

# ***Individual motivation, its nature, determinants and consequences for within group behavior***

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## ***Abstract***

The paper deals with evaluating the adequacy of the assumption that in economic transactions people are self-interested insofar as they are motivated solely by the concern of maximizing their own utility, and in particular with assessing how this assumption affects within-group behavior. Policy and incentive structures based on the assumption of exogenous and self-interested motivation can undermine other sources of motivation and have negative effects both on cooperative behavior and also on economic efficiency. The paper sketches the motivational assumption of *homo æconomicus*: in the classical formulation, in rational choice theory and in Becker's later work which introduces personal and social capital into the individual utility function. It then challenges the position that *homo æconomicus* contains an adequate characterization of human motivation for cooperative within-group behavior. It introduces alternative motivational behaviors: *philia* and altruism, identity and self-expression, moral rules, intrinsic motivation and social norms. It argues that motivations are complex and multiple; a single assumption of utility maximization is insufficient for policy purposes. As the individual is always a social being, how she behaves will be dependent on the social context in which she is acting. If motivations are endogenous, and if under certain conditions maximizing motivation displaces other sources of motivation, then these indirect effects, and their long term consequences for efficiency and equity, should be taken into account in framing economic policies.

***Key Words*** : Motivation, Rational Choice, Self-Interest, Cooperation

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## ***Individual motivation, its nature, determinants and consequences for within group behavior***

*“Adam Smith’s invisible hand may be invisible because, like the Emperor’s new clothes, it simply isn’t there; or if it is there, it is too palsied to be relied upon.”<sup>3</sup>*

*Early in the history of modern physics objection was raised to use of the concept of force, on the double ground that it is never open to direct observation and that it is not objective but animistic or anthropomorphic. It was (and is) pointed out that we observe or measure only the effects of forces and contended that it would be simpler and more candid to talk only about effects, i.e., equations of motion... The place of motive in economic choice presents a closely parallel problem.<sup>4</sup>*

*People vote in presidential elections. They give anonymously to public television stations and private charities. They donate bone marrow to strangers with leukemia. They endure great trouble and expense to see justice done, even when it will not undo the original injury. At great risk to themselves, they pull people from burning buildings, and jump into icy rivers to rescue people who are about to drown. Soldiers throw their bodies atop live grenades to save their comrades. Seen through the lens of the self-interest theory emphasized in current microeconomics textbooks, such behavior is the human equivalent of planets traveling in square orbits.<sup>5</sup>*

### ***I. Introduction: How to approach homo œconomicus***

To complain about *homo œconomicus*<sup>6</sup> is no novel undertaking. Many cast aspersions as to the truthfulness of his skeletal assumptions, his ability to mime human behavior. After all, one would not buy a new car if its crash tests enlisted an inflated plastic dummy – for the dummy’s ability to ‘bounce back’ is unlikely to be a good predictor of a human’s response to a similar circumstance! So too, these groups argue, *homo œconomicus* is not very realistic: he excludes the complex of motivations that people have – from cooperation to self-interest to altruism to attention-getting playfulness. He has no spouse or family or community or culture. For that matter, he has no emotions, no spontaneous impulses, no freedom, no intellectual fallibility and no weakness of will. So how can one trust an economic policy in which our behavior is predicted to follow the footprints of this solitary shadowy skeleton?

In bringing evidence to bear on the complexity and richness of human motivations, many have argued that *homo œconomicus* should be colored in – made more realistic, more intuitively plausible. In light of these repeated criticisms, the persistence of *homo œconomicus* among economists seems baffling. As Josh Billings put it, “It ain’t so much what folks don’t know as what they know that ain’t so.” The situation is made all the less satisfactory when eminent economists glibly disown their pet skeleton, admit his implausibility and his defects, yet still employ him. *Homo œconomicus* lives on, and his constituent assumptions must be reviewed carefully as they continue to form the basis of much of modern economics and its policy prescriptions.

This paper is concerned with evaluating the adequacy of the assumption that in economic transactions people are self-interested insofar as they are motivated solely to maximize their own utility, and in particular with assessing how this assumption affects within-group behavior. Our argument will not merely be that the self-interested assumptions of individual motivation are incomplete – a position to which Smith, Mill, Ricardo, Friedman

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<sup>3</sup> Stiglitz, 1991, p 5.

<sup>4</sup> Knight, 1944, p 305, quoted in Lewin, 1996, pp 1312-13.

<sup>5</sup> Frank, 1991, p xxiii.

<sup>6</sup> *Homo œconomicus* is here considered as someone who maximizes his satisfaction by fulfilling his preferences.

and others would have assented.<sup>7</sup> Nor will we merely be arguing that self-interest does not account for a good deal of behavior. Rather, our argument will be a bit more direct: the assumption that motivation is exogenous and can be assumed to be self-interested can be actively detrimental to economic activity. Policy and incentive structures based on the assumption of exogenous and self-interested motivation can undermine other sources of motivation and have negative effects both on cooperative behavior and also on economic efficiency. Our argument is thus not what ‘is the case’ about human nature – but rather about what is awry with the assumption of self-interest. In this paper we do not propose an alternative model of human motivation, but we do try to provide a constructive background about the variety of motivations since human motivation is never unique but always consists in a mixture of various motivations.

*Groups* refer to “entities in which individuals together undertake activities and collectively interface with the market.”<sup>8</sup> *Group behavior* refers to individual behavior which is reconciled with and furthers group objectives.

*Motivation* is that which tends to move people to act. This definition is broad and can encompass actions done to realize goals, actions done on the basis of personal principles or social norms, actions done out of emotion or out of self-expression or to please one’s colleagues. Yet the definition touches upon the reason that motivation is of interest to economists: they need to be able to predict how people will act;<sup>9</sup> and in certain cases they need to know how to create incentives so that people will act in the desired way. An accurate understanding of motivation will help on both counts.

When we say that motivation is assumed to be *exogenous* we mean that the determinants of motivation lie outside of and are not affected by the social or economic context and transactions. In contrast, if individual motivation itself can be affected by economic behavior, then it is *endogenous*.

This paper proceeds in three stages. We begin by sketching the motivational assumption of *homo æconomicus*: in the classical formulation, in rational choice theory and in Becker’s later work which introduces personal and social capital into the individual utility function. Using a careful form of argument that bears in mind the epistemological status of this model, we challenge the position that *homo æconomicus* contains an adequate characterization of human motivation for within-group behavior. We introduce alternative motivational behaviors: *philia* and altruism, identity and self-expression, moral rules, intrinsic motivation and social norms. We discuss some empirical studies and some evidence for the interaction between the various motivations. Finally, we consider the implications of moving towards an assumption of endogenous motivation, focusing on the implications for group behavior and policy advice.

This focus on the relationship between motivation and within group behavior excludes many interesting things. For example, different patterns of human motivations such as co-operation, rule-following, or altruism may be valuable for various reasons. They may be intrinsically valuable for the agent, as the ‘altruistic person’ may find direct fulfillment from expressions of generosity and kindness. They may also be intrinsically valuable to others, as the altruists’ co-workers may also value the workplace relationships that develop and the excellence of work that they produce together. Non-self-interested motivations may

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<sup>7</sup> “The relevant question to ask about the assumptions of the theory is not whether they are descriptively realistic, for they never are, but whether they are sufficiently good approximations for the purpose in hand. And this question can be answered only by seeing whether the theory works, which means whether it yields sufficiently accurate predictions.” Friedman, 1994, p 188.

<sup>8</sup> Heyer et al., 1999, p 2.

<sup>9</sup> For example, predicting the economic consequences of a land reform involves predicting what people will do in the face of new opportunities. With a better understanding of their values, their customs, of what motivates them, the direction of response might better be predicted.

be instrumentally valuable to individual ends. For example, a cooperative person may be promoted more quickly than another who is harder working or more clever, but uncooperative. These motivations may be instrumentally valuable to group ends, as cooperative or rule following behaviors may reduce transactions and enforcement costs, increase production, and help develop better processes. A cooperative work environment may encourage employees to generate suggestions for improving production processes. They may also be instrumentally valuable to ends of a different group: the co-operation among local pineapple pickers on a business owned by a multinational not only generates revenue for the producer, but also may carry on a cultural tradition or identity. While we recognize that these many facets of motivation exist, and some of the literature we will discuss does indeed study these different roles of individual motivation in society, we will focus only upon the relationship between assumptions regarding individual motivation, and the resulting within group behavior.

