

BEYOND THE HOMO ECONOMICUS

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ABSTRACT

An always larger and more consolidated body of empirical evidence documents that individuals donate money and time and their sense and satisfaction of life is strengthened by good relationships with other human beings.

This evidence should lead us to go beyond a misled opposition between a “satisfactory” pure egoism – which is still a standard benchmark in most economic models (individuals pursue their own pecuniary interest with no regard for that of others and are happy in doing it) – and a “painful” pure altruism (individuals may decide to pursue the interest of others at their expenses for deontological reasons but this makes them unhappy). What seems to emerge from this new body of evidence is an integrated paradigm of enlightened and long-sighted self-interest by which individuals may discover their intrinsically relational nature and learn (in proportion to their investment in civic and moral virtues) that their sense and satisfaction of life builds upon the capacity of doing things that are valuable for those others whose benevolent outlook represents a fundamental part of their own identity.

The new paradigm has important consequences in terms of policies. Approaches based on the reductionist paradigm which just aim at solving conflicts of interest by limiting the possibilities of opportunistic behavior should be integrated by actions aimed at reinforcing the law of motion of moral and civic values and, through them, the natural antibodies of the society which may help it to achieve socially desirable goals.

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1. INTRODUCTION

If we look at moral foundations of economics and ethics we find a deeply rooted conflict between an individualist approach based on purely self regarding preferences, which is at the basis of the neoclassical theory, and a deontological approach according to which ethics establishes what should be done in order to achieve social goals, that is, a conflict between what you want to do and what you ought to do.

In standard economic models agents are modeled as individuals having preferences and utility functions in which satisfaction is positively correlated to the increase of one's own pecuniary payoffs. By definition such models imply that happiness depends on these arguments and individuals are postulated to be rationally maximizing their utility function subject to time, money and technology constraints.¹ Economists then discover that the market is a marvelous decentralized mechanism by which, exchanging part of their endowments, individuals may improve their wellbeing.² Another providential mechanism is competition by which the price (and quality) fight among self regarding producers trying to maximize their own profits generates a result which increases consumer surplus and leads to social optimality. Unfortunately, the above mentioned market and competition mechanisms operate in an economic environment in which they often fail to produce the desired result of reconciling the conflict of individual interests into a socially desirable outcome. As it is well known asymmetric information, public goods, externalities and barriers to competition produce a series of market failures which require the intervention of institutions and the design of optimal rules aimed to reconcile private and social optimum. A more extreme position argues that the market itself and not its limits is part of the problem since the same characteristics of market interactions produce a deterioration of the moral fabric of the society.³

¹ Rationality is intended in this case as the consistence in the pursuit of the maximization of one's own goals under the above mentioned constraints. It can be violated for lack of self control (due to various forms of psychological dependences) and cognitive biases but the vast majority of individuals are assumed to follow it.

² KATZ and ROSENBERG (2005) resume what we say above by arguing that "Self-interested rationality is the fundamental paradigm of economic theory: driven solely by self-interest, individuals interact to benefit each other. Since this idea was initially introduced by Adam Smith over two centuries ago, economic theory has thrived on this simple but powerful paradigm. Considerable effort and ingenuity has been devoted to expanding and building on this basic principle of economic thought".

³ According to HIRSCH (1976) the "tyranny of small decisions", the "commercialization bias" and the "depleting moral legacy" are the three main negative effects generated by the market on moral values. Concerning the first he argues that "Individual choices, each made

This is where the deontological side lies in economics. A well known say by Hume resumes this vision by saying that men are “rascals” and that policymakers and regulators must create the best rules in order to minimize their capacity to harm other individuals. Based on the above mentioned anthropological perspective, the best candidates for fixing rules are those who are in the condition of spectators and not of stakeholders, that is, it is preferable to select for this task individuals who have nothing at stake in the world they are regulating. However, such individuals can hardly be found since it is always possible to mix personal and public interest, and incentives to appoint independent regulators are scarce given the personal interests at stake of those who are in charge of doing it.⁴

Hence, the contradiction remains. If all economic systems (and therefore also institutions) are populated by individuals having the same utilitarian (fully) self-regarding preferences of the regulated, the interest of the latter comes in conflict with the ethical goal of the institutions. In the last decades many economic models have discovered that the “king is naked” and that, beyond the simulacra of enlightened institutions, we have politicians trying to maximize their stay in power (or, even worse, their

separately and thereby necessarily without taking account of the interaction between them, combine to have destructive social consequences. These consequences are destructive in the sense that they produce a worse result for the individual concerned than could have been obtained by coordination of individual choices with some method that took account of the mutual interaction” (HIRSCH 1976: 37). This analysis can be applied to coordination failure problems such as those generated by Prisoners’ dilemmas, Traveler’s Games and Trust Investment Games (see section 2.4). The “commercialization bias” refers to the deterioration of the moral fabric of the society generated by the fact that everything, including moral values, becomes object of exchange. With regard to the third negative effect, Hirsch argues that social morality is a “legacy of the precapitalist and preindustrial past” (HIRSCH 1976: 117) which is a prerequisite for the functioning of economic transactions. However, the typical features of market economies such as individualism and avarice and the negative social contexts due to anonymity, mobility of workers tend to deplete such legacy. An opposite school of thought challenges this view by emphasizing that market economies, when promoting economic growth have also beneficial consequences in terms of higher tolerance and openness (FRIEDMAN 2005). According to Friedman’s own words, “Economic growth – meaning a rising standard of living for a clear majority of citizens – more often than not fosters greater opportunity, tolerance of diversity, social mobility, commitment to fairness and dedication to democracy”. And conversely, when there is economic stagnation or decline the citizen’s “moral character” tends to decline accordingly, there being less tolerance, less openness, and less generosity to the poor and the disadvantaged”.

