SELF-INTEREST, ALTRUISM, INCENTIVES, & AGENCY THEORY

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Abstract

Many scholars, business people, policy makers, and religious leaders are suspicious of self-interest and incentives and often oppose the use of incentives to motivate managers, employees, public servants, or the public itself. I address here some of these issues regarding human nature and organizations raised by Michael Brennan (1994) in "Incentives, Rationality, and Society."

I analyze the meaning and role of incentives in the logic of choice and argue that it is inconceivable that purposeful actions can be viewed as anything other than responses to incentives. Money is not always the best way to motivate people. But where money incentives are required, they are required precisely because people are motivated by things other than money.

Self-interest does not mean that people have no altruistic motives. And altruism, the concern for the well-being of others, does not make a person a perfect agent who does the bidding of others. This means that agency problems cannot be solved by instilling greater altruism in people (even if we could do so).

I also discuss the universal tendency of people to behave in non-rational ways. Though they are Resourceful, Evaluative Maximizers (the REMM model) humans are imperfect in the sense that they have inherited a brain that is biologically structured so as to blind them from perceiving and correcting certain types of errors, primarily those that cause emotional or psychic pain. The result is systematic, non-functional behavior that makes them worse off. I briefly discuss a Pain Avoidance Model (PAM) that complements REMM by capturing the non-rational component of human behavior. This non-rational, behavior is the crux of self-control problems that beset all humans. Recognizing these self-control problems leads to an expansion of agency theory since they are a second major source of agency costs in addition to the costs generated by conflicts of interest between people.

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1. Introduction

In "Incentives, Rationality, and Society" Michael Brennan (1994) attacks the use of incentives for executive compensation and, indirectly, for use in society in general. Professor Brennan argues that economics views rational behavior as self-interested and that this proposition is wrong both in a positive sense (that is people don't behave that way) and in a normative sense (because if they did behave in a self-interested way, the world would be a more brutish and undesirable place). Brennan is correct that people do not always behave in a rational way, but this fact provides no support for his opposition to incentives, or his opposition to self-interest.

Professor Brennan's arguments, although popular in many quarters, are, I believe, logically and empirically incorrect. Underlying his argument is a strong aversion to incentives, an opposition that reveals itself in several places to be primarily, if not wholly, an antagonism to the use of monetary incentives. (He cites approvingly the

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incentives provided by awards banquets and small prizes). He is also not fond of the agency model, concluding that the model is incorrect and moreover, that "if we go on hammering into our students the mistaken notion that rationality is identical with self-interest we shall make our agency models come true, but at the cost of producing a society that will not function" (p. 39). These views are held by many people and therefore are worthy of additional discussion. I shall deal first with the issue of incentives and then move on to self interest, non-rational behavior, and the theory of agency.

2. The Meaning and Role of Incentives in the Logic of Choice

Professor Brennan argues disapprovingly (p. 34), that economic man "will never perform without incentives." Brennan appears to desire a world in which there are no incentives, and at times seems to believe that action in the absence of incentives is the natural and, therefore, desirable state of affairs. Many managers, policy makers, and religious leaders share this view.

It is inconceivable that purposeful action on the part of human beings can be viewed as anything other than responses to incentives. Indeed, the issue of incentives goes to the heart of what it means to maximize or optimize, indeed to the very core of what it means to choose. Rational individuals always choose the option that makes them better off as they see it. This is, by definition, what we mean by purposeful action—the attempt to accomplish some end. And it is the difference in (expected) well-offness between taking one action as opposed to another, that provides incentives and results in choice. An individual takes action A over action B because he or she expects A to result in better outcomes.

As I said, much anti-incentive reasoning seems to be based on the notion of a natural state of affairs in which there are no incentives and no conflicts of interest. For there to be no incentives, all alternative courses of action or choices must promise the same degree of utility as viewed by the individual. Such a world is virtually inconceivable (and certainly uninteresting if it did exist). It does not exist in the state of nature: not all land is equally fertile, nor are all paths equally level or unobstructed by water or other hurdles. Thus, even primitive man faces incentives to cultivate one piece of land rather than another, or to choose one path over another. Incentives exist (whether we like it or not) in all cases in which people have real choice. This is true in organizations as well as in nature.

