential problems and pitfalls to help other trustees avoid them in the future. Where necessary, the Commission monitors the future activities of the charity to check that the action suggested or required as a consequence of the inquiry is carried out, and that problems do not recur. In all cases, the Commission's object will be to put the charity on a sound footing so that it can pursue its charitable purposes effectively. The Commission always acts in the interests of the charity, and not as representing the complainant personally.

The Commission cannot use its powers of inquiry or protection in respect of an exempt charity.

Some subjects are entitled to ask a Review of the decision of the Commission. Broadly, this is the case of any person or organisation such that a) the relevant decision does, or could, directly affect him/it or b) he/it is an authorised agent of someone who is, or could be, directly affected by the relevant decision.

Whilst initial contact can be informal, the Commission does not proceed with a Review unless, within three months of the date of the letter from the case officer containing the final decision, it receives a formal request in writing addressed to the Customer Service Manager asking it for conducting a Review. Whether or not the Commission consider the agent is entitled to a Review, the Customer Service Manager acknowledges receipt of the formal request for a Review within three working days of receipt of the proponent's request. Before the Review gets under way the Commission needs to know on what grounds the proponent considers the decision was not correct. The proponent needs to agree those grounds with the Customer Service Manager.

Apart from the grounds, the Commission does not conduct a Review unless the proponent also supplies it with:

a) information or evidence which is in addition to that which has been supplied to the Commission already (the extra information requirement);

b) a reasoned argument showing why the proponent feels that the decision was wrong (the reasoned argument requirement);

c) some indication of why the proponent feels that changing the decision would better promote charitable purposes in the interests of the organisation.

The Commission declines to carry out a Review if it considers that:

a) the proponent is not entitled to a Review;

b) a Review is not in the interests of the organisation;

c) the Commission is not satisfied that the proponent has identified sufficient grounds for a Review;

d) the Commission is not satisfied that the proponent has adequately met the extra information requirement or the reasoned argument requirement;

e) reversal of the decision, or a different decision, would have no practical effect;

f) reversal of the decision, or a different decision, would not be in the interests of the organisation because it would: a.1) inhibit the continuing administration of the organisation to the detriment of the beneficiaries; or a.2) delay the implementation of a transaction such that it might be detrimental to the financial interests of the organisation and its beneficiaries;

g) it would be a disproportionate response to the issues raised;

h) conducting the Decision Review could have an adverse and unjustifiable effect on other charities.

However any decision to decline to conduct a Review is itself open to being reviewed by a Legal Commissioner if the proponent requests this within one month of the date of the letter telling the proponent that the Commission has declined to review the case.

Once the Commission has agreed the grounds for a Review with the proponent, supported by material which satisfies the extra information requirement or the reasoned argument requirement, the Customer Service Manager then arranges for the Head of Customer Service to examine the proponent's request. The Commission aims to give the proponent a full reply within fifteen working days. If this is not possible (perhaps because of the complexity of the issue or the amount of material which needs to be reviewed), the Commission explains why it takes longer than 15 days, what the Commission is doing to deal with the case and when the proponent can expect to have a full reply.

When this Review is complete the Commission writes to the proponent with the outcome. The Commission reserves discretion to select Review cases for publication and to publish its findings. If the Commission sticks with its original decision, the letter specifically deals with the grounds the proponent identified when seeking the Review and explains fully why the reviewer has reached his or her decision.

6.8. Conclusions

In this chapter, I have presented the English Non Profit sector. I have tried to highlight the narrow linkage between the Civil Society and the Government. In particular, I have analysed both the structure and the powers of the Charity Commission, which is an institution created by the English government to offer organisational and legal support to the charities. Without any doubt, the presence of this entity has played a crucial role in stimulating the growth of the English Non Profit which represents, after the experience of the North European countries, the most developed context in Europe.

CHAPTER. 7
CONCLUSIONS: ECONOMISTS UNDER POLITICS?