⁴ In lab experiments spectators are third parties whose decisions affect payoffs of other players while not their own payoff. They therefore do not exactly coincide with the Smithian concept of spectator (that is, what people imagine would be the judgment of a third party). KONOW (2009) surveys several lab experiments showing that spectators may achieve more equitable choices not being driven by a form of self-interest. BECCHETTI *et al.* (2011) document that spectators opt significantly more for rules involving forms of protection and more equal distribution of income when choosing among different decision criteria which may differently reward talent, effort or chance.

day-by-day consensus in polls which represent the application of the market-to-market way of measuring value to politics).⁵ These conflicts of interest generate corruption, public inefficiencies and create conditions for the generation of increasing government debts. The same picture applies to regulators who tend to be captured by the regulated and therefore seldom succeed in creating and enforcing rules in favour of the common interest when the latter is in conflict with that of the regulated bodies. The 2007 global financial crisis seems to validate this pessimistic view on the human being. Politicians and regulators have demonstrated to be less and less capable of harnessing disruptive attitudes of financial agents and institutions and the same larger financial institutions seem unable to avoid opportunistic behavior of their traders or managers. Even though some basic rules for the reform of the financial and banking system after the crisis seem to have been identified (leverage thresholds for “too big to fail” banks, Volcker rule, stricter capital requirements in proportion to the risk of financial activities) their actual implementation at international level has proven to be extremely difficult for the above mentioned reasons.

The extreme consequence of this perspective is that ethics progressively disappears from the screen with the exception of those situations in which one’s own and the societal wellbeing are closely interdependent. This is why solutions to global problems tend to be much easier in emergency situations in which the problems are so severe to endanger the collapse of the entire economic system.

In order to contrast this risk ethicists repeat their “objectivist” deontological approach illustrating that some duties (which are the same for everyone, ie. follow moral value and civiness) have to be respected and that moral commitment should come before satisfaction of individual preferences. However their voice is less and less listened in a society in which powerful mechanisms to “excite” the satisfaction of individual preferences are at work in order to push consumers to comply with the growing supply of goods and services without specific regard for ethical issues.

In short, the contradiction is that, in order to ensure stability and prosperity of socioeconomic system, we require moral and civic resources which nowhere can be found or generated given the “dismal outlook” of the anthropological perspective currently adopted in the economic discipline.

From an empirical point of view, if we still remain on the contraposition between deontologism and the stylized preferentialist approach illus-

⁵ Classical references for the literature of political business cycle are, among others, NORDHAUS (1975) and ALESINA (1987).

trated above, we end up having (a minority of) people who follow moral commitment and duty which make them suffering and unhappy and a large majority of individuals who satisfy their self-regarding preferences and are increasingly happy due to the growing variety of goods and economic resources available.⁶ One of the most intriguing empirical findings related to this point come from Benjamin *et al.* (2012) showing that individual choices do not always maximize subjective wellbeing even when this is intended in a much broader sense than increasing one's own monetary payoffs. Drivers of this gap are predicted sense of purpose, control over one's life, family happiness, and social status. These variables are likely to create a wedge between life satisfaction and life sense (eudaimonic wellbeing).

Quite to the contrary, the availability of data on life satisfaction and its determinants, coupled with a deeper scrutiny of time and money donations and results from lab and quasi natural experiments on individual preferences, outline some stylized fact which are not exactly consistent with such dichotomy.

In the sections which follow we will show that violations of the purely self-regarding paradigm are the rule more than the exception. In section two we document that a large share of individuals donate money, time, pay ethical premia (that is, buy products which contain socially and environmentally responsible characteristics at a premium with respect to their non ethical counterparts) and, last but not least, we show that life satisfaction and overall sense of life (at any latitude and in any considered period) are deeply affected by the quality of their relationships with others (success of love relationship, time spent in relational activities or in voluntary work). Such findings are consistent with some intuitions of the classics such as those of Jeremy Bentham,⁷ Adam Smith⁸ and John Stuart Mill⁹ which seem to have been neglected by the standard economic models which have followed.

⁶ Economies bounce back from time to time but if we look at medium and long time horizon we cannot neglect the improvement of living conditions (cheaper technology which increases availability of goods and services, reduced infant mortality, higher life expectancy, etc.).

⁷ "And for every grain of enjoyment you sow in the bosom of another, you shall find a harvest in your own bosom, – while every sorrow which you pluck out from the thoughts and feelings of a fellow creature shall be replaced by beautiful flowers of peace and joy in the sanctuary of your soul". Jeremy Bentham *Advise to a young girl*, June 22, 1830.

⁸ "Concern for our own happiness recommends to us the virtue of prudence: concern for that of other people" [SMITH 1809 (1759): 385].

⁹ "Those only are happy, I thought, who have their minds fixed on some object other than their own happiness, on the happiness of others, on the improvement of mankind, even on some art or pursuit, followed not as a means, but as itself an ideal end. Aiming thus at something else, they find happiness by the way" [MILL 1989 (1893): 117].

In section three we outline a new anthropological paradigm which is more consistent with the empirical evidence found. In the conclusions we examine the consequences of such new paradigm in terms of policies.

2. VIOLATIONS OF THE STANDARD SELF-REGARDING PARADIGM

In what follows we illustrate that the three main sources of evidence we have in economics and social sciences (revealed preferences through consumption and saving choices, life satisfaction and momentary affect declarations, lab and quasi natural experiments) document massive violations of the standard anthropological paradigm by which individuals maximise self-regarding preferences and their happiness just depend on the increase of their own monetary and non monetary payoffs.

These results, we argue, clearly require the creation of an alternative (or integrated) paradigm much closer to the *zoon politicon* Aristotelean perspective by which individuals are *personae*, that is, their identity and satisfaction is crucially determined by their relationships with other human beings and crucial important components of *egos* are determined by the way others look at us.

The main points we want to illustrate in the section which follows are that significant shares of individuals donate i) money and ii) time; iii) demonstrate with their purchases to be willing to pay an ethical premium on products; iv) identify the quality of relationships with other human beings as one of the main sources of their happiness or positive momentary affect; v) have been demonstrated (with a large number of lab and quasi natural experiments) to have an important component of other regarding preferences.

The evidence we provide should lead us to go beyond, we argue, the traditional opposition between a “satisfactory” pure egoism (individuals pursue their own interest with no regard for that of others and are happy in doing it) and a “suffered” pure altruism (individuals pursue the interest of others at their expenses for deontological reason but this makes them unhappy) toward an integrated paradigm of enlightened and longsighted self-interest by which individuals discover their intrinsically relational nature and discover that their sense and satisfaction builds upon the capacity of doing things that are valuable for those others whose benevolent outlook makes a fundamental part of their own identity. Such paradigm may reveal itself much more helpful and informative in order to design policies aiming to generate those moral and civic resources needed for the survival and prosperity of the socioeconomic system.