Managers in every organization, even one with no pay-for-performance, face incentives—including incentives to do bad as well as good. To repeat, the issue for any organization is not whether it will use incentives to motivate its employees, there are always incentives. The issue is simply which incentives do we want to encourage and which do we want to discourage?

Optimal decisions often meet with opposition and retribution from colleagues, employees, communities, policy makers, regulators, and others—thereby providing managers with incentives to forsake them. To increase the chances that managers will take the best actions possible, we must ensure that the incentives (that is, the tradeoffs) they face encourage them to move in the correct direction. This means that we must strive to ensure that the culture of the organization, and any other variables under our control, reward proper, as opposed to improper, action.

The main advantage of monetary incentives in this mosaic of organizational incentives is that general purchasing power is valued by almost everyone (because it is a claim on all resources), and it can be easily varied with performance. On the other hand, it often is difficult, and in some cases impossible, to vary other aspects of the organizational setting in a way that relates to organizational, group, or individual performance.

I hasten to add that, for a variety of reasons, monetary incentives are not the best way to motivate every action. Because monetary incentives are so strong, and because it is sometimes difficult to specify the proper performance measure, monetary incentives are often dominated by other approaches. But in the end, where money incentives are required, they are required precisely because people are motivated by things other than money.

3. Self Interest, Altruism, and Perfect Agents

History provides much evidence on the adverse consequences that follow from failing to understand the proper role of self interest, how self-interest is consistent with altruistic concerns for the welfare of others, and how increased attention to self-interest or rational behavior would make the world a better, not worse, place to live. Professor Brennan is correct in his observation that people do not always behave in a rational manner. But when they do so, contrary to Brennan's beliefs, and consistent with his soldier and manager examples, people invariably make themselves and those around them worse off.

Professor Brennan (p. 34) defines economic man in a way often used as a caricature to discredit economics, and I agree with him that his characterization of economic man is not descriptive of human behavior. (Although I do not believe it characterizes the way most economists view human behavior, I shall not belabor the point here.) People do care about failure and success, they do have emotions and care about honor and self esteem, and they do feel shame and pride. In our paper "The Nature of Man" (1994), William Meckling and I discuss at length the minimal characterization of human beings capable of capturing this complexity. We call this model REMM—for the Resourceful, Evaluative, Maximizing Model of human behavior—and argue that these three characteristics are very powerful for describing the rational behavior of human beings. The model is powerful in the sense that it leads to good predictions of how human beings will actually behave. I will not repeat the arguments here.

Brennan and others err when they include altruism in the category of non-self-interested behavior. Self-interested behavior in Brennan's view means that people care only about themselves and not at all about others; they have no altruistic tastes in that they are unwilling to sacrifice any of their own time or resources for the betterment of others. This is neither logically implied by the assumption of self-interest nor empirically correct. He cites two sorts of evidence that indicates the self-interested model of human behavior is wrong: 1) that people do evidence concern for the welfare of others, and 2) that people often do not evidence a concern for their own welfare. I have no disagreement with the evidence.

As Meckling and I make clear in our article, there is nothing inconsistent between self-interested and altruistic behavior. More importantly, Brennan implicitly takes the existence of altruistic behavior to mean individuals are perfect agents for others. But the willingness to sacrifice of one's own time, energy, and resources for the benefit of others, by no means indicates a person is a perfect agent—a common and dangerous fallacy. By a perfect agent I mean someone who makes decisions with no concern for his or her own preferences, but only for those of another, including an employer or principal. As we point out in the "Nature of Man," there is vast evidence that people do have altruistic motives, and there is equally vast evidence that people are not perfect agents. To find extensive evidence of altruism, we need only look to the willingness of people to give to charity, and to help family, neighbors and even strangers.