## ***II. The Motivation of Homo œconomicus***

The figure of *homo œconomicus* has been ascribed a motivation of self-interest, whose definition has several elements. Certain elements might be associated more strongly with one historical period than another, and we describe them in sequence, although earlier concepts recur in later periods.

### ***II.1 Self-interest***

Self-interest as a factor in explaining economic phenomena was mentioned in Adam Smith's *Wealth of Nations*, where Smith identified self-interest as the motivation governing a large number of market exchange transactions between strangers.<sup>10</sup>

Oakley argues convincingly that Smith did not propose the model of classical economic man, in which all economic decisions were consequences of a perfectly egoistic and maximizing self-interested individual. Smith clearly presumed that other moral sentiments were operative such as prudence and sympathy.<sup>11</sup> Rather, that model was constructed in the 19<sup>th</sup> century by writers who endeavored "to promote political economy as a science in the definite sense that applied to the physical sciences."<sup>12</sup>

One of those who systematized self-interest as being a necessary and sufficient assumption of economic motivation was John Stuart Mill. Mill emphasized that economics "is concerned with [the human agent] solely as a being who desires to possess wealth, and who is capable of judging of the comparative efficacy of means for obtaining that end. It predicts only such of the phenomena of the social state as take place in consequence of the pursuit of wealth." Mill focused the assumption of human motivation on self-interest so as to abstract from "every other human passion or motive" with the exception of "antagonizing principles to the desire of wealth, namely, aversion to labor, and desire of the present enjoyment of costly indulgences."<sup>13</sup> The assumption of self-interest is equivalent to the assumption that every human action is undertaken in pursuit of wealth: "there is, perhaps, no action of a man's life in which he is neither under the immediate nor under the remote influence of any impulse but

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<sup>10</sup> "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves not to their humanity but to their self love." *Wealth of Nations* 1776. Book I Chapter II. See Oakley, 1994, Preface, and p 56f; Sen, 1987.

<sup>11</sup> See Oostendorp, 1995; Werhane, 1991 on the misinterpretations of Smith's invisible hand. They argue that the well-known butcher passage should be read in the sense of the impartial nature of market relationships. Smith did not see the market as a mechanism driven by self-interest and profit, but a fair co-operation mechanism, which through its impartiality, did not favor one exchange partner.

<sup>12</sup> Oakley, 1994, p 123; see Ch 6 (Human agency and Smith's methodology) and Ch 7 (Economic man and the formation of classical methodology).

<sup>13</sup> 'On the definition of political economy; and on the method of investigation proper to it' (DPE), Mill, 1967, p 321-2, quoted Oakley, 1994, p 153.

the mere desire of wealth.”<sup>14</sup> Mill introduced this principle as part of his wider project of re-establishing political economy on scientific grounds,<sup>15</sup> which required the use of simplifying assumptions.

Yet accompanying Mill’s pencil sketches of motivation was an awareness that his assumptions were proposed and sustained not because they build a true account of human nature but rather because they are useful for analyzing human behavior in the particular territory covered by economics. Mill wrote of the self-interest assumption that no economist should be “so absurd as to suppose that mankind are really thus constituted.”<sup>16</sup>

This assumption was used subsequently by the utilitarians such as Bentham, Jevons, Edgeworth, Walras, and Cournot, for whom the maximand became utility not wealth. In principle, the switch to utility might have involved a major change, since utility can be interpreted to include many elements, including the well-being of others. In practice, the change was more one of nomenclature than of substance.

These sketches came to inform the study of economic facts. First, *homo æconomicus* was constructed on the basis of real elements of human nature, as a ‘double’ – much as a sketch of a skeleton does depict real elements of the human body. Then economists came to use *homo æconomicus* independently, and in this way breathed an autonomous existence into this abstracted set of assumptions.<sup>17</sup> This construction procedure is problematic not because of the abstraction so operated but because “the *homo æconomicus*, which was constructed as an abstraction for laboratory use as a partial copy of the real person, comes back as the integral copy of the true human nature.”<sup>18</sup> We will return to that point presently.

What are the characteristics of the classical model of individual motivation? First, the assumption that *homo æconomicus* is motivated by self-interest in his economic actions presumes that motivation is exogenous to economic exchange – i.e. it is not affected by the exchange. Second, the motivation was initially related to self-interest considered as a modal behavior, that is, one could assume that most of the time people really *did* transact economic exchanges in a way that would maximize their own gain. The third element was utility considered variously as a psychological unit of pleasure (Bentham, for whom maximizing pleasure and avoiding pain was assumed to be the guiding principles of human nature) and as wealth (Mill, for whom wealth was assumed to be the only component of utility).

Is the self-interested assumption – comprised of these three characteristics – adequate as to what human behavior is motivated by? Before bringing evidence to bear in a structured manner – which is the topic of the following sections – one can note some general discrepancies between the classical assumption of self-interest and its current usage. Sen argues that the assumption of self-interest that Smith and Mill had in mind was limited to commercial relations, and primarily economic exchange.<sup>19</sup> But economics does not deal only with *exchange* but also with processes of *production* and *distribution*. And looking at the

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<sup>14</sup> DPE, Mill, 1967, p 322, quoted Oakley, 1994, p 153.

<sup>15</sup> Mill’s definition of political economy at an early stage was: ‘the science which treats of the production and distribution of wealth, so far as they depend upon the laws of human nature’ Mill, DPE, p 318, quoted in Oakley, 1994, p 150.

<sup>16</sup> DPE, Mill, 1967, p 322, quoted in Oakley, 1994, p 153. In fact, Mill wrote that ‘human actions are never ruled by any one motive with such an absolute sway that there is no room for the influence of any other’, *Ibid*.

<sup>17</sup> Demeulenaere, 1996. He argues that this method was initiated by Pareto: “A physical material consists of chemical material, the mechanical material, the geometric material, and so on; the real human being consists of the *homo æconomicus*, *homo ethicus*, *homo religiosus*, and so on. In sum, the consideration of those different materials, those different humans, amounts to the consideration of the distinctive properties of a real material, of that real human, and this only tends to cut into pieces the material to study.” Pareto, 1868, 175 – *Manuel d’économie politique, Tom 7 of complete works*, quoted in Demeulenaere, 1996, p 175.

<sup>18</sup> Dembinski, 1998, p 240.

<sup>19</sup> Sen, 1994a, 1997a.

sphere of production, an assumption of self-interest is difficult to sustain if we take into account that production “requires a team spirit and collaborative work on the factory floor.”<sup>20</sup> Furthermore, even in the sphere of economic exchange self-interest may be insufficient to bring about an efficient outcome: “the desire to transact is not the only thing that makes exchanges successful... Confidence in the reliability of the offers and promises made by others helps the efficiency of exchanges in a way persistent self-seeking need not”.<sup>21</sup> In the case of Smith’s baker, the buyer also trusts that the bread for his dinner is not poisoned or stale, but rather nutritious and fresh. “To rely just on legal recourse to have promises honored can make business transactions extremely expensive and painfully slow.”<sup>22</sup>

## ***II.2 Revealed Preferences and Rational Choice Theory***

One problem with the utilitarian theory as it developed was the assumption that people had a complete utility map. This clearly unrealistic assumption was addressed by Samuelson, who in 1938 proposed that the ‘interests’ of economic man be recognized not by introspection or discussion but rather by observing preferences.<sup>23</sup> *Homo æconomicus* now maximizes preference satisfaction. While this appears much more acceptable than maximizing based on an introspective calculation, two serious problems remain. First, revealed preference theory continues to assume exogeneity of preferences, a problem which also applied, of course, to the earlier approach. Secondly, it assumes that when people make choices they exhibit their own individualistic preferences and are not behaving as social people, i.e. making choices in part to please, offend, or cooperate with others.