2.1. Money Donations

In 2009 the total amount of charitable giving in the United States reached \$303.75 billion (around 2% of GDP), involving the vast majority of citizens (90% of people gave money to at least one charity according to Giving USA, 2010). Philanthropy is also widespread in other high-income countries (Andreoni 2001 and 2006). In Europe, official figures document that, on average, 53 percent of the population give money to charities (ranging from 73 percent in UK to 62 percent in Italy and 31 percent in France).¹⁰

Of course, not all money donations arise from purely altruistic preferences. The vast literature on this point (Andreoni 1989 and 1990; Harbaugh 1998; Goeree *et al.* 2002; Ribar and Wilhelm 2002; see also Camerer 2003, for a comprehensive review) finds that individuals may donate for strategic reasons (they expect something back in exchange from those who received the gift, even though they run the “social risk” of not being reciprocated) or for gaining social appraisal (also in this case however individuals do not live in isolation and many of their actions are driven by the desire of being pleased by their peers). Moreover, altruism may be impure in the sense of Andreoni (1990), that is, individuals may prefer donating directly vis-à-vis paying taxes which can be used to generate exactly the same social effect of their direct donations, since in the first case they enjoy a warm glow while the second they don't. This well-known impure altruism result is however another example of the fact that relationships with other human beings are a good *per se* (the point will be discussed in more detail in section 2.3) and direct giving is therefore preferred to a more aseptic and anonymous intervention even though the economic effect is the same. In this sense impure altruism just reveals that people attach high value not just to the solution of a problem but also to the creation and enjoyment of a human relationship.

2.2. Time Donations

Creation of economic value of a given country is based on three pillars. The first is the visible one of market transactions of goods and services which are registered in GDP statistics. However, the wealth of nations is also made by other two invisible pillars represented by non registered transactions of goods and services realized among family members within

¹⁰ See Charities Aid Foundation's *The World Giving Index 2010* (<https://www.cafonline.org/docs/default-source/about-us-publications/worldgivingindex28092010print.pdf>, accessed October 24, 2019).

the household and by volunteers outside the household.¹¹ An individual and her country may appear richer if, when ill, she can pay and receive care from a paid private nurse, but she is actually richer if she does not pay nurse's services on the market but has five friends or family members and each of them perform individually the same amount of work of the paid nurse. The misperception is due to the fact that we often look only at the first visible, while not at the two invisible pillars of value creation.

The voluntary work pillar is a good example of how a non purely self-interested behavior may create economic value at aggregate level. Data on voluntary work around the world apparently document massive violations of the purely self-regarding paradigm. In 2010, 60.8 million people, or about 26 percent of Americans volunteered by performing unpaid work for a nonprofit organization.¹²

Katz and Rosenberg (2005) observe that in Canada volunteer work in the year 2000 corresponded to an equivalent of 549,000 full-time jobs. Gallup and OECD 2008 data document that the highest shares of volunteering population are in Canada (38.1 percent) and Australia (37.9). In Europe on average 23 percent provide voluntary work to non-profit organizations (ranging from 29 percent in UK to 16 in Italy and 22 in France)

The ILO manual on voluntary work reports that 12 percent of the adult population (140 million people) of 37 main world countries (Salamon *et al.* 2004) volunteer representing the equivalent of 20.8 million full-time equivalent paid workers and generating a \$400 billion contribution to the global economy according to conservative estimates.

More important to our inquiry on human preferences is the ILO observation that "Volunteer work provides a sense of personal satisfaction, fulfillment, well-being and belonging to persons who volunteer". This consideration is confirmed by empirical evidence on the effect of volunteer work on life satisfaction. In a well know paper Meyer and Stutzer (2008) use the German fall of the Berlin Wall as a quasi natural experiment to verify the effect of the sudden disappearance of many volunteer organisations. They document that voluntary work has significant and positive impact on life satisfaction overcoming the standard problems of endogeneity and

¹¹ According to the ILO definition "Unpaid non-compulsory work; that is, time individuals give without pay to activities performed either through an organization or directly for others outside their own household". The UN includes in voluntary work "a wide range of activities, including traditional forms of mutual aid and selfhelp, formal service delivery and other forms of civic participation, undertaken of free will, for the general public good and where monetary reward is not the principal motivating factor" (UN General Assembly 2001).

¹² <http://philanthropy.com/article/26-of-Americans-Volunteer/62876/> (accessed October 22, 2019).

therefore identifying a clear cut causality nexus from the first to the second variable.

The same caveats discussed for money must be applied to time donations as well. Not all time donations may be related to pure altruism since strategic motivation cannot be excluded. A typical strategic motivation considered in the literature is that individuals “work for nothing” (Freeman 1997) because this allows them to improve their network of relationships and their curricula (Katz and Rosenberg 2005). This is partly enhanced by the fact that team working is increasingly appreciated in modern corporate environments where the joint activity of professionals with non overlapping competencies is more and more important to solve complex problems and generate economic value.¹³ Hence, voluntary activities in a CV are a signal of pro-social attitudes which may be very useful within the working environment. However, even though such strategic reasons may be one of the explanations of voluntary activity of the young, they definitely cannot explain the vast phenomenon of voluntary work of retired individuals.

2.3. *Ethical Premia Paid on Socially and Environmentally Responsible Products*

The fact that profit maximizing corporations are more and more spending money to declare their social and environmental engagement in their marketing campaigns and are supporting their ethical stance by “retailing public goods” (Besley and Ghatak 2007)¹⁴ is an indirect proof of the fact that consumers look at these factors when they take their purchasing decisions.

Purchases of “ethical” products which may cost relatively more than their “standard” counterparts demonstrate that individuals pay “ethical premia”, that is, are willing to trade off money for the satisfaction of contributing to a social and/or environmental cause.

One way of measuring this phenomenon looks at survey data on the willingness to pay for ethical features of the products with plenty of empirical analyses documenting it. In a recent Nielsen global survey on 28,000 consumers from 56 countries (Nielsen 2012) it is documented that 46 percent of them are willing to pay a premium price for companies adopting corporate social responsibility strategies. A related finding which worth

¹³ See, among others, HAMILTON, NICKERSON and OWAN (2003), BECCHETTI, GIANFREDA and PACE (2011) and ICHNIOWSKY, SHAW and PRENNUSHI (1997) for the growing importance of team working in different industrial environments.