To see equally vast evidence that people are seldom perfect agents for any interest, we need look no farther than the conflict and abuse in families, the sexual abuse of youthful parishioners by some Catholic priests, and the general failure of organizational control systems, (including recent abuses by the officers and board of the United Way charity). In spite of this plentiful evidence, Brennan (p. 37) arguing in favor of the perfect agent model says: “we are also capable of rising above our own narrow self-interest, and we are more likely to do so the greater is our responsibility for the welfare of others.” In the extreme, it appears only too easy for men such as Hitler or the Romanian dictator Ceasescu to impose huge costs on the populations with whose welfare they are nominally vested. Unfortunately, as the media coverage illustrates in these days of race wars and regional violence, such atrocities are all too common. The abusive cases aside, Meckling and I argue that even Mother Teresa is not a perfect agent because she would be unwilling to devote her time and energy to arbitrarily chosen ends of an employer. Her preferences evidence a strong desire to help the poor of Calcutta over all sorts of alternatives, and to that extent she is self-interested although altruistic. In this sense we are all alike in that we have our own preferences.

4. Non-Rational Behavior

Brennan quotes several examples from Postrel and Rumelt (1992) in which soldiers and managers behave in ways that are clearly inconsistent with their own near term self interest. In the case of the soldiers, it is their failure to take obvious precautions (keeping their helmets and arms, changing out of wet socks, digging fox holes) to maintain their own protection and fighting capability, while the managers manifest a similar problem in their antagonism towards customers. This behavior is not unique, and economists viewing the world through their lens of rationality have generally failed to see that such behavior is common to virtually everyone to one degree or another—including themselves.

While Postrel, Rumelt and Brennan are correct in their observation that people do not always act in their own self interest, this provides no comfort to Brennan’s call for the use of fewer incentives. In fact, Postrel and Rumelt correctly see the implications for even more detailed use of incentives to alleviate these self control problems—not only through monitoring, but also by paying closer attention to the timing and context of rewards and punishments to help individuals achieve their own self control.

While rationality as incorporated in the postulates of REMM is a powerful concept providing great predictive power and a solid basis for policy decisions in business as well as personal and public life, it is not complete. Human beings are more complex in their totality than can be represented in any parsimonious model, including REMM. The problem, as we see with the soldier example, is that people behave systematically in ways that contradict REMM. But the evidence goes far beyond the extreme conditions of war.

Clinical psychological records as well as everyday observations of family, organizational, and social action, abound with examples of humans engaging in non-rational behavior. By non-rational I do not mean random or unexplainable, I mean dysfunctional or counterproductive behavior that systematically harms the individual. But this non-rational behavior can be modeled relatively simply, and recognizing these non-rational aspects of human beings does not mean that we have to give up the powerful predictive ability of REMM. Indeed, the two phenomenon can and do simultaneously exist, and their joint recognition converts REMM from a purely *positive* description of human behavior to a *normative* model that says this is how humans should behave. Consistent with this view, I believe the solutions suggested by the psychological and psychiatric professions are best interpreted as helping people learn to correct their “mistakes” in order to behave in more REMM-like ways.[1]

The general point is that human behavior is essentially dualistic: people evidence both rational and non-rational components, and these components coexist in inherent contradiction. This phenomenon reflects the innate imperfection of humans, and social

[1] See Peck (1978), and Argyris (1991, 1993). Consistent with this there is some evidence that those behaving according to the REMM model live more successful lives. See Larrick, Nisbett, and Morgan (1993).

scientists, managers, and policy makers must deal with peoples' behavior in its entirety. These imperfections are not aberrations from normality, but rather an integral part of normality itself. Although there is no room here to make the argument fully, I believe it is possible to integrate a model of this non-rational behavior with REMM, thereby vastly increasing the predictive power of our analytical apparatus.

