by David Colander

Can economists handle change? Being an economist, my answer is the standard economic answer, "It depends."

What does it depend on? First, it depends on what one means by "handle" and "change." I consider those definitional issues in the first section of the paper. Second, it depends on the underlying framework one uses. In the second section of the paper I argue that economists' current conceptual framework makes it impossible for them to handle institutions and institutional change other than superficially, but that with a slight change in that conceptual framework, they can handle change in a deeper and more meaningful way.

Definitional Issues

Most people look at the world directly. Economists don't; through arduous training they are taught to see the world through models. These models color their vision of the world and create distinctions which they then go about and elaborate, explore, and debate. Is the world in equilibrium or disequilibrium? Is a change a policy change, a regime change, or an institutional change? Is change endogenous or exogenous?

I point out these characteristics of economists because the question the papers in this volume address: "Can economists handle change?" only becomes a meaningful question within the lens of an economic model in which a state of change is differentiable from a state at a moment of time, and in which endogenous is somehow distinguishable from exogenous. In discussing questions of this sort economists often forget that these concepts are not descriptions of the world; they are descriptions of a model. A change is exogenous or endogenous only in reference to a model; switch the model and the exogenous can become endogenous, and the endogenous can become exogenous. Similarly, equilibrium can become disequilibrium, and disequilibrium can become equilibrium.

It follows that the concepts used to describe and discuss change are model specific. Without the economists' modeling lens, change is inseparable from the static reality, and the question "Can economists handle change?" becomes almost synonymous with a question I addressed in an earlier collection of essays: *Are Economists As Important As Garbagemen?* (Colander 1991). An alternative way of posing the question addressed in that book is: "Are economists providing a reasonable analysis of economic events?" In that book I suggested that the economists' lens was wrong--that they saw themselves outside the economy looking in, rather than as part of the economic process. I concluded that "No, because of their outside perspective, they are not providing a reasonable analysis of economic issues." In that collection of essays I spelled out the reasons why.

In this paper, while the arguments are similar to those I present in my garbageman book, the issue I address is different. Instead of considering

policy issues, I consider the issue of changing institutional structure, and the sense of the question the editors pose as I understand it. That sense is: "Can the essentially static neoclassical model, broadly interpreted, be adapted to handle institutional change?"

The second definitional issue concerns what one means by "handle." I see three possible interpretations one could give to "handle." One could mean "predict when change is going to occur." If this is what is meant, economists have been totally inept at handling change. Another possibility is that one could mean "provide after-the-fact explanations of change that are intuitively satisfying." If this is what is meant, economists have been reasonable good at handling change on a superficial level, but not on a deeper level. Or, alternatively one could mean: "Can economists succeed in society so that, even though their model doesn't predict change, society doesn't cut off the funds going to them?" If this is what one means, economists have been superb at handling change. Indeed, as I argued in the garbagemen book, if economists' objective function is to maximize their enjoyment while maintaining income, they have been able to handle change quite well.

In this paper I assume that by "handle" one means the second of these definitions: "to provide an after-the-fact intuitive explanation of why change occurred in an intuitively satisfying way." I choose this definition in part because it provides the most interesting discussion, and in part because that is the most that can be asked of economists. Using the alternative definitions, the paper would be far too short; using the first definition one would simple point out economists' failures at predicting change; using the third definition one would simply point out neoclassical economists'

wonderful institutional success despite having little insight to add that is not contained in a few simple precepts. (of which the most important is the No Free Lunch precept)

Institutions and Economic Models

Positive economics is, in part, a descriptive discipline which tries to explain how societies produce, allocate, and distribute goods. In the real world institutions play an important role in the production, allocation and distribution of goods, suggesting that any economic theory which purports to be relevant to the real world needs a theory of real-world institutions. The mainstream approach does not have a theory of institutions; it limits its analysis to narrow questions of how goods would allocated and distributed if a set of perfectly competitive market institutions existed. Thus, the mainstream model explores how self-interested maximizers will operate within an ad hoc, assumed institutional structure. The mainstream approach is problematic because it is clear that real world markets aren't perfectly competitive. For the mainstream analysis to be relevant to the real world its analysis must be extended to incorporate real world institutions.