¹⁴ For this literature the recent survey on the Journal of Economic Literature by KITZMUELLER and SHIMSHACK (2012) and, among others, BAGNOLI and WATTS (2003) and ARORA and GANGOPADYHAY (1995).

mentioning is that the willingness to pay almost doubles when it concerns environmental issues (66 percent willing to pay to ensure environmental sustainability) compared to social issues (38 percent for initiative reducing child mortality). In Italy (IREF, 2005) 30 percent of consumers declare they are willing to pay more for the socially responsible features of a product and 90 percent argue that firms must be socially and environmentally responsible. In the UK Bird and Hughes (1997) find that 18 percent of consumers are willing to pay more for an ethical product, while De Pelsmacker, Driesen and Rayp (2003) document that in Belgium 18 percent of consumers are willing to pay a premium on fair trade coffee. However, the contingent evaluation literature (Carson *et al.* 2001) tells us that willingness to pay may be higher than actual purchasing habits due to the well known interview biases (more people declare themselves ethical if there is no cost for doing it).

Another reason why this may occur is that “virtual” choices in questionnaire answers assume absence of information asymmetries and search cost differentials between “ethical” and standard products. These are two relevant problems since the ethical features of the non standard products do not possess the characteristics of an experience good (individuals do not bridge the informational asymmetry on their ethical value after the purchase and trial of the product) and the distribution of ethical products is limited.

In spite of these limitations the numbers of people actually paying ethical premia on the market are impressive. The Fairtrade Foundation calculates that in most European countries sales of products with Fairtrade marks¹⁵ have been growing at rates between 20 and 75 percent in 2008. Fairtrade bananas have conquered significant market shares in Switzerland (50 percent) and the UK (25 percent) since supermarket converted all the bananas sold to Fairtrade.

In more recent time some experiments have tried to evaluate the net effect of the ethical product features on purchasing habits. Hiscox and Smyth

¹⁵ IFAT (the umbrella which keeps together producers and fair trade organizations) includes products in the fair trade register if they abide by the following criteria: i) creating opportunities for economically disadvantaged producers; ii) transparency and accountability; iii) capacity building; iv) promoting fair trade; v) payment of a fair price; vi) gender equity; vii) working conditions (a healthy working environment for producers. The participation of children, if any, does not adversely affect their well-being, security, educational requirements and need for play, and conforms to the UN Convention on the Rights of the Child, as well as the law and norms in the local context); viii) the environment; ix) trade relations (fair trade organizations trade with concern for the social, economic and environmental well-being of marginalized small producers, and do not maximise profit at their expense. They maintain long-term relationships based on solidarity, trust and mutual respect that contribute to the promotion and growth of fair trade. Whenever possible, producers are assisted with access to pre-harvest or pre-production advance payment).

(2010) attached on the showcase of a candle seller in *ABC carpet and store* in New York an announcement advertising its social and environmental stance and found that the seller increased by around 40 percent its sales with respect to the competitor selling just in front of it, even though the product of the former was sold with a 15 percent overprice.

With a similar experiment Hiscox, Broukhim, Litwin and Volosky (2011) find on E-Bay that the same announcement generates a 45 percent premium on polo t-shirts documenting how social and environmental responsibility raises significantly consumers' willingness to pay and reservation prices.

In the same way as "concerned" consumers may pay a premium for ethical products in financial markets, "concerned" investors may voluntarily accept constraints to the pursuit of the maximum risk-adjusted return from their investment in financial markets. According to the Social Investment Forum (2007) around 11 percent of the assets under professional management in the US (\$ 2.71 trillion) are socially responsible investments, that is, they are invested in funds which use social screens of shareholders advocacy in their management strategies. In the year 2010 the sum raised to \$3.07 trillions. The growth of socially responsible investment between 1995 and 2007 (324 percent) was much stronger than that of standard investment (260 percent).

Other "concerned" investors express their social responsibility by channeling funds to microfinance institutions via microfinance investment vehicles (more than \$ 6.2 billion in 2009 in 91 specialised vehicles). A large part of these funds support non profit maximizing microfinance institutions and accept lower returns in exchange of the satisfaction of promoting equal opportunities and market inclusion of borrowers who do not have access to traditional commercial banks (CGAP 2010). Another recent field of activity in which solidarity spirits are at work is that peer-to-peer lending electronic platforms. The most famous of them Kiva has collected since its origin (2005) 334 million dollars from 795,051 lenders who accept to lend at zero interest rates. These resources financed poor borrowers from 154 microfinance institutions. The above mentioned figures reveal that the average amount lent is extremely small but Kiva revealed itself very effective in pooling resources from a large number of lenders.¹⁶ Non performing loan rates have been extraordinary low (1.02 %) for an activity where the geographical distance between lenders and borrowers is so high. The likely rationale is that microfinance organisations uses Kiva as a shop-window for their activity posting on the website stories and pictures of their most trust-

¹⁶ Kiva summary statistics at <http://www.kiva.org/> (accessed July 30, 2012).

worthy borrowers. All borrowers and organisations have a rating which reduces the informational asymmetries.

The examples described in this section not just confirm departures from the purely self regarding paradigm but also demonstrate that firms are well aware of this broadened consumers perspective and develop strategies aimed to capture ethical premia.

2.4. Other Regarding Preferences in Lab and Quasi Natural Experiments

In the previous sections we documented how a significant share of individuals follow what is apparently a non purely self regarding conduct by donating time, money and paying a premium for ethical features of consumption goods and financial investment. We however argued that the interpretation of these facts is not unambiguous since strategic reasons may mix up with purely altruistic motivations. Results from lab experiments are therefore particularly important since they may test and reject specific assumptions on individual preferences with ad hoc treatments which control for all other potential confounding factors and may be replicated by other researchers for different groups of individuals at different latitudes and time periods. The typical experiments used to test for the existence of other regarding preferences are Dictator Games (Andreoni and Miller 2002), Ultimatum games (Güth, Schmittberger and Schwarze 1982, Camerer and Thaler 1995), Gift Exchange Games (Fehr, Kirchsteiger and Reidl 1993, Fehr, Kirchler, Weichbold and Gächter 1998), Trust Games (Berg, Dickhaut and McCabe 1995, Ben-Ner e Putterman 2006) and Public Good Games (Fischbacher, Gächter and Fehr 2001, Sonnemans, Schram and Offerman 1999, Fehr and Gächter 2000).