The culmination of *homo æconomicus* is expressed in rational choice theory, as, for example, presented by Becker. According to this theory individuals behave in such a way that they “maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets.”<sup>24</sup>

But how meaningful is this account of human behavior? One can well question whether it is more than a tautology, and whether the assumption of self-interest has survived in any meaningful form in rational choice theory. Clearly the restatement of agents’ motivation was designed to avoid restricting human motivation to self-interest, if we mean by self-interest concern only for one’s own well-being narrowly conceived.<sup>25</sup> Becker like Smith and Mill before him recognizes that people have multiple motives. So he articulates the broad consensus of rational choice theorists when he argues (in both early and current work) that the omnivorous assumption of self-interest can cover actions undertaken on the basis of any motivation at all: “The economic approach I refer to does not assume that individuals are motivated solely by selfishness or material gain. It is a method of analysis, not an assumption about particular motivation. Behavior is driven by a much richer set of values and preferences than narrow self-interest.[...] The analysis assumes that individuals maximize welfare as they conceive it, whether they be selfish, altruistic, loyal, spiteful, or masochistic”.<sup>26</sup>

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<sup>20</sup> Sen, 1994a, p 15; Ostrom, 1998.

<sup>21</sup> Sen, 1994a, p 15.

<sup>22</sup> Sen 1994a, p 16. Trust has been recognized by institutional economics as a major instrument to bring transaction costs down.

<sup>23</sup> Samuelson is a convenient marker but was by no means the first or only person to propose this. Lewin points out for example that ‘Pareto implies [that] economics [can] be studied leaving aside the concept of motives.’, Lewin, 1996, p 1309. See Sen 1994

<sup>24</sup> Becker, 1976, p 14. See also Sen, 1994b; Hogarth and Reder, 1987.

<sup>25</sup> “A self-interested person [narrowly conceived] will never prefer x to y if he or she believes that y is better for himself or herself. If nothing but self-interest affects his or her preferences then he or she prefers x to y if and only if he or she believes that x is strictly better for himself or herself than is y.” Hausman, 1994, p 260.

<sup>26</sup> Becker, 1993, p 385. For applications of that approach, see Becker, 1976, 1981.

Perhaps it would seem that the ‘self-interest’ contribution to the *homo æconomicus* skeleton has become non-controversial because it no more implies ‘self-interest’ than Smith did. However, closer scrutiny of the *method* of rational choice theory shows that this is not the case; the updated assumption of self-interest can only incorporate a subset of human motivations.<sup>27</sup> Let us examine why it is not so.

Rational choice theory views rationality as “intelligently maximizing a payoff function (the pay-off function being a real-valued representation of the person’s preferences over the outcomes), using all the available instruments, subject to feasibility”.<sup>28</sup> So at first glance the account can indeed go along with any actual motivations.<sup>29</sup> It has evaded the earlier problematic assumption that self-interest was a modal behavior in economic exchange, for example. Yet it does not follow that *homo æconomicus Jr.* is agnostic about human behavior. Rather there are manifold assumptions such as: that people solely act as to fulfill their preferences (welfarism), that their preferences are exogenous, and that people value outcomes in any time period insofar as these outcomes have consequences on the present value of their utility (consequentialism). Outcomes may also reflect other states of affairs, and others’ well-being, but they are significant only insofar as they impinge on the chooser’s own utility. A particularly critical and contentious assumption is that preference-based choice is internally consistent. Internal consistency of choice “refers to relations of apparent ‘agreement’ or ‘coherence’ that are required to hold between what are chosen from different sets, i.e., different parts of the choice function”.<sup>30</sup> Sen has convincingly illustrated that these assumptions lead to inaccurate explanations of actual human behavior – such as interpreting choices per se, without considering the context of the choice menu.<sup>31</sup>

Each component assumption of *homo æconomicus* has come under scrutiny and discussion. For example, the central term “preference ordering” represents too many different things: “A person is given one preference ordering, which is supposed to reflect his interests, to represent his welfare, to summarize his idea of what should be done, to describe his actual choices and behavior. Can one preference ordering do all these things?”.<sup>32</sup> A substantial set of arguments query the relationship between revealed preferences and individual interest – for example, a young man working in a family farm may have chosen to work home because he may not know that there is work he would prefer two farms away; he may prefer instead to go to school but have to work in order to contribute to the family income; he may have wanted to work on the farm several years ago and has since changed his mind because new opportunities arose, so is biding his time until he can move on; he may have been entirely indifferent between working at home and going to the city, but having to choose one, randomly stayed home.<sup>33</sup> As these simple scenarios show, to defend each of these different scenario in terms of the young man’s self-interest requires rather elaborate and constantly-shifting accounts of

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<sup>27</sup> For other criticisms see for example Nussbaum, 1997; Sen 1973, 1993; Hogarth and Reder, 1987; Goldstein and Hogarth, 1997; Lewin, 1996.

<sup>28</sup> Sen, 1994b, p 384.

<sup>29</sup> “If you are observed to choose x rejecting y, you are declared to have revealed a preference for x over y... With this set of definitions, you can hardly escape maximizing your own utility, except through inconsistency.[...] But if you are consistent, no matter whether you are an egoist, or an altruistic, or a class-conscious militant, you will appear to be maximizing your own utility in this enchanted world of definition.” Sen, 1982, pp 88-89.

<sup>30</sup> Sen, 1993, p 20.

<sup>31</sup> Sen 1973, 1993, 1997b.

<sup>32</sup> Sen, 1982, p99.

<sup>33</sup> Sen gives a balanced evaluation of ‘Individual Preference as the Basis of Social Choice’ in Arrow, Sen, and Suzumura, 1997, 15ff. On the link between individual preferences and well-being, see Sen, 1982. The difficulties in observing preferences has been long recognized, see Houthakker, 1961.

what his self-interest actually is. The response to this has often been to lapse into defining self-interest in simple dollar terms, or in terms of a limited subset of variables.

A body of empirical and psychological studies have tested whether an individual does in fact choose what would be 'rational' for him or her to choose if he or she were concerned to maximize material well-being under a budget constraint, and have found that the assumption does not have consistent predictive value.<sup>34</sup>

In sum, the motivational assumption of revealed preference theory can be interpreted as tautological.<sup>35</sup> But when it is introduced into welfare theorems, serious problems arise. Empirically, it seems that narrow self-interest cannot explain many actions. Nor is the assumption of consistency borne out empirically. Fundamental problems arise because of the assumption of exogeneity of preferences and the isolation of individual choice, so that each person is treated as a maximizing island and not a social being.

### ***II.3 Endogenous Preferences and Social capital***

*Homo æconomicus* had a growing spurt when its artists partially endogenized preferences. Two leading design artists were Coleman and Becker at the University of Chicago. Coleman proposed a conception of social capital in which individuals with access to higher levels of social capital were better able to attain their goals (i.e. to maximize utility).<sup>36</sup> According to Coleman, while preferences remain individualistic and exogenously determined, the outcomes from any set of actions are partly dependent on the richness of social capital. Social capital refers to concrete personal relations and networks of relations generating trust, creating and enforcing norms. It is seen as something that "facilitates certain actions of individuals who are within a social structure.[...], and that makes possible the achievement of certain ends that would not be attainable in its absence."<sup>37</sup>

Becker's 1996 book *Accounting for Tastes* extends the revealed preference approach to deal with "the effects of experiences and social forces" that is, "to include endogenous preferences".<sup>38</sup> He does this by incorporating personal and social capital in the individual utility function. At time  $t$ , utility is a function of these stocks as well as of goods:

$$U = U(x, y, z, P, S)$$

U	= utility
x,y,z	= goods
P	= personal capital stocks
S	= social capital stocks

*Personal capital* is viewed as to include the individual's past and personal history. It refers to cumulative life experiences which help to determine current preferences. For example, if in her childhood, the individual was forced to eat something everyday, she might have a negative preference towards that food. Becker believes that "habitual behavior permeates most aspects of life."<sup>39</sup>

In contrast to personal capital, social capital cannot be unilaterally built up by an individual but rather "incorporates the influence of past actions by peers and others in an

<sup>34</sup> See Tversky and Kahneman, 1981; Frank 1991; Hargreaves-Heap, 1989; Hogarth and Reder, 1987; Thaler, 1980.

<sup>35</sup> "The consumer is said to maximize utility, and utility is defined as that which the consumer attempts to maximize. [...] The statement that individuals maximize their utility is anything but a truism." Wiggins, 1980, p 260.

<sup>36</sup> The concept of social capital shows many different interpretations. For a review of the different interpretations in the economics and sociology literature, see Fine 1999a,b; Harris and De Renzio, 1997; De Renzio, 1997.

