Future Research in the Social, Behavioral and Economic Sciences

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Abstract: This paper describes a research program organized around the theme of “What Makes Societies Work?” There are two stages. The first is a study of how context and institutions affect people’s incentives. Why do people’s preferences appear to be helpfully prosocial in some settings, and narrowly self-interested in others, and how can we design interactions to amplify the former? Why are institutions such as constitutions and courts effective in shaping social behavior in some settings but not others? Why are the relational incentives created by repeated interactions more effective in some settings than others? Addressing these questions will take a concerted effort on the part of economists and others from across the range of social sciences.

Next, these insights are to be put to work in addressing questions of how we can influence or even design social outcomes. How do we achieve a consensus on using future interactions to create current incentives? What institutions can we design that will induce people to coordinate on contributions to the public good rather than hoarding private wealth as the route to status? Questions such as these are fundamental to making economics and social science more generally a useful part of our intellectual arsenal.

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I. Introduction: II. What Makes Societies Work?

Why are some societies more successful than others? This is perhaps the most fundamental of social science questions, from both a positive viewpoint—it is important to understand the patterns we see—and a normative viewpoint—it is important to draw lessons for how we should organize society.

One might define success in many ways, with per capita income, growth rate, longevity, physical or mental health, happiness, and political stability being just a few of the possibilities. However, there is sufficient common ground in these measures that we can move beyond this potentially endless diversion to concentrate attention on the underlying mechanisms.

Economics has not produced a convincing answer. Early economic models, focused on physical capital accumulation, explained woefully little of the variation in economic performance across countries. Adding human capital to the analysis provides some improvement, but still leaves large gaps in our understanding. Recent appeals to “social capital” reflect a recognition that something is missing, but have not produced a precise idea as to what it might be. The other social sciences provide a collection of intriguing ideas, but have not advanced to careful quantitative evaluation of their models.

II. Incentives

An understanding of how a society works begins with an understanding of the incentives motivating its members. Let us say that the incentive for a person to do $A$ rather than $B$ is internal if the person prefers $A$ to $B$, is contractual if the person chooses $A$ in return for some explicit (typically immediate) benefit, and relational if the person chooses $A$ in return for some commonly understood but implicit (typically future) benefit. Like many concepts in economics, such as the short run and long run, the boundaries between these categories are blurred and context dependent, but the categories are conceptually useful.

Internal incentives are simply a matter of preferences. Economists typically have very little to say about preferences, taking them as fixed and beyond either explanation or influence. However, there is good reason to believe that internal incentives are quite sensitive to context, as well as quite important in shaping social behavior. The United States is known for the extent to which its citizens comply with its tax code, while many other countries struggle with tax collection. The difference appears to be not that audit probabilities are higher in the United States or penalties more severe, but rather that people in the US unilaterally supply, or prefer, a higher degree of compliance. This preference is fragile, however, in the sense that people express a willingness to comply only to the extent that they think others are also doing so. The
same is true of many other activities, from littering, waiting in line, and obeying traffic laws to life-style decisions that are reflected in the “broken windows” theory of neighborhood behavior.

Contractual incentives are the hallmark of economic exchange. Such incentives come into play whenever we make a purchase, accept employment, trade financial instruments, and so on.

Contractual incentives mediate a relatively small portion of our interactions, with relational incentives playing the key role in the remainder. We expect to pay for a restaurant meal, but a typical response to a fine dinner at a friend’s house is that one has acquired an obligation to reciprocate. We readily pay taxi fares, but wouldn’t think of asking for compensation upon giving a colleague a ride home. The former interaction in each case is contractual, the latter relational. Far from being confined to seemingly minor matters of social etiquette, there is evidence that a great proportion of business-to-business interactions are governed not by explicit agreements, but by relational considerations of the form “we’ll make this up next time.” Interactions between firms and consumers similarly hinge on relational incentives—one makes no explicit promise to return to a provider who has given good service, yet everyone views the interaction differently if such return is impossible. Political interactions similarly hinge on relational incentives.

III. A First Round of Questions

These distinctions allow us to outline a research program in two stages. The first stage would address the following three questions:

1. What Shapes Internal Incentives? As noted by Arrow (1971), virtually every interaction between individuals requires a willingness to forego some individual advantage, and to trust that others will do so as well. The retail sector of our economy works as it does partly because customers fear arrest if they flee without paying, but to a greater extent because they would choose not to flee even if certain of impunity. People invest in private property partly because law enforcement resources help protect that property, but to a greater extent because they understand that most others will not try to seize it. In the language of this proposal, people have internal incentives to complete transactions and respect the property of others. It is clear that these internal incentives go beyond the narrow conception of self-interest that serves economics. What is the nature of these incentives? More importantly, what determines them?

It may appear at first glance as if we are appealing here simply for more behavioral economics. There are three important differences. First, much of behavioral economics has been concerned with arguing that people’s preferences are not narrowly self-interested. It is important for the proposed research to move beyond this to investigate what determines the social aspects of preferences. Why are people willing to behave socially in some environments and not others? How do we design interactions to take advantage of these social aspects? Answering these questions will require insight from and collaboration with
the other social sciences, most notably psychology, but also including sociology and anthropology.