The main finding of these experiments is that departures from the purely self regarding behaviour are massive and Nash (homo economicus) rationality is often followed by a minority of individuals.

A related fundamental result (in Prisoners' Dilemmas, Public Good and Trust Games) is that individuals facing social dilemmas depart from purely self regarding behaviour (and expect that other participants would do the same) since such decision would produce superior outcomes from both an individual and a social point of view. The dilemma is that the superior outcome is produced only if also the counterpart will follow the same route of action. Many individuals however accept such social risk and their confidence is productive from an economic point of view.

The most important results confirming what said above are those coming from the Dictator game. In the Dictator game a player is given an amount of money and can decide whatever part of it to donate to a second player. After this move there is no reply and the game ends. Under the re-

ductionist anthropological paradigm of the homo economicus the dictator gives nothing since a donation would reduce her own monetary payoffs which is the only thing which matters. Note that, since the game ends with her move, the dictator has no strategic reasons to donate. In order to avoid that people generosity would be driven by friendship or sympathy for a counterpart, standard dictator games are generally played under the maximum social distance since the giver plays with a computer and cannot see who is on the other side.

A meta study of Engel (2010) examines results from around 328 different Dictator game experiments for a total of 20,813 observations. The result is that only around 36 percent individuals follow Nash rationality and give zero (based on these numbers the author can reject the null hypothesis that the dictator amount of giving is 0 with $z = 35.44$, $p < .0001$) and more than half give no less than 20 percent.

When analyzing factors affecting departures from the homo economicus behavior we find that the share of dictators giving zero falls to 28 percent if the money property rights are of the recipient and the dictator may take from him, 25 percent if players handle real money in the game, 19 percent if the recipient is deserving (ie. is identified as poor).¹⁷ A further interesting result is that student experiments (which are the vast majority of treatments) underestimate deviations from the self regarding paradigm. Students are those who are closer to the homo economicus behaviour (40 percent) while only 20 percent of children, 10 percent of middle age players and almost no one of the elders behave in this way.¹⁸

Engel's finally comments results of his meta-analysis by saying that "While normally a sizeable fraction of participants does indeed give nothing, as predicted by the payoff maximisation hypothesis, only very rarely this has been the majority choice. It by now is undisputed that

¹⁷ On this point KONOW (2009) argues that giving arises from a mix of unconditional and conditional altruism where the latter is related to context dependent norms where need can be more important than familiarity with the receiver.

¹⁸ Some recent developments of the dictator game literature seem to show that other regarding behavior is stronger when players can enjoy the benefit of the effect of their other regarding attitude on counterparts or when consequences of their actions are known to themselves and others. This is because in ANDREONI and BERNHEIM (2009) dictator giving is significantly reduced when a random mechanism is applied to it so that its effect on beneficiaries may vanish with a positive probability. Furthermore, when an exit option from the game is available (with the counterpart not being aware of it), individuals are willing to pay for it and keep for them all the rest (BROBERG *et al.* 2005; DANA *et al.* 2006). Overall, these findings do not reject the hypothesis that other regarding behaviour may be viewed as the price individuals have to pay in terms of monetary payoffs if they want to create common consent with other people and relational goods (see section 2.5).

human populations are systematically more benevolent than homo oeconomicus".¹⁹

Another impressive set of results comes from the meta analysis of Johnson and Mislin (2010) on 162 trust games with more than 23,000 observations. As it is well known the trust game is a sequential game in which the trustor has the first move and may give part of her endowment to a second player (the trustee). The amount of money sent by the trustor is tripled when transmitted to the trustee who may in turn decide how much of what received she want to send back to the trustor. After the trustee moves the game ends. As it is well known the Nash equilibrium of the game is the one in which both trustor and trustee send zero under the assumption that there is common knowledge that both players behave as *homines economici*. Deviations from the Nash equilibrium for the trustor may be generally due to strategic reasons, inequity aversion and pure altruism. Trustees have no strategic reasons to give back money and may deviate from the Nash solution due to inequity aversion, pure altruism and reciprocity or kindness.

The meta analysis reports average amounts sent by trustors and trustees in 35 different countries (equally waiting each experiment). The highest average amount is sent by trustees in Asia (.46) and the lowest in Africa (.32). All average contributions are significantly different from zero even though, differently what occurs in Dictator game meta experiment of Engels (2010), we do not have information about the share of individuals following Nash rationality.

The above mentioned lab experiments have helped researchers to identify specific forms of other regarding preferences in which contributing to the wellbeing of others significantly and positively affects one's own wellbeing. Individuals feel a disutility for inequality, an obligation to reciprocate for the kindness received and may have wellbeing of others in their utility functions. Technically speaking the implied broadened preference pattern has been shown to include elements of (positive and negative) reciprocity (Rabin 1993), other-regarding preferences (Cox 2004), inequity aversion (Fehr and Schmidt 1999 and Bolton and Ockenfels 2000), social-welfare preferences (Charness and Rabin 2002), and various forms of pure and impure (warm glow) altruism (Andreoni 1989 and 1990).

¹⁹ The recent literature has qualified this general result investigating some relevant side questions. List (2007) demonstrates that, when individuals have also the opportunity of taking and not just of giving in Dictator games, they withhold significantly more even though the result that they do not choose the most selfish solution is confirmed. Furthermore, there is widespread evidence that people tend to be more selfish when their endowments are not a gift given by experimenters but are deserved with effort or talent (Becchetti *et al.* 2011).

2.5. Relational Goods and Their Enjoyment

Pro-social attitudes revealed by time and money donations and by the willingness to pay for socially and environmentally responsible products find close correspondence in the fact that, at every latitude and in every time period, quality of relational life, success/failure of love relationships and time spent with friends have strong and significant effects on life satisfaction and momentary affect.²⁰ Relating this to the previous section, life satisfaction results are consistent with experimental findings showing that: i) anytime we depart from anonymity and reduce social distance, behavior is less opportunistic; ii) propensity to give is reinforced when the direct bilateral relationship between giver and receiver is ensured (Andreoni and Bernheim 2009).

Such evidence has led a recent strand of economic research to devise the concept of relational goods.