<sup>37</sup> Coleman, 1990, p 302.

<sup>38</sup> Becker, 1996, p 22; see also Chapter 11.4.

<sup>39</sup> Frey, 1997. Becker, 1996, p 9.

individual's social network and control system."<sup>40</sup> It includes peer pressure, and guidelines for achieving social acceptance and recognition. Becker defines social capital as " $S^i_{t+1} = X_i + (1 - d_s)S^i_t$  where  $d_s$  is the depreciation rate of social capital and  $X_i (= \sum X_{ij})$  is the effect of choices by the  $j$  members of  $i$ 's network on his social capital."<sup>41</sup> Becker points out that while individual influence on social capital is very small (if  $j$  is large), people can to some extent choose social networks that raise their utility. Also, Becker argues that social capital can change much more rapidly than culture if all members of a network face the same exogenous change. For example, after a rise in petrol prices, people might tend to prefer public transportation to their private car. If the upper class begins to take public transportation or do car-pooling, they might have a mimetic influence on their peers. Such a change in social capital can happen more quickly than a change towards a more environmentally-friendly culture.

In Becker's explanation of these personal and social capital stocks, it becomes apparent that these include patterns of human interaction and choice-making which in other models would be referred to as human motivation. Motivation as such is not analyzed by Becker, who "retains the assumption that individuals behave so as to maximize utility".<sup>42</sup> He describes norms of reciprocity, trust, loyalty, cooperation either as habitual behavior that individuals cultivate as part of their personal capital and which influences their utility, or as behavior which increases one's social capital. In both cases,  $P$  and  $S$  act as "constraints that operate through preferences" but do not independently influence behavior.<sup>43</sup> That is, in contrast to psychologists who emphasize the cognitive limitations to rationality,<sup>44</sup> Becker still assumes that individuals "make forward-looking, maximizing and consistent choices".<sup>45</sup>

Although Becker's schema provides a useful way of classifying influences over individual choices, by adding personal and social capital to preferences, and provides an acknowledged increase in explanatory power for phenomena such as violence and addiction, it still 'values' these contingently insofar as they increase the individual's utility function. In particular, it appears that the preference function, determining the nature of the individual's utility function is exogenous and individualistic, even though social and personal capital are now included.

Moreover, it ignores the dynamic interaction between different motivations. Becker's work cannot for example predict that a child who mows the lawn might cease to do it freely once his parents start to pay him. This what Frey calls the "crowding out effect": (monetary) incentives that appeal to self-interest narrowly conceived may crowd out intrinsic motivation, or the motivation to do something for its own sake.<sup>46</sup> It also does not treat the human experience of conflict or even sacrifice. If the partner of a man with a debilitating long term condition cares for him faithfully, foregoing exciting moves and career possibilities, and foregoing her own needs for friendship and support as the disease progresses, Becker's schema would recognize that her utility function had a large weighting for the personal capital value of 'loyalty'. So in calm and even terms, the rational choice theory would conclude that during the twenty years of nursing the woman had maximized her utility. It does not allow for counter-preferential choice, when, as in the present case perhaps, the agent acts on

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<sup>40</sup> Becker, 1996, p 12.

<sup>41</sup> Becker, 1996, p 12.

<sup>42</sup> Becker, 1996, p 4.

<sup>43</sup> Becker, 1996, p 22.

<sup>44</sup> Simon, 1982.

<sup>45</sup> Becker, 1996, p 23.

<sup>46</sup> Frey, 1997. See also Frey and Oberholzer-Gee, 1997. Their study shows that the willingness to accept a socially desirable but locally unwanted project (namely the acceptance of a nuclear waste repository) highly declines after monetary compensation is offered.

principle *to the detriment* of her own utility and self-interest. Becker's formulation still does not allow the individual to 'sacrifice' her utility or, as in the case of addictions, to make a mistake about how best to maximize long term utility.

The first section argued that the assumption of self-interest, and its downstream assumptions of maximizing behavior in various forms of rational choice theory, do not produce a *homo æconomicus* that encompasses or explains the range of actual behavior. Can a consideration of alternative patterns of human motivation take us any further? We will argue that yes, it will, because on the one hand there are significant motivations that Becker's model cannot take into account, and on the other hand there are interactions among these motivations.

### ***III. Sympathy, Commitment and Intrinsic Motivation***

Before launching into a discussion of the alternative accounts of human motivation let us consider the issue from a bit upstream, at the junction between motivational assumptions and rational choice theory. In a seminal paper entitled 'Rational Fools', Sen sets out to inquire how the neoclassical theory could manage if people were not concerned uniquely with their own self-interest narrowly defined. He defines two grounds of action in which a consideration for others' welfare enters: sympathy and commitment.

In *sympathy*, concern for others directly affects one's own welfare. Hence it may be conceived of as a certain type of egoism, because if the other person's pain is reduced, the agent's own welfare is improved. Whereas in earlier forms of revealed preference, sympathy-based behavior was considered an externality, Sen showed that it could be incorporated into the present models without much difficulty, as Gary Becker's work has indeed done.<sup>47</sup>

A *commitment*, however, does not necessarily affect one's own welfare at all, but does affect one's subsequent action. One's choice may or may not in fact increase one's own welfare, but in either case the choice is not *motivated by* one's own-welfare considerations at all. It may be motivated by altruism, such as when one's concern for an elderly neighbor means that one buys vegetables for her every week even when the money spent sometimes deprives one's own family of tasty treats. Or one acts out of one's convictions (justice, honesty), or even a thirst for revenge (non-self-interested motivations need not be benign<sup>48</sup>). Commitment is a counterpreferential choice, "destroying the crucial assumption that a chosen alternative must be better than (or at least as good as) the others for the person choosing it".<sup>49</sup> Because it "drives a wedge between personal choice and personal welfare, and much of traditional economic theory relies on the identity of the two",<sup>50</sup> commitment-based behavior would require a reformulation of models in order to incorporate it.

Sen argues in his seminal paper and subsequently, that commitment, or intrinsically motivated behavior, is significant for several reasons. First, while it may be exhibited only rarely in certain types of economic interaction, such as Smithian exchange, it may be of greater importance to achieving good welfare outcomes relating for example to public goods (roads, street lights, parks, military), and to free-rider problems. Clearly some forms of commitment are highly valued in the labor market for economic reasons because it decreases monitoring and enforcement costs and increases outputs (hence the surge in business

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<sup>47</sup> Becker, 1974, 1981, 1993, 1996. A well-known example of how, under certain conditions, preferences of the altruist and the selfish might converge is the 'rotten kid theorem'.

<sup>48</sup> Sen, 1997a.

<sup>49</sup> Sen, 1982, p 92.

<sup>50</sup> Sen, 1982, p 94.

strategies for increasing worker morale, company ethos, and so on).<sup>51</sup> There are also human reasons for appreciating alternative motivations – fulfilling work, relationships, status, and creative expression have strong correlations with human happiness and life satisfaction.<sup>52</sup> Yet the traditional utilitarian view of economic behavior cannot coherently incorporate these motivations.

Sen is not unique in separating calculating from noncalculating motivations, and it can be fruitful to join his work to a roughly parallel avenue of inquiry. Psychologists as well as economists interested in behavioral motives have studied the motivations that come *from within* a person. One “is said to be *intrinsically motivated* to perform an activity when one receives no apparent reward except the activity itself.”<sup>53</sup> Intrinsically motivated activities are those “that are spontaneously initiated and that people subjectively experience as enjoyable”.<sup>54</sup> For example, the activity of gardening is said to be intrinsically motivated if the motivation is the enjoyment of the activity itself, without regard for the neighbor’s compliments or the anticipated personal pleasure in contemplating a beautiful garden or the ensuing vegetables.<sup>55</sup> Though an important source of economic behavior, intrinsic motivation is also fragile, because is highly likely to be undermined by financial incentives, as we will later discuss.<sup>56</sup>

In contrast, extrinsically motivated activity is done instrumentally, for the sake of some other reward or satisfaction. *Homo oeconomicus*, in all forms, is assumed to act on the basis of ‘calculations’ of how activities affect his utility function. This utterly extrinsic account of behavior excludes the possibility of acting simply for the sake of acting – because the act is valuable.