Second, behavioral economics relies crucially on experimental methods. We are still far from having developed commonly accepted and workable standards for doing economic experiments. For example, there is virtually no emphasis on replication in experimental economics, while replication is commonly touted in the sciences as the essence of experimental inquiry. Existing econometric methods have been imported into experimental economics, in contrast to the extent to which other sciences view experimental design and the ability to collect additional data as a substitute for statistics. Perhaps most distressingly, psychologists have a long history of experimentation, but very little has been done to bring experimental methods from psychology into economics. The different questions stressed by the two disciplines clearly call for different methods, but it is unlikely that we have nothing to learn from decades of experimental research in psychology. It is imperative that the proposed research make progress in experimental method, drawing insight not only from economic theory but also psychology and the other social sciences. Notice that we need not simply more experiments, but rather more work on how we should do experiments.

Third, much of experimental and behavioral economics has been concerned with showing that one can find behavior that cannot be explained by the simple economic models with which we work. This is interesting, but this alone tells us very little. Models are by design approximations of a hopelessly complex reality, and hence are deliberately constructed so as to not explain some behavior, in return for simplicity and transparency. Hence, finding behavior inconsistent with our current models is a useful contribution only if one can argue that elaborating our existing models to accommodate such behavior is worth the resulting erosion of simplicity and transparency. Unfortunately, we currently have no techniques for making such comparisons, and indeed no common language for discussing the issues. We need research in quest of the theoretical equivalent of an “adjusted R-squared,” allowing discoveries of behavior inconsistent with standard models to be accompanied by a meaningful discussion of whether such a finding warrants a more complicated model, or is simply another reminder that models are indeed models.

2. What Gives Rise to Contractual Incentives?  At first glance, the answer to this question seems obvious. Contractual incentives are the bread-and-butter of economics. People work because they are paid, they produce because they can sell, and so on. These incentives are backed up by formal institutions that ensure these transactions can be made reliably. Constitutions protect private property, courts enforce contracts, markets are designed to facilitate trade, all in the shadow of mutually-embraced and officially-sanctioned coercion.

Upon closer examination, the link between the formal institutions and the resulting contractual incentives is complex and fragile. What does it mean to say that a constitution guarantees certain liberties or protects private property? The constitutions of Liberia and the United States are quite similar, but give rise to remarkably different outcomes. The constitution of the Soviet Union included a host of civil liberties, but produced a surprisingly
different outcome. What does it mean to say that courts enforce contracts? Law enforcement personnel or juries simply decline to enforce laws they find sufficiently unpalatable. Example include cases in which juries in Victorian England simply failed to convict, in response to penalties they judged too severe, and the current concept of jury nullification. What does it mean to say that incentives are created by the potential for officially-sanctioned coercion? The propensity for super-bowl celebrations to turn into riots is but one indication that law enforcement is effective only if most people comply voluntarily.

In effect, formal institutions are simply cheap talk, suggesting (perhaps quite vividly) an equilibrium in the “game of society,” but with no power to do anything other than suggest. When are these suggestions effective, and when are they irrelevant? How do we design formal institutions to give rise to effective contractual incentives? Mailath, Morris and Postlewaite (2001) provide one intriguing attempt at examining this problem. Much more work is needed, drawing not only on economics, but also history, psychology, sociology, and political science.

3. How Do We Harness Relational Incentives? The incentives in the vast bulk of our interactions arise neither internally nor out of the expectation of contractual reward, but out of the implications of current actions for future payoffs. We have a well-developed theory of repeated games to deal with such situations. At the same time, this theory is missing an essential element, namely an understanding of which of the many equilibria in a repeated game is the relevant one. Schelling (1980) raised this problem long ago, noting that in many cases there appears to be an obvious equilibrium, despite being distinguished by nothing in the formal structure of the equilibrium. The intervening decades have provided many more examples and filled in many details, but have brought little progress on a general understanding of “focal points.” How do we structure relationships so that salutary equilibria not only exist, but are “selected” by the participants? This is perhaps the most important question, again calling for reinforcements from the other social sciences.

IV. Implications

The second stage of the proposed research will build on these foundations to ask the following type of questions. What is the optimal level of diversity in a society? Psychologists have stressed that heterogeneous groups of people often make better decisions, while effective relational incentives may require sufficiently homogeneous behavioral expectations. How do we balance these conflicting forces? How can we rewrite institutional economics to include not only formal institutions—banks, credit markets, legal systems, and so on—but also the internal and relational incentives that supplement these formal institutions? To what extent should development assistance concentrate on building such incentives? Should the study and perhaps creation of such incentives play a role in our educational system? Can we describe culture as a shared set of incentives, and if so, can we design culture to be more effective?

These questions are the most speculative raised in this proposal, and accordingly are the most briefly described, but are also ultimately the most important. We have the tools for examining such questions, but are at the very beginning of formulating and understanding them.
Answering this research challenge will require elements from all of the social sciences, but promises tremendous rewards.

V. References