For relational good we mean any kind of feeling positively contributing to individual's utility and life satisfaction whose "production" requires interaction with other individuals as necessary condition. The most typical examples of them are the enjoyment of a friendship or of a love relationship, or participation to the life of some club or association in which members are gathered by some common goals and enjoy their common consent. As such, relational goods obviously include companionship, emotional support, social approval, solidarity.

More formally, in order to compare relational goods with the more traditional private and public goods, the former have been defined as *a specific kind of local public goods (requiring the joint participation of at least two individuals) for which investment, production and consumption coincide* (Gui 2000; Ulhaner 1989; Becchetti and Pelloni 2010).

Relational goods are public goods in that they share with public goods the characteristics of nonrivalry (my own enjoyment of the good does not

²⁰ The empirical literature on the determinants of life satisfaction has boomed in the last decades. Its results have been considered reliable in spite of the methodological problems of lack of cardinality and of the limits in interpersonal comparability of self declared life satisfaction across individuals and countries. Note however that the most robust results are those from panel data fixed effect estimates in which what is measured is the impact of life events on within changes in life satisfaction (ie. changes of self declared life satisfaction for the same individual in two different periods of time) (for a survey see, among others, FREY and STUTZER 2002 and 2010; CLARK *et al.* 2006). Quite recently the technique of vignettes has been elaborated: survey respondents observe in a picture (are narrated) a similar situation (of happiness/sorrow) and have to evaluate the level of life satisfaction of the individual in it (CORRADO and WEEKS 2010, KING and WAND 2007).

“exhaust” the good and therefore does not prevent my companions from enjoying it) and non excludability (it is not possible to exclude those with which I generate the relational good from its enjoyment). They are however a special kind of public goods since, more than being nonrival, they can be defined *antirival* (the enjoyment of my companion actually depends on my participation and enjoyment, and is not merely not excluded by it). Furthermore, the local characteristic of this good implies that properties of nonrivalry and non excludability apply only to the group which produces and consumes the relational goods (ie. if I organize a private party I can prevent participation of people I do not want to invite).

A very interesting point relates to the quality or intensity of relational goods. On this point Bardsley and Sugden (2006) borrow from the Adam Smith’s *Theory of Moral Sentiments* concept of ‘fellow-feelings’. According to Smith the factor determining the positive influence on individual utility when enjoying relational goods is the fellow feeling or the common consent which, in turn, depends on an intellectual agreement but also on the intensity of (good or bad) emotional experiences lived together.²¹ Bardsley and Sugden (2006) define such fellow feelings as “mental states produced during such non instrumental social interactions”.

The evidence on the positive impact of factors involving good human relationships on life satisfaction is impressive and seems to provide strong support to the Aristotelean anthropological paradigm of the human being as *zoon politicon*. At every latitude, and for any considered period, we find nowhere, to our knowledge, a negative and significant effect of factors such as marriage (success of love relationships),²² religious practice, time spent meeting friends, voluntary activity, number of people on which we can count.

A recent contribution by Helliwell (2008) considers two of the largest international databases including data on self declared life satisfaction such as the World Value Survey and the Gallup. It shows looking at different continental subsamples that, in any case, marriage and living as married,

²¹ Smith argues that experiences do not need to be related to positive events since companionship generated when suffering together bad experiences (ie. attending the funeral of a friend) may produce very strong relational goods as well.

²² Relational good indicators have been recently introduced among those monitored at international level by OECD which included the number of friends individuals can rely on in the OECD better life index set of indicators (<http://www.oecdbetterlifeindex.org/>, accessed October 22, 2019). Relational goods are among the main considered categories as well in the recent creation in Italy of indicators of fair and sustainable wellbeing by ISTAT after a participated process in which experts elaborated such indicators after the definition of the relative domains by representative members of the civil society (<http://www.istat.it/it/archivio/65333>, accessed October 22, 2019).

voluntary activity and number of people on which we can rely on, are significantly and positively correlated with life satisfaction.

Another interesting stylized fact in the life satisfaction literature which tells us something about the importance of others is the paradox of the relationship between children and life satisfaction. If we consider the vast majority of empirical papers the number of children is not significant or even negative. However the literature documents that having children has three main separate effects on individuals life: reduction of per capita disposable income in the household, pressure on time use and enjoyment of a relational good. If we control for the first two factors which negatively affect happiness the effect of the third factor has been shown to be largely significant (Becchetti, Giachin Ricca and Pelloni 2011, Stanca 2009).

The importance of good relationships for our life is confirmed by medical studies showing that health vulnerability is significantly and positively affected by loneliness. Epidemiological studies also provide wide evidence that the lone elders survival is lower than that of the elders with richer relational life under heat waves (Klinenberg 2008).

As it is well known a positive and significant relation does not imply a one-way causation from good relational life to life satisfaction. Especially in the case of relational goods the inverse causality link cannot be neglected and is often at work. If, for whatever contingent or long lasting psychological reason, I become happier I will tend to have a better relational life. Unfortunately, the introduction of fixed effects which control for time invariant idiosyncratic characteristics is not enough to control for reverse causation. It may well be that the positive correlation we observe is in fact determined by a positive change in life satisfaction which generates positive changes in relational goods.

Several papers have tried to solve this conundrum with various approaches.

Frey and Stutzer (2006) document that life satisfaction around marriage events is inverse U-shaped identifying conditions by which marriages generate more satisfaction among partners. Clark *et al.* (2008) also look at dynamic effects of marital status events and find that the loss of the partner generates a deep fall in life satisfaction at the event date and in the year after, while marriage has positive and significant impact from 3 years before to one year after. On the contrary, divorce generates negative effects which are significant up to the last (fifth year) after the event analysed in the research.

Meyer and Stutzer (2008) used the German reunification as an exogenous shock in order to evaluate the impact of the end of activity of a large number of voluntary organisations on the wellbeing of East Germans. Becchetti, Giachin Ricca and Pelloni (2011) evaluated the impact of rela-

tional goods on happiness in Germany by using the average probability of retirement for a given age as instrument. The authors first demonstrate how retirement is a positive shock which significantly increases leisure time and leisure satisfaction and then show with the instrumented regressions a significant causal nexus from enjoyment of relational goods to life satisfaction.