Motivations can then be classified into commitments<sup>57</sup> governed by internal incentives, that is “intrinsic motivations that people have to perform well in a task, the source of which can have various origins including, for example, a need to exhibit mastery, pride, or a wish to impress others,”<sup>58</sup> and those governed by external incentives, that is, “explicit rewards, such as money, that depend on performance”.<sup>59</sup>

The next sections describe several kinds of intrinsic motivation which cannot be entirely reduced to self-interest. All of them can be thought of as kinds of commitment, or intrinsic motivation, in which *something else* besides one’s own welfare motivates the action – be it *philia* or justice or doing a good job. The different kinds of motivation refer to the different reasons – the different *something elses* – that can motivate action. The goal of these sections is not merely to suggest that human beings in fact have multiple motives but to suggest that considering these motivations will bring into focus the problem with the self-interest assumption for behavior within groups.

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<sup>51</sup> See Kaufman, 1999 for a review of the psychological basis of rational choice in labor economics.

<sup>52</sup> Lane, 1991; Frey, 1999. See also the November 1997 issue of the *Economic Journal* (107) which discussed the controversy about Economics and Happiness.

<sup>53</sup> Deci, 1971, p 105 (italic are ours) cited in Frey, 1997, p 13.

<sup>54</sup> Enzle et al., 1991, p 468.

<sup>55</sup> Intrinsic motivation has received a lot of attention in labor economics, where it has been recognized that a worker performed her job not as much as for wage as for doing the job for its own sake. See for example Kaufmann, 1999; Lane, 1991; Frey, 1997; Frank, 1991; Csikszentmihalyi, 1997.

<sup>56</sup> Kohn, 1993; Deci and Ryan, 1985; Frey, 1997.

<sup>57</sup> In using this term, we are broadening it somewhat from Sen’s early usage, while still only including within it those motivations that can support counterpreferential choice.

<sup>58</sup> For a review of different forms of intrinsic motivation, see Deci & Ryan, 1985.

<sup>59</sup> Goldstein & Hogarth, 1997, p 244.

### III.1 *Philia and Altruism*

One may be motivated to act because of one's relationship or affiliation with another person. Affiliation – from the Greek *philia* – refers to the ability to communicate with others, to form associations and to organize politically. In Aristotle's political thought, *philia* is the core of living together in society. *Philia* expresses any sense of affection, of belonging to others, of communication with others, whether spontaneous or reflected, due to circumstances or to free choice. It can mean friendship, love, benevolence, regard, charity or philanthropy. *Philia* is the social bond that maintains unity among citizens of the same city, among companions of a group, among associates in a business.<sup>60</sup> Aristotle argues that affiliation, or the capacity human beings have to associate with one another, to form ties, is intrinsically valuable, and a part of human fulfillment or welfare broadly conceived. He argues that it is also the precondition for group existence. Upon this is founded *koinônia* – any community undertaking action or pursuing a common interest together. And upon both *philia* and *koinônia* is founded the supreme form of political life, the *polis*, whose function consists in providing its citizens the opportunities for them to live a good life.

*Philia* can be a motive of economic action. One paradigmatic example of this is altruism,<sup>61</sup> when an action is done 'for the good of the other' independently of concern for the impact that action will have, positively or negatively, on one's own well-being. If in a cycle shop a kind elderly man raised the seat of one's bicycle for no charge. The shopkeeper did so out of good will – never asking if that person lived around there and might frequent his shop again.

While this may sound quite an esoteric motivation it need not be. For example, studies of intrinsic motivation in employment situations find that one source of motivation and on the job is the relationships with co-workers, not in the sense of wanting to please them but in the sense of working together as a team, and relating well to one another.<sup>62</sup> *Philia* may also be one facet of cooperative behavior that also is in one's self-interest. So regard for other people, taken as ends in themselves, may motivate or partially motivate a range of economic actions.

### III.2 *Identity or Self-Expression*

Another important kind of motivation which has no external source is the behavior that is undertaken to express some form of identity, that is, how a person sees herself. For example, what motivates the singing of a national anthem or the rising of a national flag may be the expression of a national identity, of belongingness to a common group, a common nation: "Community, nationality, class, race, sex, union membership, revolutionary solidarity, all provide identities that can be, depending on the context, crucial to our view of ourselves, and thus to the way we view our welfare, goals, or behavioral obligations."<sup>63</sup> Identity, as the reflection of a person's character traits (personal dispositions such as friendliness or integrity, or social-role identity as being a professor or the daughter of someone, or socially defined group identity such as ethnicity or gender), affect actions in many ways. It affects what is

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<sup>60</sup> Aristotle, *Ethique à Nicomaque*, transl. J. Tricot, librairie Vrin: Paris, 1994, p 380.

<sup>61</sup> Lane 1991, Kreps 1997. However, *philia* need not be associated with altruism. In Aristotelian ethics, *philia* means a natural inclination every human being expresses towards one another. That natural inclination can take three forms, or have three ends: advantage, pleasure and 'the person for her own sake'. The only virtuous *philia* was the one that had the person for her own sake as an end, what we would qualify today 'altruism'. Yet, what is common to all three forms, forms, is that the relationship is characterized by mutual standards of obligations. Even the advantage *philia*, in contrast to self-interest, includes something that is beyond individuals and that influences them, namely the norms that arose from the relationship.

<sup>62</sup> Lane, 1991; Kreps, 1997. Considerations of fairness regarding the wage of others – fairness regarding the wage of others – which may in part reflect the affiliation between workers and employers, and in part norms of reciprocity and fairness – might be very influential even in competitive markets, see Fehr *et al.*, 1998, p 326.

<sup>63</sup> Sen, 1985, p 348. See also Sen, 1999. Of course, the same action can be undertaken for different motives. A government official may order the singing of an anthem because it *will* serve her self-interest, by reminding people of their national allegiance and so preparing them to listen receptively to her call for increased taxes.

salient to an agent; it directs the formation of habits; it affects beliefs (for example, a person's group or role identity can often provide the best explanation of her holding certain beliefs, and acting in consequence).<sup>64</sup> Identity is a central aspect of human behavior in the sense that our actions express things about ourselves and the groups to whom we belong.<sup>65</sup> Behavior is communicative and is often an expression of identity. Our behavior and actions "express our ideas about what is worthy in our selves, and by extension the sense which we make of the world. Action is no longer a means to a given end, but is more an activity which is its own end".<sup>66</sup>

Identity is not to be associated with socially constructed rules that determine how different types of people should behave. Identity cannot be reduced to prescriptions or norms guiding what actions are appropriate or not, because identity-driven behavior does not suggest a fear of sanction as norm-guided behavior does.<sup>67</sup> Following a set of prescriptions *reinforces* an identity. For example, prescriptions with regard to what constitute good table manners may build up an aristocratic image among one's table companions and so might be done out of a motive of conformity or pleasing others. But if the aristocrat continues to use good table manners while travelling alone with servants in the Indian desert, she acts out of the motive of identity that cannot be accounted for in terms of prescriptions. Again, she is not driven by the fear of sanction of what should or should not be done (who will know), but is driven by the desire to express what she is.

Identity may also be quite an important factor in consumption patterns – an insight used far more often in the advertising industry than by economists. Consumers consume to express their identity (or to express a desire to be associated with a particular group identity, such as in response to an advertisement). This pattern is not limited to consumer societies: Kurien relates that the consumption behavior of migrants in three distinct Indian villages is guided by the culture and symbolic dimension of their society.<sup>68</sup> Such behavior has been noted in other anthropological studies. DiMaggio observes that "economic goods are consumed for what they say about their consumers to themselves and to others as inputs into the production of social relations and identities."<sup>69</sup>

### ***III.3 Moral Rules and Virtues***

A person's motivation may also reflect none other than his or her inclination to 'do the right thing'. There are different ethical models one can use – evaluating the consequences of an action, awaiting the voice of God, acting upon emotions so as to maintain an inner equilibrium, or acting in accordance with rules or virtues (which can also be thought of as habits built up by following rules such as to act justly or kindly or with gentleness). We discuss only the last.