Chicago economists have been on the forefront of extending mainstream economic analysis to consider broader issues such as institutional structure. The Chicago "everything which is, is efficient" approach extends that analysis of self-interested individuals to the real world, and discusses how such individuals would interrelate in a broader institutional context. Thus, it opens up questions that the mainstream

neoclassical approach assumes away. Doing so is, in my view, highly laudable. But, ironically, after allowing such questions Chicago economics doesn't deal with them; it simply subsumes them under a broader implicit "competitive institutional" framework which assumes that some unspecified competitive force will guide society to the efficient set of institutions. Thus, what, in my view, should be the beginning of an economic analysis of institutions and institutional change becomes a stopping point.

The superficiality of the Chicago approach was captured by the editors of this volume's initial charge to contributors in which they questioned the "whatever is, is efficient" attitude inherent in the Chicago approach. The editors correctly cite Melvin Reder's (1982) insight that: "Successfully to endogenize a new variable is to enhance the explanatory power of economics, and there is much interest in such achievements. However, it must be noted that where variables are made 'endogenous,' they can no longer serve as objects of social choice. To the extent that variables are endogenized--choice is explained--society's freedom of choice is seen as illusory. Freedom appears to consist not in power of choice, but (pace Hegel) in recognition of necessity. This is not a likely conclusion for followers of Adam Smith, and surely not one they desire, but one from which they can be saved only by the failure of this direction of research."(page 35)

In their initial charge the editors suggest that Reder's insight means that endogenizing change via the Chicago approach must fail and that, using the Chicago approach, change must be treated as an exogenous shock beyond

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¹ Many Chicago economists only implicitly use the "whatever is, is efficient" approach but a few Chicago economists, such as Umbeck and Slater (1986) state it explicitly.

economic explanation. Within the existing model, they are, of course, right. But, with a slight modification in the underlying framework, the Chicago approach of attempting to endogenize sociological and institutional issues into economics can be made to handle change in a meaningful, rather than a superficial, way.

The slight modification I propose is to go beyond the Chicago "everything which is, is efficient" approach, and replace it with a "everything which is, plus many things which aren't, are efficient" approach. By this I mean that, in thinking about institutions, unless presented with a strong argument to the contrary, one's initial assumption is that there are a variety of institutions that could be the equilibrium outcome of some game-theoretic model of self-interested behavior. To determine what institutions are potentially feasible one must make an explicit analysis of the choice theoretic foundation of any institutional structure that one is using in one's model.

To achieve a reasonable choice-theoretic foundation for some institutions it may be necessary to posit a repeated game framework in which the underlying self-serving behavior is limited by steady state optimality conditions; it may be necessary to modify one's equilibrium concept; or it may be necessary to define the game theoretic model contextually within a historical context. In the approach I am suggesting, one does what it takes to achieve a choice theoretic foundation of institutions because one takes as axiomatic that any assumed institutional framework should be consistent with some individual choice theoretic framework.

It is likely that many alternative institutions will be consistent with the same choice theoretic foundation. However, that does not mean that all

institutions can be so rationalized, especially if one imposes reasonable constraints on model specification. One such constraint is on the nature of the utility function: A possible constraint is the ruling out of selective self-interest. By that I mean that other than such behavior which follows from limitations imposed by optimization in repeated games, selective self-interest--self interest followed in certain aspects of behavior but not in others--is not allowed. A second reasonable constraint might be a requirement that one's analysis of institutions be consistent with one's analysis of individual behavior given those institutions. (I will discuss the importance of this requirement below.) Thus, the choice theoretic foundation for institutions provides a limitation on the allowable choice theoretic foundation used to analyze individual choice given the institutions of the model.

The modification I propose is slight, but the implications are major. In this modified approach institutions become objects of social choice, but do not become totally deterministic as they do in the Chicago approach. Many alternative institutional choices are possible. The approach to institutions and institutional change I am suggesting would ask questions such as: How did society choose the particular institutions it chose? How have modifications in technology changes the nature of that choice. What likely alternative choices did it have? How stable are its choices?²

²In some sense all institutions--markets, governmental structures, families, corporate structures--are determined by individual decisions, and any complete theory must be broad enough to explain all institutions. I do not see such a complete theory as a reasonable goal given current technology. It would be the equivalent to scientists who are limited to exploring onlya few snowflakes, set out to explain the precise forces involved in the construction of snowflakes, and how the particular structure of every snowflake was predetermined. Perhaps, at some date, natural scientists, with the ability to explore an almost infinite number of snowflakes, will be able to explain such forces, but they are a

The Production of Institutions

For self-interested individuals to choose institutions they must somehow coordinate their actions, making group choices and, using some social decision making rule. Since markets and other institutions must be chosen through political or other non-market means, there can be no explicit presumption that the existing society would reach the most desirable institutional structure. There might be a tendency in that direction since the most desirable institutions yield possibilities of societal benefit, but there will be strong forces in the opposite direction. Like the QWERTY typewriter keyboard, inefficient institutions can become entrenched by history and inertia. History and perceived fairness of institutions will become important parts of economic analysis, and the analysis will likely include a consideration of Schelling-type focal points, (Schelling, 1960) which limits the choice of institutions to a few.