In this thesis, I have analysed the concept of civil society and I have tried to elaborate a consistent theory to highlight its economic implications. The aim of the thesis was to introduce the modern concepts of social capital, reciprocity, and private public goods into a typical endogenous growth scheme. Moreover, in order to make my theory coherent with the real life, I have used two sources of evidence to confirm its main theoretic implications. The first source consists of the rich empirical literature on both private provision of public goods and the economic consequences of trust. The other source consists of a real example of civil society in which a community of cooperative individuals supported by an efficient government acts in order to achieve the common good and to define a positive and fruitful social reality which affects its economic performances.

In particular, the scheme of the thesis can be summarised as follows.

In chapter 2, I have discussed the main implications of the endogenous growth theory stressing the discouraging implications of the presence of the government.

In order to enrich the interpretative scheme assumed in those models, in chapter 3, I have presented my theory of Civil Society. Firstly, I have discussed the most important contributions of classic and modern thinkers on this fascinating concept. The emphasis has been put on both the concept of common good which implicitly defines the social need of mutual assistance and the possible role of the government in the social interaction. Secondly, I have isolated three constitutive elements of the civil society which can be treated from the economic point of view: the concept of we-rationality, the theory of social reciprocity which describes the reciprocal linkage of anonymous individuals, and the widespread trust intended as the main by-product of a virtuous social coexistence.

In chapter 4, I have presented a formal model of endogenous growth theory which incorporates the distinctive elements of the concept of civil society. The model was formally divided into two parts: a static specification and a dynamic specification. In the static specification, I have presented a theory of social reciprocity to show how anonymous contributors are influenced by others' contributions in deciding their contribution towards a specific public good. In the dynamic specification, I have incorporated the main conclusions of the static specification into a model of endogenous growth theory enriched by the presence of a variable which captures the level of widespread trust in the society. The basic idea is that, the more the members of the society cooperate in collecting the public good (which basically captures the common good), the higher the level of widespread trust in the society and, therefore, the higher the economic performances are because of a reduction in the transactional costs, higher productivity of labour and so on. The main conclusion of the model is that, depending on the specification of the production function, the level of trust can either influence the growth rate of the economy or increase the levels of the variables. Moreover, the government can influence positively the economic performances of the country. In particular, one way the government can encourage the economic growth is to stimulate the production of social capital by triggering a motivational crowding-in in the society.

In chapter 5, I have discussed the results of some important empirical researches which confirm the theoretical implications of my model. In particular, I have referred to three implications: the coexistence of cooperative contributors and free-riders, the confutation of the crowding-out effect played by government's contributions and, finally, the positive correlation between the level of trust and the economic performances (the growth rate and the levels of the variables).

Finally, in chapter 6, I have used the British Non Profit sector as a virtuous example of civil society. This reality is composed by two actors. On one side there is a community of individuals who express their entrepreneurship and their social involvement through a rich network of voluntary organisations, clubs, and philanthropic associations. On the other side there is a Government which has supported the private sector to achieve the common good through institutional mechanisms. In particular, both the Charity Commission and the elaboration of a system of laws elaborated ad hoc for the English organisations which achieve charitable activities represent the most important intervention in such a direction.

I can identify at least three aspects of my thesis which require further research.

Firstly, it could be interesting to compare the English experience with those of the other European countries in order to define an optimal institutional and legal context for the development of the non profit sector.

Secondly, as far as I know, there is not any experiment in the literature which tests the assumption of "diffusion by analogy" of trust I have introduced in my theory to explain how cooperation can spread from a typical public good game into a productive game. Although many of the "classic" theories of social capital are implicitly built on this particular assumption, they rarely offer empirical evidence on it. Therefore, it could be interesting to design an experiment to test the validity of this assumption.

Finally, referring to the model, it could be interesting to analyse more in detail the dynamics of the proportion of fair contributors in the society. As said, the dynamic specification of the model starts from the equilibrium proportion of fair contributors obtained in the static specification. In order to analyse the dynamic consequences of a policy of the government on both the levels of the variables and the growth rate of the economy, it could be interesting to analyse the dynamics of assuming to start from a disequilibrium proportion of fair contribution.