Persons who learn and choose to follow rules do not evaluate their actions on a case by case basis, but rather compare alternative behavioral patterns and select rules upon which future actions will be based. The central concept of rule-following behavior is that "actors do not respond to particular situations as unique events but form categories of situation which they perceive as similar."<sup>70</sup> Insofar as rule-following is an intrinsic behavior, however, these

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<sup>64</sup> See Flanagan and Rorty, 1990.

<sup>65</sup> Monroe, 1996, cites the example of choice between using Word, E-mail or chess in the computer: she will choose Word as a writer, E-mail as an academic that wants to communicate with other scholars, chess as a mother that plays with her children. See also Badhwar, 1993, on how altruistic behavior can be an expression of a self-affirming motivation.

<sup>66</sup> Hargreaves-Heap, 1989, p 5.

<sup>67</sup> See Akerlof and Kranton, 1998, for a conception of identity associated to prescriptions-following.

<sup>68</sup> Kurien, 1994. For the link between culture and economy, see Di Maggio, 1994.

<sup>69</sup> Di Maggio, 1991, p 133, quoted in Kurien, 1994.

<sup>70</sup> Maki et al., 1993, p 176.

rules will be adhered to independently, again, of their affect on an individual's own interest. For example, in a certain context there may be social pressures to take bribes; it may be necessary in order to bring income levels up to subsistence; honest behavior may be viewed with suspicion, and not rewarded with job promotions. And yet a doggedly honest person may still refuse to take bribes, at considerable personal and professional cost.

This is not to say that *all* rule-following behavior is even partially morally motivated. Rule-following is a matter of behaving similarly in similar circumstances. There is no necessary motivational assumption behind it,<sup>71</sup> and persons might choose rules in accordance with self-interest (rule-consequentialism) or even with morality perceived as an efficient strategy rather than as an intrinsically valuable one. Vanberg argues that behavior (which reflects motivations) is a product of formal, informal and internal (conscience-led) incentives and sanctions, but also of “intangible intra-personal determinants of choice” as societies enforce one or another norm.<sup>72</sup> However there are some instances in which moral or ethical rules are followed for their own sake, and this comprises a distinct category of intrinsic motivation. Rules cannot be reduced to norm-guided behavior because rules do not involve the fear of sanction that characterizes breaking a norm, as we will see in the next subsection.

### ***III.4 Social norms and the motivation to please others***

There is one other significant factor which ‘tends to move people to act’, which is as dear to sociologists as utility is to economists, and this is motivation to be well-regarded, to have a good name, to fit into society. Its passive form is merely the impression society leaves on a person's behavior; at other times it may take the form of an active motivation, in which an action is done for an extrinsic reason, namely to please others or avoid social sanctions (she waters her garden in order to be kindly regarded by her neighbors).

Durkheim pioneered a line of objection to rational choice theory which continues to this day. He complained that the individualist, maximizing characterization of individuals in economics is an inaccurate description of human motivation as it ignores societal influences: “According to [economists] there is nothing real in society but the individual...they ignored all circumstances of time, place, and country in order to conceive of man's abstract type in general...nothing is left but the sad portrait of an isolated egoist”.<sup>73</sup> Durkheim and others<sup>74</sup> argue that economic action is embedded in ongoing networks of relationships rather than carried out by atomized actors outside a social context, and cannot be explained by individual motives alone independently of the social and cultural context.

Now for economists since Friedman at least the above quotation would hardly be relevant, because, as clarified above, the assumption of maximization does not require that human beings *act* for this motive, but rather that the assumption be adequate to its purposes. Yet an increasing core of literature, both empirical and theoretical, indicate that the embeddedness of human action may often be of considerable economic significance through its influence on economic behavior. Societies and cultures may introduce habits – like habits of working hours and holidays – or may enforce behavior patterns – such as proper hospitality for professional colleagues – with social sanctions. They may have behaviors that confer identity – children of successful parents go to private schools – or that influence people's moral sensibilities of justice and fairness on issues such as whether there are death-deserving

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<sup>71</sup> Vanberg, 1994, p 30.

<sup>72</sup> Persons choose rules in accordance with a morality perceived as an efficient strategy, that depends on the community allocation of rewards for moral conduct and punishments for rule violation. Vanberg, 1994, p 58, assimilates morality to social capital, in the sense that “the current level of morality in a community always reflects past enforcement of moral rules, and it will only be maintained by ongoing enforcement. The level of morality can, in this sense be viewed as *social capital* that, in the absence of sufficient reinvestment, will depreciate over time.”

<sup>73</sup> Durkheim, 1978, p 49.

<sup>74</sup> For the main works in sociological economics see Granovetter, 1985; Swedberg & Granovetter, 1992; Polanyi, 1957.

crimes, how tolerable is bribery, or to what extent does one aim for fulfillment in an afterlife or future lives, rather than focusing on fulfillment in this life.

Following this line of argument, communitarians argue that individual behavior cannot be characterized independently of the social settings or community (i.e. the set of institutions and practices).<sup>75</sup> According to the communitarians, individuals are constituted by the community which they are part of, or by the network of social relationships under which they grow up. The individual is not a social atom, rather her identity as individual is constituted and defined by her social relationships and community ties. Community is pre-existent to individuals in the sense that community is what gives meaning to the life of its members, what gives them identity. As goals and values individuals pursue cannot be separated from the community in which those goals and values are shaped, the only way to understand human behavior is to refer to individuals in their social, cultural and historical context. Individual behavior cannot be characterized independently of the social settings (like the set of institutions and practices) in which that behavior takes place. Rather, it is this setting which makes human actions intelligible.

The community imposes a set of norms upon individual actions. Norms are patterns of behavior that reflect the customs, traditions, values, or way of life of a particular society or group.<sup>76</sup> Examples of norms are numerous, such as norms of co-operation (division of labor, tax compliance), norms regulating the use of money (norm against buying someone's place in a queue), norms of reciprocity (to return favors done to us by others), norms of retribution (to return harms done to us by others, revenge), work norms (equal pay for equal work), consumption norms (manners of dress, table), norms of distribution (regulate what is seen as a fair allocation of income), and moral norms (regarding , e.g., killing, honesty, hospitality).<sup>77</sup> The transgression of norms can lead to social sanctions such as ostracism. Hence norms are partly able to explain group behavior – why people act in groups.<sup>78</sup>

Norms and social structures – from so-called Asian Values to traditionalism – have been considered in a deterministic way, as if they exist independently of the individuals in society and leave individuals no freedom to alter or ignore them. But many argue that there is a dialectic relationship between social structure and individual agency.<sup>79</sup> Agents are constituted by and constitute norms. Agents act according to the norm, since individual actions reproduce the norm in their daily lives, but the norm has no existence without individual actions. The relationship between norms, or more generally between institutions, and motivation can also be characterized as partly endogenous (there seem to be some rigidities), because humans can reflect upon and hence change the norms that govern social life.<sup>80</sup> The agent (individual or group), its sources of motivation, and its norms for evaluation, decision and action are always, by the very social nature of human beings, embedded in a socio-cultural context. Actors are not guided by an individual rationality, but a rationality that is itself contained in the nature of the social relationship. A person's ways of valuing things are structured through social roles, practices and relationships. Motivations for action are

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<sup>75</sup>Communitarian philosophers (MacIntyre, Sandel, Walzer, and Taylor in a more moderate way) have had a strong influence on political philosophy. They oppose the "liberal" view (Rawls, Nozick, Dworkin) which sees society as a cooperative venture for the pursuit of individual advantage, an essentially private association formed by individuals whose interests are defined independently of the community of which they are members. For an introduction to the communitarian/liberal debate, see Mulhall & Swift, 1992; Avineri and De-Shalit, 1992.

<sup>76</sup> Elster, 1989b, p 105. Maki et al., 1993, p 176, note that norms are enforced by "anticipated sanction by others at the thought of behaving in a certain, forbidden way."

<sup>77</sup> Elster, 1989a,b.

<sup>78</sup> Rotative credit is an example of how norms sustain group behavior. For other examples see Hechter, 1987.

<sup>79</sup> For the interaction between social structures and individual agency see Giddens, 1984; Etzioni & Lawrence, 1991. See also the notion of *habitus*, i.e., a structure internalized by an agent, in Bourdieu, 1977.

<sup>80</sup> Lawson, 1997.

linked with the moral aspects of one's relationships with others.<sup>81</sup> Economic action is embedded in ongoing networks of personal relations rather than carried out by atomized actors outside a social context, and cannot be explained by individual motives alone (or by context alone<sup>82</sup>).