Choosing institutions with lumpy costs will likely involve significant non-marginal changes. It is much like the problem of choosing an operating system for a computer. A system, once chosen, determines the structure of individual choice within that operating system; an alternative operating system may often significant benefits in certain areas, but may involve significant costs in others, and the preferable one may well change as technology changes.

long way from achieving that end. For economists, who observations are much more limited, to attempt such a broad explanation is, in my view, pure folly. Instead, I follow the far more limited research program of providing explanations of how existing institutions work, what functions they perform well and which functions they don't perform well, and whether some alternative institutions exist which might be worth considering.

Institutional changes represent major changes and will inevitably have much higher costs than expected since real world institutions enormous effort to modify. But, in time, major changes may be worthwhile and it is economists' job to look at individual proposals for institutional change, and to judge whether or not they are useful.

The \$20 Bill on the Sidewalk Principle

The difference between the Chicago approach and the approach I am suggesting can be seen by considering an analogy often given in support of the Chicago approach. That analogy is sometimes called the "\$20 bill on the sidewalk" principle. The argument goes as follows: The assumption of rationality means that any profit opportunity will be exploited by self-interested, rational individuals. Therefore, an economy will always move to the efficient equilibrium unless there are impediments, such as externalities, to that movement. Given the assumption of rationality if the economy were inefficient it must mean that profit opportunities are being passed up, so it is only reasonable to assume that no inefficiency exists. The story underlies the "accept that which is" policy implications of the "what is, is efficient" principle.

In my proposed broader everything which is, and many things which aren't, are efficient framework, the above story no longer would lead on to the policy conclusion that existing efficient institutions are necessarily the desirable ones since there is no competitive process to choose among efficient institutions. Difficult coordination problems must be solved for institutions

to exist and there is no a priori reasoning that explains how, or whether, society will solve these.

Markets don't simply exist; they are created by individuals in society. Establishing markets requires agreement on property rights and other market conventions which requires enormous amounts of initial cooperation. With multiple efficient institutions one would expect that there are many \$20 bills lying on the ground. A reasonable society would commission someone, such as economists and other social scientists, to look for them. Thus, in my approach, economists are part of society's production process. It is economists who are looking for those \$20 bills that exist in the form of preferable (to existing) institutions. If society didn't believe \$20 were lying around, it would have a strong incentive to get rid of economists.

Using a multiple institutional equilibrium conceptual framework requires economists to give up their role as an outside scientific observer who analyzes institutions from an outside perspective and replace it with a role as institutional engineer. In that new role economists' jobs are to study the workings of past and existing institutions, to shed light on ways in which these institutions work and do not work, to consider alternate institutional arrangements, and possibly even to propose alternatives which might be preferable to existing ones.

Designing a satisfying treatment of individual choice, institutions and institutional change will not be easy. It is a challenging task which social scientists such as Herbert Simon (1956), Jon Elster (1989), James Coleman (1990) and Robert Frank (1985), have set up for themselves. It is their work,

not Chicago economics, which, I believe, offers a serious alternative to the Austrian spontaneous order approach to institutional change.

Consistency of Psychological Assumptions.

In this analysis of institutions there are alternative characteristics of institutions besides efficiency which it seems reasonable that an institution should fulfill. One of these characteristics is consistency. By consistency I mean that the choice theoretic foundation in the analysis of institutions be the same as the choice theoretic foundation of individual behavior.