The challenge is to understand and correct the patterns that cause individuals to incur the costly consequences of non-REMM behavior. To some extent, this non-optimal behavior can be incorporated into REMM by recognizing that individuals' visions of the world and their ability to act or react depend on various factors (such as the intensity of emotions) that have the power to change, if only temporarily, their perception of "goods." Such an expanded model would be capable of explaining deviant behavior as the result of maximizing actions in situations where an individual's perceptions of the world are systematically different, or more constrained, than normal.[2]

A constrained maximization view cannot, however, explain the defensiveness with which humans frequently reject new ideas and new data. Neither can it explain the primary result of this defensiveness—their reluctance to learn and adjust their behavior to serve better their own interests. It is crucial to understand that these non-rational responses are evident not just in the annals of clinical psychology, but throughout organizations and society. This phenomenon, for example, lies at the heart of the failure of the internal control systems that has led to the waste of hundreds of billions of dollars of resources and the failure of many of the crown jewels of corporate America over the last several decades. (See Jensen, 1993.)

In "Economics, Organizations, and Non-Rational Behavior" (1995) I postulate a Pain Avoidance Model (PAM) that describes non-rational human behavior under

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[2] Abraham Zaleznik suggested this constrained maximization view of deviant or "non-normal" behavior. Weick's (1983) survey of the effects of stress on the behavior of humans describes behavior that is consistent with such a view.

conditions of fear. While attempting (generally subconsciously) to avoid the pain associated with recognizing personal error, people often put themselves in a position where they incur far more pain. The most recent brain research indicates these virtually universal human defensive responses are founded in the biological and chemical structure of the brain—responses that are intimately involved with the brain's "fight or flight" response.[3] What is surprising about this defensive behavior is the seemingly trivial things that can cause humans to become frightened, and that while they are experiencing fear, these same individuals are commonly unaware of it. This frequently occurs, for example, when people are faced with evidence or theories that threaten to change the lens through which they view reality, including not only the world around them, but their view of themselves.

One interesting aspect of this non-rational behavior is the universal tendency for humans to hold views of themselves and their behavior—"espoused theories" in the language of Argyris (1990, 1991, 1993)—that are false. They are false in that they are inconsistent with the theories on which the individuals act—what Argyris calls their "theories in use." Discovering these violations of our own principles and beliefs (that is, our "irrationality") is threatening to an individual's self esteem, and creates serious anxiety. The brain's fear response, therefore, severely limits humans from perceiving when the theories and beliefs they espouse about their own behavior are false.

This common disconnect between espoused theories and theories in use undermines the foundation of Brennan's concern for the undesireable effects of letting students learn that people generally behave in self-interested ways. He asserts in his opening paragraph that peoples' espoused theories determine their behavior. "Self-image is a major determinant of behaviour. . . . If I think of myself as an honest person, I shall

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[3] See LeDoux (1994) and the references therein, and the September 1992 *Scientific American* special issue on the brain.

behave in an honest way." The evidence contradicting this theory is observable around us every day.

The Pain Avoidance Model is consistent with many phenomena that REMM cannot explain. Examples include the tendency of people to systematically overrate themselves in rankings of their peers, the infrequent use of pay-for-performance compensation systems, the common refusal of people to welcome feedback on their errors, and the systematic tendency for corporate managers to overpay for acquisitions.[4]

While grounded in the flight or fight response—a mechanism that has contributed to survival for millions of years—it appears that the effects of human responses to emotional or psychic pain are highly counter-productive in our densely populated and complex modern industrial world. This phenomenon leads systematically to defensive, not learning, behavior, in virtually every human being. It causes people to become stuck, unchanging and unchangeable. They become wedded to the theories in their brains in ways that make them systematically worse off. And to make these challenges more difficult to deal with, the biological structure of the brain generally makes the individual blind to his or her behavior. For this reason, learning in these situations is both very difficult and slow.

Therefore, while recognizing that REMM cannot capture individual, micro-level behavior in its entirety, we must recall that it does describe a large amount of aggregate and long-run human behavior. When we add to this model a description of the pain avoidance characteristics of humans, the combined model leads to a much richer positive description of behavior. Even more importantly, this dualistic model will lead, I believe, to much more effective normative propositions, programs, and devices for helping people to avoid or minimize the non-rational, dysfunctional aspects of their behavior.