This section has reviewed some of the motivations that may be relevant for within group behavior. These are of course not a complete account of the range of motivations – those things that tend to cause us to act – things like vengeance, or a desire to manipulate, or simple curiosity, may also motivate.<sup>83</sup> Also, surrounding motivation, and intervening between motivation and action, are other factors. For example there is *akrasia*, or a weak will: when, although one is motivated to be patient or thrifty or rational, one encounters oneself being the opposite. Another intervening factor is simple fallibility;<sup>84</sup> in which a person's or group's limited capacity to process information means that her or their actions only imperfectly reach their aims. There are also the emotions – anger, compassion, indignation – that strengthen or dampen other motivations and may cause action themselves. All are required in a full account of human action. However not all are required in order to make the case that an assumption of endogenous motivation would be superior to *homo æconomicus*, and it is to that case that we now turn.

### ***III.5 Long Term Self-Interest?***

A reader who is familiar with *homo æconomicus* will now have rehearsed in her mind, at least several times during the descriptions of intrinsic motivation above, the shadowy objection of revealed preference theory: that all of these observations of human behavior can be incorporated into the utility model if one takes a long enough time horizon. As discussed earlier (II.2) one difficulty with this is the assumption of internal consistency of choice (i.e. a person will choose what she prefers) which is needed to generate economic expressions from preferences. However the remainder of this paper develops another objection, namely that this configuration would not take into account the interaction among motivations, hence could generate policy that undermine group behavior. In order to develop this objection we need to consider groups and motivational assumptions.

## ***IV. Why Motivation Matters for Policy***

It is now time to draw some of these points together. Section II.1 argued that if acting upon self-interest were taken as the exclusive mode of human behavior in economic transactions, this would be mistaken, because people's economic behavior regularly and predictably seems to exhibit different motivations.

Section II.2 argued further that interpreting choices as preference maximization left serious problems because revealed choices do not necessarily represent people's self-interested choice, but are the outcome of a complex combination of influences, including that

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<sup>81</sup> See the notion of social game theory in Burns, 1994.

<sup>82</sup> It can hardly be argued that culture has *no* influence upon the characteristic patterns of action and even motivations for action within different groups. But a simplistic reduction of human motivation to ethnic or cultural affiliation would similarly overlook many things – from the diversity of people, to their multiple identities, to the dynamics of cultural change, to the fact that any macro unit will be composed of heterogeneous groups. See Sen, 1997a; DiMaggio, 1994.

<sup>83</sup> Unmet needs may also motivate behavior in a very powerful way – needs for physical sustenance or emotional affirmation. However insofar as these needs pertain quite directly to one's own interests, they do not form a distinctive type of intrinsic motivation but are part of self-interest.

<sup>84</sup> Stiglitz, 1991.

of social norms, commitment to others, etc. Moreover, connected to these points, the theory assumes exogeneity of preferences.

Section II.3 argued that even Becker's revisionist account of rational choice, which attempts to endogenize some preferences by introducing personal and social capital, retains individualistic exogenously determined preferences as the fundamental building block. Maximizing individualistic behavior is only one of the multiple motivations that people may have, while individual preferences are largely socially determined. Acting as if maximizing individualist behavior were the only type may actually change motivation, by 'crowding out' other motivations, some of which are reviewed in Sections III.

To the extent that individualistic maximizing behavior increases efficiency, crowding out alternative motivations might be regarded as desirable, but there is increasing evidence – shown namely in the social capital literature<sup>85</sup> – that in many cases short-term maximization actually reduces efficiency by increasing transactions costs.

The point we now face is that, if there is some competition between different motivations – maximization of own utility, *philia*, work performance, social compliance – given that the other motivations also have direct or indirect effects on economic behavior which can be efficiency-creating and can enhance well-being, then giving incentives that promote a certain type of behavior – utility maximization – to the detriment of all others may not consistently lead to optimal outcomes and processes. This can be stated as the following stylized fact: “providing extrinsic incentives for workers can be counterproductive, because it may destroy the workers' intrinsic motivation, leading to lessened levels of quality-weighted effort and lower net profits for the employer.”<sup>86</sup>

An increasing body of evidence suggests that economists are mistaken when they understate or ignore intrinsic motivation, and when they understate or ignore that motivation is embedded in a social context. Not only is this motivation necessary for economic activity; but also, a systematic relationship exists between extrinsic and intrinsic motivation, which economists fail to take into account. One aspect of this relationship is what Bruno Frey has called the crowding-out effect. Another aspect is the 'crowding-in effect', according to which intrinsic motivation can be enhanced by some external intervention. Yet, economic theory has taken extrinsic motivation to be relevant for behavior. The economic model of human behavior, based on incentives applied from outside the person considered, has swept away under the carpet the fact that “people change their actions because they are induced to do so by an external intervention.”<sup>87</sup> By ignoring the link between extrinsic and intrinsic motivation, specific policies might undermine an individual's behavior, and the phenomena of “hidden costs of rewards” is observed.<sup>88</sup>

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<sup>85</sup> See for example Narayan & Pritchett, 1996; Putnam, 1993; World Bank, 1997.

<sup>86</sup> Kreps, 1997, p 360. He makes the point that even though the empirical evidence has somehow been controverted, he assumes there is something to the stylized fact, since “abundant smoke signifies a fire, and the assertion is too strongly rooted in folk wisdom to be entirely hot air.”, p 360. Intrinsic motivation appears to be linked with cooperation. For example, Hom et al., 1992, investigate the effects of cooperative versus individualistic rewards on students' intrinsic motivation, and find that cooperative rewards generated higher levels of intrinsic motivation

<sup>87</sup> Frey, 1997, p 13.

<sup>88</sup> Kreps, 1997; Fehr et al., 1997; Fehr et al., 1998; Lindbeck, 1997; Enzle, 1991; Goldstein and Hogarth, 1997; Hogarth and Reder, 1987; Hom et al., 1994; Sen 1994a, 1997a; Thill et al., 1998; Frey and Oberholzer-Gee, 1997. See in particular Lepper and Greene, 1978. Their experiment shows that when an activity is undertaken under pure intrinsic motivation (i.e. because people enjoy it), and when a material incentive is then offered and withdrawn, the activity ceases or is performed only in a restricted way.

## ***V. Interaction between Motivations***

If self-interest is taken to be an insufficient assumption of human motivation, then one possible response would be to model the more complex bundle of motivations, including altruism and norms, that people have. The problem with this approach is that it would ignore the influence social setting may have on the kind and relative strength of different motivations in different groups and societies. It would assume that motivations are exogenous: we are, by virtue of our nature, composed of one third of self-interest, one fifth of conformity, and one sixth *philia*, work motivation and identity-expression. Yet empirical evidence indicates that motivations are different across cultures, that they respond to changes in external environments, and so on.

An example is provided in the sector of health services in Britain.<sup>89</sup> Changes in the English welfare system (development of quasi-markets in welfare provision and supplementation of fiscal welfare by legal welfare) appear to be the result of a shift in beliefs concerning human motivation and behavior. People who finance, operate, and use the welfare state are no longer assumed to be either public spirited altruists (knights) or passive recipients of state largesse (pawns), but are all considered to be somehow self-interested (knaves). Legrand argues that in a situation of ignorance concerning human motivation, it would be safest to adopt public policies based on the knaves strategy. For a knaves strategy will do little harm if people are actually knights; but a knights strategy could be disastrous if people are actually knaves.<sup>90</sup> However, “the introduction of a knave-direct strategy may make the knights behave more knavishly.”<sup>91</sup> It has been argued that when people give blood for altruistic reasons, introducing a payment system would reduce or stop voluntary giving.<sup>92</sup> Since some evidence shows that when people behave altruistically, policies designed on the assumption of their being knaves make them knaves, the considerations about the motivation on which policies are based are not neutral. Is there some possibility of making people actually behave more like knights?

Another indication of the influence of the environment on motivation is suggested by a well-known experiment among economics students,<sup>93</sup> which shows that economics students appear to be less cooperative than other students. Academic economists were more than twice as likely as the members of any other discipline surveyed to report that they give no money at all to any private charity. They also found that economics majors were more than twice as likely as non-majors to defect when playing one-shot prisoner’s dilemmas with strangers, the difference in defection rates growing larger the longer a student had studied economics. Is it because students are taught a certain pattern of human behavior that they end up behaving in that certain way, (or because it is only maximizing types that choose to become economists!)?