Institutions place limits on individual behavior, often requiring individual optimal behavior at a moment in time to deviate from that individual's optimal behavior when considered out of institutional context. Such seemingly non-optimal behavior can be made consistent with individual self interest by positing a repeated game theoretic framework, and the individuals I cited above, who are working on the approach to institutional change I am advocating, often employ such a framework. They have been criticized for that framework; critics claim that there are not providing full but explanations ofinstitutions, are merely providing rationalizations. I agree with such critics, but believe that such ex-post rationalizations can be helpful in choosing an institutional model. By that I mean that such ex-post rationalizations of institutions can be helpful in establishing an appropriate concept of rationality to use, given institutions

Consistence requires that these two concepts of rationality be the same.³ The psychological assumptions one makes about individuals' rational acceptance of institutions should match the psychological assumptions one makes about individuals' rational behavior given those institutions. The degree to which one assumes individuals are willing to deviate from pure self interest in the acceptance of an institutional structure should be the same degree of deviation that one assumes in the underlying analysis of individual choice. Unless these match, one violates the consistency principle. Thus. consistency places a constraint on the rationality concepts one can use. For example, if one assumes that in their individual behavior individuals are only concerned with themselves, then the institutional structure one models them in should be ex-post rationalizable with such totally self-interested individuals. If, on the other hand, one assumes individuals are beneficent in some of their actions, then it is appropriate to model an institutional structure that is ex-post rationalizable with that same degree of beneficence.

Stability of Institutions

A second requirement for institutional analysis is that the institution should be choice-theoretically stable by which I mean that, given the psychological assumptions determined by the consistency principle, in equilibrium no incentive exists for individuals to change that institutional

³The argument for consistence is the same as the argument for assuming rational expectations. That argument is that if we are modeling individual choice, the theory of expectations should not use a different concept of rationality than we use for other analyses. For that reason, Alan Walters, an early expositor of the rational expectations idea, called them consistent expectations.

structure. The argument for the stability requirement is the following: Within a model of self-maximizing individuals institutions can be seen as contingent limitations on individual actions. These contingent limitations are acceptable to individuals either because the costs of deviating from them to individuals are too great, or because such limitations make sense to individuals in a repeated game framework, even as they don't make sense in a single game framework. Such contingent limitations can be highly beneficial to the society since they allow attainment of a preferable equilibrium, but they can also be highly unstable.

The limitation this condition poses for economic modeling can be seen by considering a perfectly competitive institutional structure. Such an institutional structure does not meet this stability condition since in a perfectly competitive equilibrium people at the margin have little incentive to fight against institutional change, while non-marginal individuals have an enormous incentive to push for changing from a market competitive institution. Rational, self-interested individuals, operating within almost any social decision framework, would not choose perfectly competitive markets. Given the inconsistency that underlies the mainstream economic model it is little wonder that mainstream economic analysis shies away from an analysis of institutions.

The question: What kind of institutional structure is choicetheoretically stable? is a difficult one. It is far more likely that some type of competitive monopoly equilibrium exists, in which individuals monopolize until the costs of further monopolizing equal the benefits. It is an understanding of the enormous push for monopolization which underlies the

classical arguments for laissez-faire, but in neoclassical economics formalization of the classical model that push for monopolization was lost.

Conclusion

Conceptualizing from a multiple equilibria conception of institutions requires only a slight technical modification in the Chicago model, but it requires an enormous modification in the vision accompanying it. It requires one to give up the views that existing markets and property rights are natural, and that, somehow, it is inappropriate to question their superiority over other forms of coordinating institutions. It requires one to give up all simple Pareto optimal arguments as far too simplistic, and to use a broader concept of optimality that includes distribution issues, and does not take the existing distributional framework as a point of departure. It requires one to give up any theoretical justification of markets and replace it with a historical-empirical justification. If markets are to be justified one must argue that, in the past, markets as a coordinating mechanism have worked better than the alternatives, and that the experience of the past is relevant to the future. It is an argument that can be made, but it is not an argument that follows from economic theory.

If the approach to institutions and institutional change that I propose is more reasonable than economists' current approach, why aren't economists already using it? One possible reason is that they will be a cost of such of change. To see that cost, it is helpful to reconsider the three meanings of handle that I discussed in the first part of this paper. My proposed approach

will help only in regard to my chosen definition--helping to provide a more meaningful ex-post explanation for changes that occur. It will not help economists predict change much better than they do now. The multiple equilibria models will be too complicated to be helpful in predicting anything more than tendencies toward change. Thus, predicting change will be essentially as difficult as it is now.

The cost comes when one considers the third definition of handle-being institutionally successful so that ones inability to predict doesn't lead to a cutoff of funds. The current Chicago approach provides a quasi-scientific justification for markets. That makes individuals who are benefiting from current market structures more likely to support it, even though it does not predict well. My proposed change eliminates that quasi-scientific justification, and, in doing so, will likely make it harder for economists to handle change in this third sense. Whether the costs justify the gains is something every economist must answer for him or herself.

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