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[4] For example, in large sample surveys, almost no one ranks themselves below the 50th percentile of their peers. For discussion of these phenomena see Baker, Jensen, and Murphy (1988), Jensen and Murphy (1990), and Schwert (1993) and the references therein.

Finally, it is useful to recognize that these tendencies for individuals to act in ways that are inconsistent with their self interests are another source of conflicts with employees, employers, partners, mates, colleagues, and so on. In short, they are another major source of agency costs that must be addressed in any cooperative effort.

5. Agency Theory

I now turn to agency theory, its definition, and the opposition to it from Brennan and others. In the end, of course, the usefulness of any theory depends on its ability to describe the world. No theory, including agency, is perfect, but I am surprised by the opposition that is based on a patriarchal fear that if we let the masses find out how people really behave it will further corrupt them. Let me take a moment to briefly review the modern history of this topic as I have been involved.

In the early 1970s William Meckling and I wrote an article on the theory of agency whose purpose was to open up the black box in economics and finance called the firm.[5] Our point was to show that firms were highly unlikely to behave in the value maximizing way that was common to so much of the modeling and analysis in economics and finance. In opening up the box, we provided a structure within which we could begin to analyze the conflicts of interest between the involved human beings and the resulting equilibrium behavior of the organizations. Judging by the subsequent theoretical and empirical use of these concepts, the profession has found the approach a productive one.

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[5] Jensen and Meckling (1976). The agency article was written at the same time we were working on early versions of the "Nature of Man," and in a sense this latter paper is the foundation of our work on agency. Although the "Nature of Man" has been widely circulated over the years, it remained unpublished because there did not seem to be a natural place for a paper that seemed to be such a straight forward summary of 200 years of work in economics. Yet the puzzle has been that the manuscript has generated considerable controversy such as that represented in Professor Brennan's article. The reasons, I now see, go to the heart of the conflict between science and views on the perfectibility of human beings that emanate from religious preachings as well as the secular views that come from other branches of the social sciences, and policy advocates.

We opened that original paper with the famous statement from Adam Smith in which he called attention to the conflicts of interest between the owners of joint stock companies and their managers and directors. Although he did not use the language of agency costs he clearly understood the problem and in a sense was the original agency theorist. Smith believed so strongly in the power of self interest and the conflicts it generates, that he was extremely pessimistic about the ability of the joint stock company to survive in any but the simplest of activities where management's behavior could be easily monitored.

> Without a monopoly, however, a joint stock company, it would appear from experience, cannot long carry on any branch of foreign trade. To buy in one market, in order to sell, with profit, in another, when there are many competitors in both; to watch over, not only the occasional variations in the demand, but the much greater and more frequent variations in the competition, or in the supply which that is likely to get from other people, and to suit with dexterity and judgment both the quantity and quality of each assortment of goods to all these circumstances, is a species of warfare of which the operations are continually changing, and which can scarce ever be conducted successfully, without such an unremitting exertion of vigilance and attention, as cannot long be expected from the directors of a joint stock company (Smith, 1776, p. 460).

Smith observed the failure of dozens of stock companies in his day, and concluded that the only activities a joint stock company could carry on successfully without a state granted monopoly were those which were easily monitored—in his words in "which all the operations are capable of being reduced to what is called a routine, or to such a uniformity of method as admits of little or no variation" (p. 461). In his opinion this limited joint stock companies to banking, fire and marine insurance, canals, and municipal water supply. Smith did not, obviously, anticipate the evolution of governance mechanisms that have enabled the corporation to survive and even thrive in a plethora of economic activities throughout the world.

Agency theory postulates that because people are, in the end, self-interested they will have conflicts of interests over at least some issues any time they attempt to engage in cooperative endeavors. This cooperation includes not only commerce through partnerships, and corporations, but also interaction in families and other social organizations. We focused our analysis in our original article on the conflicts of interest between stockholders and managers in the public corporation, not only because of the vast extent of the resources now controlled by such organizations, but also because those conflicts of interest are obvious and easily observed in the world around us. Similarly each of us can observe the conflicts in families, and in the social and other organizations we associate with, and the structure of our analysis applies to each of them. The conflicts are so ubiquitous and so familiar that they almost become invisible.