A rich body of empirical studies suggest that cooperation can indeed be fostered by providing the right incentives (as well as it can be destroyed by providing the wrong incentives). A laboratory experiment<sup>94</sup> showed that under anonymous conditions, only a tenth of a group was prepared to act cooperatively in a 4-person prisoners’ dilemma game, while more than three quarters of the group behaved in a cooperative way when they were allowed to talk to each other before the game, and to establish an atmosphere of higher confidence.

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<sup>89</sup> Legrand, 1997.

<sup>90</sup> “High rewards and harsh penalties can activate self-interested deliberation on the part of agents who would otherwise be guided by non-egocentric considerations.” Pettit, 1996, p 82.

<sup>91</sup> Legrand, 1997, p 161. See also Peters and Marshall, 1996, who show how the changes in New-Zealand welfare policies (based on individualist instead of communal assumptions) have increased social inequalities, marginalization and social exclusion.

<sup>92</sup> Titmuss, 1970.

<sup>93</sup> Frank et al., 1993.

<sup>94</sup> Bohnet and Frey, 1994.

Another experiment<sup>95</sup> showed that the level of cooperation could be increased by explicit instruction to adopt a cooperative rather than a competitive or individualistic orientation (e.g. instruction to act as partners, to have regard to the common welfare), by a higher degree of communication and social interaction between players, by the extent to which the players share group membership, and by the experience of sharing a common fate. What seems to matter for cooperation is the presence of variables that produce a mutually cooperative relationship, a kind of ‘we-awareness’. Another study<sup>96</sup> in the same line argues that people who hold a value commitment to benefit the collective, are, on average, more likely to engage in behaviors that address collective needs. Those experiments show that evoking group identity, that raising the awareness of social interests (or attention to collective goals) can make the individual restrict his personal gain to preserve a collective good, can foster cooperation for greater individual and collective welfare. Some advocate that people need to be re-educated in the civic virtues.<sup>97</sup>

## ***VI. Individual Motivation within Groups***

Cooperative behavior is one of the three major modes of within group behavior.<sup>98</sup> It can be efficiency raising because it involves lower transaction costs, it also helps to solve problems of externalities, and acts as an insurance process coping with uncertainties.<sup>99</sup> Institutional economists<sup>100</sup> argue that a prime reason institutions (or norms<sup>101</sup>) exist is because they reduce uncertainty and provide a structure for exchange.<sup>102</sup> In this and other ways, norms may involve an efficiency gain over short-term self-interest. Moreover, cooperative behavior may be associated with more equitable outcomes.<sup>103</sup>

Cooperative behavior is clearly an outcome of motivation, but it is not uniquely associated with any particular motivation. For example David Kreps identifies four possible motivations for acting on a norm, which he defines as “a somewhat general rule of voluntary behavior” – from reciprocity to tipping 15% to facing the front of the elevator. Adherence may be justified 1) in terms of one’s self-interest – because it is “costless relative to violation” or it may be 2) “immediately personally beneficial because it permits coordination (e.g. bear to the right in a crowded walkway).” On the other hand, 3) adherence may be better in the long term because it builds up one’s reputation in repeated games. 4) Finally, adherence to some norms may be “desirable per se” and may be adhered to out of one or another form of intrinsic motivation.<sup>104</sup> In addition one might want to add that cooperation can be fostered by

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<sup>95</sup> Turner, 1987.

<sup>96</sup> Funk, 1998.

<sup>97</sup> Etzioni, 1988.

<sup>98</sup> Heyer et al., 1999.

<sup>99</sup> Hechter, 1987. See for example Kervyn, 1989, who shows how the communal economy of a peasant Andean society is a ‘rational’ strategy that acts as a means to internalize the externalities and as a way of benefiting from the economies of scale that characterize the Andean agriculture.

<sup>100</sup> See the institutional economics literature, North, 1990; Dugger, 1994; Williamson, 1985; Sikkink, 1991; North, 1989; Nabli and Nugent, 1989; Ruttan, 1989; Bardhan, 1989; Morris and Adelman, 1989; Coase, 1960; Stiglitz, 1989; Sah and Stiglitz, 1985; Esman and Uphoff, 1984; Wade, 1988; Ensminger, 1992.

<sup>101</sup> North, 1990, p 3, defines institutions as “the rules of the game in society, or the humanly devised constraints that shape human interaction. Institutions structure incentives in human exchange.”

<sup>102</sup> Keynes 1921, 1936 argued that agents, when confronted by uncertainty, relied on conventions, common practices and everyday life habits, in order to make savings and investment decisions. See also Gerrard, 1993.

1989; Sah and Stiglitz, 1985, Esman and Uphoff, 1984; Wade, 1988; Ensminger, 1992.

<sup>103</sup> Stewart, 1996.

<sup>104</sup> Kreps, 1997, p 359.

the mere weight of social habit described above – which may account, for example, for elevator etiquette.

So the menu of motivations that might be supportive of cooperative behavior includes:

- Long-term reciprocity, where self-interest is interpreted over the long term
- Philia* and altruism, where others' welfare is important to the individual
- Communitarian motivation where 'we' is important as well as 'I'.
- Identities where group cooperation is a significant element of the person's identity
- Social norms which favor cooperation.
- Ethical convictions enhancing cooperation

It is easy to say which types of motivation will not bring about cooperative behavior. The prime candidate is short-term self-interest maximization. Apart from that certain types of identity might be inimicable to cooperation – e.g. the person who regards being competitive as a key part of his identity, or being a loner, or a member of a secret society which does not include others in the group.

Both theoretical reasoning and empirical evidence suggest that many of these motivations are liable to be stronger determinants of action (a) where there are not large personal trade-offs with behavior favoring personal maximization; (b) where there are not large (or indeed any) group trade-offs, in terms of group efficiency, with alternative motivation; (c) where groups are stable and long-lived so that long-term reciprocity makes sense or social norms are binding; (d) the size of the group is relatively small so that social interactions and their effects are perceptible.<sup>105</sup>

## ***VII. Implications***

In an article reflecting on business and moral principles, and their challenge to the principle of self-interest, Sen argues that one needs a wider conception of motivation rather than a new single principle: "it would be, I would argue, a great mistake to try to replace the hypothesis of universal profit maximization with another hypothesis of similar, unconditional uniformity (such as ubiquitous altruism, or universal human sympathy, or some other form of non-contingent high-mindedness). The connections are dependent on many social, cultural and interactive considerations, and the resulting behavioral principles would tend to be complex as well as variable with respect to time, place and group."<sup>106</sup> In this paper we have argued similarly that motivations are complex and multiple; a single assumption of utility maximization is insufficient for policy purposes. As the individual is always a social being, how she behaves will be dependent on the social context in which she is acting: self-interest in the market, altruism in the family, reciprocity in community or neighborhood relationships.

Moreover, much theory, including revealed preference, takes motivation to be exogenously determined. However evidence suggests that this is not the case: the relative importance of an extrinsic motivation (such as responding to economic incentives) is not fixed, but rather varies in comparison with the importance of other motivations such as those described in this paper, which include a complex set of factors encompassing among others, societal norms and incentive systems. The assumption should rather be that motivations are partially endogenous to the social and economic context, as well as to peculiar features of a situation. The relative importance of different motivations can and does change over time.

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<sup>105</sup> Kameda et al., 1992, found that the motivation to cooperate between members of a group was an inverted U-shaped function of subgroup size.

<sup>106</sup> Sen, 1997a, p 6.

Furthermore, the direction of these changes may be partly predicted by knowledge of the incentive structures and beliefs of a society.

If motivations are at least partially endogenous, and if under certain conditions maximizing motivation displaces cooperation, altruism, and even rule-following, then these indirect effects, and their long term consequences for efficiency and equity, should be taken into account when policies try to foster certain types of behavior. In particular, this consideration may refashion the discussion of using economic incentives as a way of changing behavior. The issue is not *only* whether incentives will work to affect the desired behavior change, but *also* whether in addition to changing direct behavior, an economic incentive may also change the way people tend to act more generally.

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