REFERENCES

Abrams, B. A. – Schmidt, M. A. [1978]. The Crowding Out Effect of Government Transfers on Private Charitable Contributions. *Public Choice*, vol. 33, p. 29-39.

Abrams, B. A. – Schmidt, M. A. [1984]. The Crowding Out Effect of Government Transfers on Private Charitable Contributions: Cross Sectional Evidence. National *Tax Journal*, vol. 37, p. 563-568.

Alesina, A. – La Ferrara, E. [2002]. Who Trusts Others? *Journal of Public Economics*, vol. 85, p. 207-234.

Andreoni, J. [1988]. Privately Provided Public Goods in a Large Economy: The Limits of Altruism. *Journal of Public Economics*, vol. 35, p. 57-73.

Andreoni, J. [1993]. An Experimental Test of the Public Goods Crowding-Out Hypothesis. *American Economic Review*, v. 83(5), p. 1317-1327.

Andreoni, J. [1995]. Cooperation in Public Goods Experiments: Kindness or Confusion? *American Economic Review*, v. 85(4), p. 891-904.

Andreoni, J. [2004]. Philanthropy. Prepared for the *Handbook of Giving, Reciprocity and Altruism*. Editors: Gerard-Varet, Kolm and Mercier Ythier, in the series Handbooks in Economics, K. Arrow and M.D. Intriligator, General Editors.

Bardsley, N. - Sausgruber, R. 2003. Social Interaction Effects in the Laboratory and Society: Conformism and Reciprocity in Public Good Provision. CeDEx working paper, the University of Nottingham.

Bardsley, N. [2000]. Interpersonal Interaction and Economic Theory: the Case of Public Goods. *Annals of Public and Cooperative Economics,* vol. 71(2), p. 191-228.

Barro, R. - Sala-i-Martin, X. [1992]. Public Finance in Models of Economic Growth. *Review of Economic Studies*, vol. 59, 4, p. 645–661.

Barro, R. – Sala-i-Martin, X. [2001]. *Economic Growth: 3rd Edition.* MIT press.

Barro, R. [1990]. Government Spending in a Simple Model of Endogenous Growth. *Journal of Political Economy*, vol. 98(5-II), p. S103–S125.

Barro, R. [1991]. Economic Growth in a Cross Section of Countries. *Quarterly Journal of Economics,* vol. 106(2), p. 407–443.

Beem, C. [1999]. The *Necessity of Politics: Reclaiming American Public Life.* University of Chicago Press.

Bellah, R. N. [2000]. The Good Society: We Live through Our Institutions. *In The Essential Civil Society Reader,* editor: Eberly, D. E. Rowman & Littlefield Publishers, Inc.

Bergstrom, T. – Blume, L. – Varian, H. [1988]. On the Private Provision of Public Goods. *Journal of Public Economics,* vol. 29, p. 25-49.

Bikhchandani, S. – Hirshleifer, D. – Welch, I. [1998]. Learning From the Behaviour of Others: Conformity, Fads and Information Cascades. *Journal of Economic Perspectives,* vol. 12, p.151–170.

Bohm, P. [1972]. Estimating Demand for Public Goods: an Experiment. *European Economic Review*, vol. 3(2), p. 111-130.

Bordignon, M. [1990]. Was Kant Right? Voluntary Provision of Public Goods Under the Principle of Unconditional Commitment. *Economic Notes,* vol. 3, p. 342-362.

Bruni, L. Sugden, R. [2000]. Moral Canals: Trust and Social Capital in the Work of Hume, Smith and Genovesi. *Economics and Philosophy,* vol. 16, p. 21-45.

Casson, M. [1991]. *The Economics of Business Culture.* Clarendon Press.

Cialdini, R. [2001]. *Influence. Science and Practice: Fourth Edition.* Allyn and Bacon.

Clotfelter, C. T. [1985]. *Federal Tax Policy and Charitable Giving.* University of Chicago Press.

Dawes, R. M. [1980]. Social Dilemmas. *Annual Review of Psychology,* vol. 31, p. 169-193.

De Toqueville, A. [1835/2000]. *Democracy in America.* University of Chicago Press.