Meckling and I argued that because conflicts of interest cause problems and therefore losses to the parties involved, the parties themselves have strong motivation to minimize the agency costs (as we labeled them) of such cooperation. This *conservation of value principle* is the basic force that motivates both principal and agent, or partners, to minimize the sum of the costs of writing and enforcing (implicit and explicit) contracts through monitoring and bonding, and the residual loss incurred because it will not pay to enforce all contracts perfectly. The theory provides the structure within which to model and understand a vast array of human organizational arrangements, including incentive compensation, auditing, and bonding arrangements of all kinds. That literature is large and continues to grow.

Constrained at the time by our economists' view of rationality, Meckling and I discussed only one source of agency costs, that which emanates from the conflicts of interest between people. There is clearly a second major source of agency costs, the costs incurred as a result of the self control problems discussed above—that is the actions that people take that harm themselves as well as those around them—what Richard Thayler years ago characterized as agency problems with one's self.[6]

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[6] See Thaler and Shefrin (1981). I am embarrassed to admit that Richard was a colleague at Rochester at the time he did this original work, and although I always found it interesting, I failed for more than a decade to see the generality and the importance of this self control issue.

It is now time to take the next logical step. We have as a profession broken open the black box called the *firm* and are fully cognizant that, because of the inherent conflicts of interest among the parties to the firm, it doesn't maximize in any simple sense.[7] The next step is to break open the black box called the *individual* and similarly recognize that, because of self control problems that lead to non-functional behavior, the individual cannot be said to maximize in the simple sense we economists have assumed for 200 years. Indeed, some of the apparent contradictions evident in Adam Smith's work, especially that between the *Wealth of Nations* and his *Theory of Moral Sentiments,* may well reflect this conflicting dualistic nature of humanity. As my discussion above indicates, self control problems are much more important than most economists have perceived. I predict they will receive vastly increased attention in the future—attention that will result in better models and policies, both public and private.

6. Some Reflections

Professor Brennan laments that the teaching of agency theory and the use of incentives will somehow "coarsen" humanity and make the world we live in a less hospitable place. This issue is worthy of careful research. It does not follow logically from the content of the theory, nor does his conjecture fit with my empirical observations from 20 years of teaching this material.

When I teach agency theory I do not find students surprised at the existence of conflicts; they live in the middle of them constantly, and those conflicts which are not experienced personally can be shared in the daily torrent of offerings from the world's media. Because of the universality of conflict, the danger is that we may take it for granted rather than fail to see it at all.

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[7] One branch of opposition to some of this analysis came from those who believed that conflicts of interest exist, but are completely resolved by markets and competition.

I find that students and business people are excited by the central proposition of agency theory, and that central proposition is not that people are self-interested, or that conflicts exist. The central proposition of agency theory is that rational self-interested people *always* have incentives to reduce or control conflicts of interest so as to reduce the losses these conflicts engender. They can then share the gains. Moreover, the theory provides a general structure to point the way to a variety of classes of solutions to these problems.

Perhaps Professor Brennan and others object to the fact that the theory does not assume (or conclude) that the inherent nature of people can be changed to eliminate conflicts of interest (with others or with ourselves). Moreover, even if we could instill more altruism in everyone, agency problems would not be solved. Put simply, altruism, the concern for the well-being of others, does not make a person a perfect agent who does the bidding of others.

I have little faith that we can change human nature in the near future. And the lack of success from thousands of years of such effort by all great religions of the world leaves little hope for realists such as myself that the basic nature of man will be soon fundamentally altered.

Instead, I place my bets on altering the institutional structures, contracts, and informal arrangements that we create to reduce conflict, to govern our relations, and to increase the extent of cooperation and the benefits we reap from it. Such efforts, arising from self-interest, will be privately rewarding and will improve the quality of life in our society.

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