As a final consideration it must be obviously remembered that others (and their utility or wellbeing) do not enter only positively in one's own utility function. The vast literature on relative income shows that individuals are deeply affected by pecuniary (and also non pecuniary) comparisons with their peers (Ferrer-i-Carbonell 2005). In general an outcome which is below the average of our reference group (ie. the group of those with which I compare) tends to affect negatively individual well being with the exception of cases and countries in which vertical mobility is very high and the improvement of wellbeing of peers raises the probability of my own improvement.²³

A second obvious caveat is that, even though relational life is fundamental for individual wellbeing, it does not automatically have positive effects for the society as a whole.²⁴ Phenomena such as amoral familism, corporatism or even mafia connections tell us that the interest of a group of individuals linked by close ties can be pursued at the expenses of the interest of third parties. Nonetheless, and this is what matters to our purpose, the reductionist individualist approach to the definition of individual utility which neglects the role of relational life is strongly rejected by empirical evidence.

To sum up, individuals donate time, money, find large part of their enjoyment and sense of life in cultivating relationships. Neglecting it can be even economically counterproductive since economic fertility crucially depends on the quality of interpersonal relationships in social dilemmas such as those represented in Trust Investment games or Prisoners' dilemmas which are part of everyday economic interactions. Such dilemmas tell us that – in presence of three factors such as asymmetric information, incomplete contracts and limits of civil justice – absence of trust, trustworthiness

²³ See results of SENIK (2004) in transition countries, JIANG *et al.* (2009) in urban China and BECCHETTI and SAVASTANO (2009) in Albania, among others.

²⁴ An interesting branch of the literature analyzes what is the social capital produced internally and externally by members of Olson (those mainly looking at the interests of members) and Putnam (those by which members mainly aim to provide benefits for third parties) organisations. Results show in general that members of such organisations exhibit higher trust and trustworthiness in public good games even though documenting some forms of "in-group bias" (DEGLI ANTONI and GRIMALDA 2011).

or team working cooperative attitudes make economic outcomes suboptimal from both an individual and an aggregate point of view.

3. HINTS FOR A NEW PARADIGM

Based on the evidence provided above on the vast violations to the purely self regarding preference paradigm we try to sketch the main features of a plausible alternative framework, consistent with the observed “stylized facts” of human behavior which we documented in the previous sections. In doing so we are aware that this represents the most difficult part of this paper. We however think that our effort can be regarded as a first step providing a good stimulus for further research in this direction.

Imagine a world in which individual preferences are represented by the following instantaneous utility functions

$$U_{it} = f(a^*[X_{is} + U_j](V_t), RG_{ij}(\min[R_i, R_j]), b^*X_{ic}) \quad (1.1)$$

$$U_{jt} = f(a^*[X_{is} + U_i](V_t), RG_{ij}(\min[R_i, R_j]), b^*X_{ic}) \quad (1.2)$$

subject to the following constraints

$$V_{it} = -c(X_{ic})V_{it-1} + I_t \quad (2.1)$$

$$M\dot{i} = p_c X_{ic} + p_s X_{is} \quad (2.2)$$

$$M_i = M_{oi} + wL_i \quad (2.3)$$

$$\bar{L} = L_{ik} + I_{i0} + R_{i0} \quad (2.4)$$

$$I_i = I_{oi} + I_{i0k}(L_{ik}) \quad (2.5)$$

$$R_i = R_{i0} + R_{i0k}(L_{ik}) \quad (2.6)$$

The utility functions (1.1 and 1.2) are made essentially by four components. The first part in square brackets identifies two components which positively affect utility only if the level of virtues (V) is high; the two are a stimulus good (X_{is}) and the utility of a counterpart (U_j). A third element is a relational good (RG)²⁵ whose quality depends on the minimum time invested (R) in it by two partners.²⁶ The fourth component is represented by

²⁵ For simplicity the relational good is a relationship between individual i and individual j but of course many relational goods (such as, for instance, club participation) are between a larger number of agents. The definition of relational goods as local public goods is provided in section 2.5.

²⁶ For the sake of simplicity we ignore here the gender problem. FLECHE *et al.* (2019) show that women who work more than their spouse feel less satisfied with relationships and family

a comfort good ($X_{i,c}$) which can be consumed also for low levels of virtue. Note that our assumption of $a > b$ implies that stimulus goods give higher contribution than comfort goods to individual wellbeing. For simplicity we assume that there is only one standard type of comfort, relational and stimulus goods while in the reality there are many of them. The comfort good is assumed to create addiction, thereby depleting the current stock of virtues and negatively affecting its law of motion in (2.1).

Note that the presence of relational goods (RG) creates a second indirect source of interdependence between utility functions. If the relational good is high (low) both individuals are happier (less happy) since the relational good is a shared (local public) good. This is a way of considering others different from the more traditional one of incorporating the utility function of the individual j in that of the individual i also considered in our specification.

Hence, our model depicts a paradoxical world where the highest quality goods can be consumed only with previous investment in virtues. Far from any moralistic consideration we may make the case of two individuals on the top of a snow capped mountain on a sunny day. The first has invested in learning how to ski and may therefore enjoy a superior good represented by skying down along the slope. The second has not and cannot consume the good. We may reasonably assume that he therefore ends up spending the entire day consuming comfort goods in a shop enjoying relatively lower satisfaction.

On the contrary, low quality comfort goods can always be consumed but they may create addiction leading to the depletion of accumulated virtues. A clear example of it is alcohol, drugs but also TV dependence. The more individuals consume this kind of goods, the more they deplete virtues and therefore get further from the possibility of consuming stimulus goods.²⁷

The two individuals considered in the model face the same six constraints. The first (2.1) is represented by the law of motion of virtues which is a typical capital accumulation equation in which, in any period, investment in virtues is added (I_t) and there is some depreciation of the previous-

life. This implies that culture and the unequal balance of family tasks may lead to change our assumption. More specifically, when living in such cultural environment women's utility from the family relational good may be lower than their time invested if they are the member of the couple investing less time in it.