Durkeim, E. [1893/1997]. *The Division of Labor in Society.* The Free Press.

Elster, J. [1989]. *The Cement of Society.* Cambridge University Press.

Elster, J. [1998]. Deliberation and Constitution Making. In *Deliberative Democracy.* Editor: Jon Elster. Cambridge University Press.

Etzioni, A. [2000]. Communitarianism and the Moral Dimension. In The *Essential Civil Society Reader,* editor: Eberly, D. E. Rowman & Littlefield Publishers, INC.

Fehr, E. – Schmidt, K. M. [1999]. A Theory of Fairness, Competition and Cooperation. *Quarterly Journal of Economics,* vol. 114(3), p. 817–868.

Fehr, E. – Schmidt, K. M. [2002]. Theories of Fairness and Reciprocity - Evidence and Economic Applications. In *Advances in Economics and Econometrics - 8th World Congress,* Econometric Society Monographs. Cambridge: Cambridge University Press.

Ferguson, A. [1767/1996]. *An Essay on the History of Civil Society.* Cambridge University Press.

Fries, R. [2000]. Le Associazioni Filantropiche e la Charity Commission. In *Regolazione e Controllo sulle Organizzazioni Non Profit.* Editors: Barbetta, G. P. – Schiena, C. Il Mulino Publishing Company.

Fukuyama, F. [1995]. *Trust: the Social Virtues and the Creation of Prosperity.* Free Press.

Genovesi, A. [1765-1767/1820]. *Lezioni di Commercio o sia di Economia Civile dell'Abate Antonio Genovesi Napoletano a cui Vanno Uniti Opuscoli Interessantissimi Riguardanti l'Economia Politica e l'Agricoltura.* Silvestri Publishing Company.

Genovesi, A. [1766/1973]. *Della Diocesina o sia della Philosophe del Giusto e dell'Onesto per gli Giovanetti.* Marzorati publishing Company.

Glaeser, E. L. – Laibson, D. I. – Scheinkman, J. A. - Soutter, C. L. [2000]. Measuring Trust. Quarterly Journal of Economics, vol. 115(3), p. 811–846.

Granovetter, M. [1978]. Threshold Models of Collective Behaviour. *American Journal of Sociology,* vol. 83, p. 1420–1443.

Granovetter, M. Soong, R. [1983]. Threshold Model of Diffusion and Collective Behaviour. *Journal of Mathematical Sociology,* November, p. 165–179.

Hegel, W. F. [1821/1991]. *Elements of the Philosophy of Right.* Cambridge University Press.

Heliwell, J. F. – Putnam, R. [1995]. Economic Growth and Social Capital in Italy. *Eastern Economic Journal,* vol. 21, p. 295–307.

Himmelfarb, G. [2000]. The Demoralization of Society: What's Wrong with the Civil Society. In *The Essential Civil Society Reader,* editor: Eberly, D. E. Rowman & Littlefield Publishers, Inc.

Hirshman, A. O. [2002]. *Shifting Involvements: Private Interest and Public Action – 20th Anniversary Edition.* Princeton University Press.

Hollis, M. [1998]. *Trust within Reason.* Cambridge University Press.

Hume, D. [1740/2002]. *A Treatise of Human Nature.* Oxford University Press.

Hume, D. [1748/1995]. *An Inquiry Concerning Human Understanding.* Prentice-Hall, Inc.

Isaac, R. M., Walker, J. M. [1988]. Group Size Effects in Public Goods Provision: the Voluntary Contributions Mechanism. *Quarterly Journal of Economics,* vol. 103(1), p. 179-199.

Kant, I. [1785/2002]. *Groundwork for the Metaphysics of Morals.* Oxford University Press.

Keefer, P. – Knack, S. [1997]. Does Social Capital Have an Economic Payoff? A Cross Country Investigation. *Quarterly Journal of Economics,* vol. 112(4), p. 1251–1288.

Khanna, J. – Posenett, J. – Sandler, T. [1995]. Charity Donations in the UK: New Evidence based on Panel Data. *Journal of Public Economics*, vol. 56, p. 257-272.