²⁷ We do not go in depth on this point in the paper for sake of space but there is ample literature which evidences that consumption of what we consider comfort goods (ie. hours spent watching television) contribute negatively to life satisfaction. It is more intuitive to understand that comfort goods which produce heavier forms of dependence (ie. drug or alcohol addiction) do not impact positively on happiness (BRUNI and STANCA 2008).

ly accumulated stock of virtues (V_{t-1}) which is proportional to the amount of comfort goods consumed. Time subscripts are omitted from simplicity from the other five static constraints which follow. The second (2.2) is the standard budget constraint which establishes that comfort and stimulus goods may be bought up to the maximum amount of income (M) available.²⁸ In the third constraint (2.3) income is the sum of non labour (M_0) and labour income where labour income is the product of hourly wage (w) and hours worked (L). The fourth constraint (2.4) tells us that the amount of time available daily (\bar{L}) can be used working (L) investing in virtues (I) or in relational activities (LR). Finally, these three activities are however not mutually exclusive and each type of work can produce some amounts of investment in virtues or relational activities (2.5 and 2.6).

The model implies: i) rationality (individuals maximize their utility function subject to the given constraints) and preferentialist individualism which is however not fully self regarding (the utility function includes other regarding preferences and relational goods). It is in part objectivist since some arguments are common to all individuals.

It is easy to check without further analytical detail that the model also allows for the possibility of multiple equilibria. For high discount rates individuals may be trapped in an equilibrium of high consumption of comfort goods and low investment in virtues, which further deplete as far as individuals consume comfort goods and do not allow them to achieve superior goods. Such individuals are therefore bounded to low life satisfaction levels. For low discount rates individuals invest more in virtues and have therefore the possibility of achieving stimulus and relational goods and achieve higher levels of sympathy.

It can be easily verified that this type of model provides predictions which reject the dichotomy between purely self regarding happy individuals and less happy individuals bound to respect social norms. Its predictions are more consistent with evidence and choices described in sections 2.1-2.6. Individuals who invest enough to have access to stimulus goods are happier while those who remain trapped into low levels of virtue consume comfort goods and end up having lower life satisfaction levels.

Another likely implication of the model is that it provides another explanation for the coexistence of the Easterlin paradox (non increasing relationship between income and happiness at aggregate level) and the positive relationship between individual happiness and income. Beyond the relative income explanation (see Clark *et al.* 2008) our model says that deterioration

²⁸ The model can be slightly complicated if we assume that investment in virtues and in relational goods is not always without economic costs.

of relational goods and of the investment in stimulus good may be concurring drivers reconciling the Easterlin paradox with the positive happiness-income relationship at individual level.

4. CONCLUSIONS

Economics without a serious focus on non purely self regarding preferences and the quality of relationships is like physics which ignores the existence of the electron. Research on voluntary work, charitable donations, determinants of life satisfaction, ethical consumption and investment and lab experiments on human preferences produce evidence which is difficult to reconcile with the simplified paradigm of purely self regarding human preferences which has been the basis of economic modeling for ages.

A significant share of individuals donate time and money, trade off economic convenience with the satisfaction of contributing to an ethical cause and depart from purely self regarding rationality in lab experiments. This evidence should lead us to reject the standard paradigm in favour of a broader one which accounts for other regarding preference patterns (which may be specified as conditional or unconditional altruism, inequity aversion, reciprocity, etc.). Since such departures allow them to achieve superior personal and social outcomes in well known social dilemmas which are typical of economic life (trust games, prisoners' dilemmas and public good games), we should wonder whether the purely self regarding rationality is not an inferior form of rationality with respect to a socially richer team working attitude and whether people in real life are not more capable than theoreticians of grasping such superior rationality.²⁹ Last but not least, the empirical literature on life satisfaction has widely demonstrated that good relationships with other human beings are essential drivers of happiness.

Based on these considerations we must wonder whether, following also the intuitions of the classics (see introduction), it is time to create an alternative broadened paradigm which is capable of accommodating this empirical evidence. In the third section of the paper we outline some features of this new paradigm.

The paradigm consistent with the evidence provided in this paper must take into account that the majority of individuals have in some way the wellbeing of others in their utility functions (inequity aversion, altruism

²⁹ The paradox is that even game theorists have been demonstrated under certain condition not to follow standard Nash rationality but rather prefer (even in one shot simultaneous games) cooperative strategies which can lead to superior outcomes when facing social dilemmas (see for instance their behavior in Travellers' Games in the BECKER *et al.* paper (2005)).

pure or strategic, kindness or reciprocity) or, put on negative terms, do not have only self regarding arguments on their utility function. If this may be in part due to strategic reasons (I may be self regarding but I play social because I expect my counterpart to be social and I hope to get more by playing in this way) or for creating good relationships with others which we saw affect significantly life satisfaction, part of this non entirely self regarding attitude is also due to inequity aversion or pure altruism. At the same time, while acknowledging for other regarding behavior, we must also take into account that a share of individuals behave like homo economicus as shown in the experimental results we discuss in section 2.4.

This is why in our last section we sketch some features of a new “Aristotelean” anthropological paradigm in which individuals enjoy wellbeing of other individuals and relational goods in addition to two types of consumption goods. Going back to an old idea of Scitowsky (1976) we argue that the first type of the latter are a sort of *stimulus goods*, have stronger impact on life satisfaction but require investment in virtues in order to be enjoyed. The second type, on the contrary, are *comfort goods* and when we consume them we deplete our stock of virtues. These characteristics generate multiple equilibria. From initial conditions with a low level of virtue stimulus goods cannot be achieved, the individual consumes only comfort goods but in this way she further depletes her stock of virtues. This kind of individual ends up behaving like an homo economicus, has low quality relational goods and ends up being unhappy. On the other side, from high levels of virtue individuals enjoy stimulus goods, have good quality of relational life and behave differently from the homo economicus.

The crucial policy prediction of this model is that it is important to favour investment in virtues in order to stimulate social attitudes of individuals (which are also socially desirable from an economic point of view) or even to create frames which may foster individuals to switch from the individualistic to the cooperative attitude. The alternative paradigm helps us to find a way out from the paradox of a world populated only by purely selfish individuals where it is almost impossible to avoid conflicts of interests and find benevolent planners who fix rules which reconcile the pursuit of individual interest with social optimum. If a significant amount of individuals have a non negligible share of other regarding components, the latter can be considered natural antibodies which the society has in order to avoid disruptive or anarchic tendencies. Policies aimed at stimulating and reinforcing these antibodies and the law of motion of social responsibility may be extremely helpful for the pursuit of societal wellbeing and for the reduction of costs of top down institutional intervention.

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