Kingma, B. [1989]. An Accurate Measure of the Crowd-Out Effect, Income Effect, and Price Effect for Charitable Contributions. *Journal of Political Economy,* vol. 97, p. 1197-1207.

Knack, S. – Zak, P. J. [2001]. Trust and Growth. *Economic Journal,* Vol. 111, p. 295–321.

La Porta, R. – De Silanes, F. L. – Shleifer, A. – Vishny, R. W. [1997]. Trust in Large Organizations. *American Economic Review*, vol. 87(2), p. 333-338.

Laffont, J. J. [1975]. Macroeconomic Constraints, Economic Efficiency and and Ethics: an Introduction to Kantian Economics. *Economica,* vol. 42, p. 430-437.

Locke, J. [1690/1980]. Second *Treatise on Government.* Hackett Publishing Company.

Marwell, G – Ames, R. F. [1981]. Economists Free Ride, Does Anyone Else? Experiments of the Provision of Public Goods. *Journal of Public Economics,* vol. 15, p. 295-310.

Mill, J. S. [1848/2004]. *Principles of Political Economy.* Prometheos Books.

Nozick, R. [1994]. *The Nature of Rationality.* Princeton University Press.

Payne, A. [1998]. Does the Government Crowd-out Private Donations? New Evidence from a Sample of Non Profit Firms. *Journal of Public Economics*, vol. 69, p. 323-345.

Plato [c.a. 360 bce/1955]. *The Republic: 2nd Edition.* Penguin Books.

Putnam, R. D. [1993]. The Prosperous Community. *The American Prospect,* vol. 4, p. 35–42.

Putnam, R. D. [1995]. Bowling Alone. *Journal of Democracy,* vol. 6, p. 65–78.

Rabin, M. [1993]. Incorporating Fairness into Game Theory and Economics. *American Economic Review,* vol. 83(5), p. 1281–1302.

Romer, D. [2001]. *Advanced Macroeconomics: 2nd Edition.* McGraw-Hill/Irwin.

Rose-Ackerman, S. [1996]. Altruism, Nonprofits, and Economic Theory. *Journal of Economic Literature,* vol. 34(2), p. 701-728.

Sandel, M. [2000]. Democracy's Discontent: the Procedural Republic. In *The Essential Civil Society Reader,* editor: Eberly, D. E. Rowman & Littlefield Publishers, INC.

Schelling, T. [1978]. *Micromotives and Macrobehaviors.* W. W. Norton and Company.

Simon, C. P. – Blume, L. [1994]. *Mathematics for Economists.* W. W. Norton & Company, Inc.

Simon, H. [1982]. Theories of Bounded Rationality. In *Models of Bounded Rationality. Behavioral Economics and Business Organization.* Editor: Herbert Simon. Cambridge: MIT Press.

Spear, R. [2001]. United Kingdom: A Wide Range of Social Enterprises. In *The Emergence of Social Enterprise*. Editors: Borzaga, C. – Defourny, J. Routledge Publishing Company.

Sugden, R. [1982]. On the Economics of Philantropy. *Economic Journal,* vol. 92, p. 341-350.

Sugden, R. [1984]. Reciprocity: the Supply of Pubblic Goods through Voluntary Contributions. *Economic Journal,* vol. 94, p. 772-787.

Sugden, R. [1989]. Spontaneous Order. *The Journal of Economic Perspectives*, Vol. 3, p. 85-97.

Taylor, M. [2004]. The Welfare Mix in the United Kingdom. In *The Third Sector in Europe.* Editors: Evers, A. – Laville, J. L. Edward Elgar Press.

Warr, P. [1983]. The Private Provision of Public Good is Independent of the Distribution of Income. *Economics Letters*, vol. 13, p. 207-211.

Weber, M. [1946]. *From Max Weber: Essays in Sociology.* Oxford University Press.

Wolfe, A. [2000]. Whose Keeper? Social Science and Moral Obligation. In *The Essential Civil Society Reader,* editor: Eberly, D. E. Rowman & Littlefield Publishers, Inc.