Introduction

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In recent years scholars and policy makers alike have paid increasing attention to the complex relationship between social institutions and economic performance. There are various reasons why it is important to understand the role of institutions: economic stagnation in many developing countries; structural problems in the old industrial economies; and the collapse of the soviet economies of the former Soviet Union, Central Asia, and Eastern and Central Europe. Institutional analysis is of paramount importance for guiding the transition to markets in formerly centrally managed economies. Many scholars now recognize that mainstream economic analysis, neoclassical economics, is of little help in restructuring economies that lack secure markets; the same criticism holds for other disciplines in the social sciences.

An interdisciplinary research program that deals explicitly with the link between institutions, institutional change, and economic performance is now emerging. The new institutional analysis is a line of investigation that departs from but does not abandon neoclassical economics. Central to the research agenda is an emphasis on property rights, the transaction costs of measurement and enforcement, and incomplete information. The research program has been further enriched through cross-fertilization with law, political science, sociology, anthropology, and history.

Although both theoretical and empirical contributions to this field are accumulating at an increasing rate and two pioneers of the approach recently received the Nobel Prize in Economics (R. H. Coase in 1991; D. C. North in 1993), the impression persists that the field is long on theoretical analysis but short on empirical work. It is probably true that the stock of knowledge would grow faster if the new institutionalists put more emphasis on empirical work, but excellent empirical studies are more abundant than many critics realize. The empirical studies are not

highly visible, because they are scattered through the journals of several disciplines. In contrast, major theoretical contributions are frequently published as books or reprinted in books that have a relatively wide circulation across fields and disciplines.

In this volume we bring together nine empirical studies by fourteen scholars. These scholars analyze institutions and institutional change in various parts of the world at different periods of time, and deal with issues ranging from the evolution of secure markets in seventeenth-century England to the origins of property rights in airport slots in modern America.

To make the empirical essays accessible to a wide audience, including students of economics and other social sciences, we have written an introduction to each study and added three theoretical essays that reflect our collective views on the present status of institutional analysis and where it is headed. The views expounded in our essays provide a research methodology for addressing the issues associated with the causes and consequences of institutions and institutional change. In the first essay, Thráinn Eggertsson outlines a general framework for the study of institutions and economic performance. Eggertsson makes clear that both formal and informal institutions affect decision making. He pays particular attention to two issues in the literature that have attracted criticism of the new institutional analysis: the role of power and the role of rational choice.

In the second essay, Lee Alston presents a guide to structuring and testing issues in institutional analysis. He argues that incomplete knowledge and unintended consequences warrant abandoning the functionalist approach to institutional change: explaining the causes of institutional change by their consequences. Alston advocates a research agenda that examines the independent causes of the birth, life, and death of institutions. The essays by both Alston and Eggertsson emphasize that the study of institutions involves layers of analysis, and different layers often require different theoretical and empirical tools.

Because the new institutional analysis is a rapidly evolving field, basic theoretical tools are still being shaped and important issues concerning institutional change, such as the evolution of informal institutions, are poorly understood. The third essay, the Epilogue by Douglass North – his 1993 Nobel lecture – summarizes past achievements and discusses the frontier of research in the theory of institutions.

In writing the introductions to the empirical essays we had several goals in mind: to place the studies in a broader perspective, to highlight relevant theoretical concepts, and to suggest questions for reflection by the reader.

Introduction

Institutional change is a multidimensional, multilevel phenomenon that empirical studies cannot capture in all its complexity. Therefore, empirical studies simplify in various ways. First, the *scope* of the analysis is selective. A study may focus only on economic processes and ignore the political domain or, alternatively, attempt to capture the interaction between economic and political processes but only consider the economic consequences for a single industry. Second, empirical studies in institutional change are usually framed in terms of one or a few *central theoretical concepts,* such as agency, collective action, or credible commitment. Third, the *treatment of time* varies. Sometimes institutional change is analyzed with the help of cross-sectional data, comparing institutional arrangements across space but at the same time. In other instances, the scholar uses longitudinal data for comparative statics or in an attempt to analyze a dynamic process. Fourth, the character of empirical studies in institutional change varies with the *nature of the political and social systems* that are investigated, which may range from a traditional authoritarian agricultural community with little specialization and exchange to an advanced, mature industrial democracy. The empirical studies in the present volume sample this variety.

The first study, by Gary Libecap, is a pioneering quantitative test of the naive theory of property rights, named so[1] because it assumes that potential opportunities to increase wealth induce the required institutional change. The study tests the thesis that, up to a point, property rights become more precisely defined as the value of a resource increases. The scope is sectorial, meaning that micro and political processes are not explicitly considered.

The second study, by Jan Winiecki, uses a simple model of an authoritarian state (based on the new theory of the firm) to explain the inability of rulers in the former Soviet states to radically reform their economies. The theory of agency is used to analyze the relative autonomy of mid-level agents who were responsible for implementing the reforms.

The third study, by Andrew Stone, Brian Levy, and Ricardo Paredes, is an example of a cross-sectional analysis. Again, the role of transaction costs in providing relative autonomy to local actors is emphasized. The authors ask whether local actors who are faced with a formal institutional framework, imposed by central political authorities, that generates high transaction costs are able to lower these costs by creating informal property rights. The essay attempts a limited empirical test by comparing various economic results and processes in a country with

[1]T. Eggertsson, *Economic Behavior and Institutions* (Cambridge University Press, 1990).

relatively efficient formal property rights (Chile) with outcomes in a country that relies more on informal arrangements (Brazil).

The fourth study, by Douglass North and Barry Weingast, is concerned with the political foundations of secure markets. In an economy where entrepreneurship is decentralized, economic actors will hold back on long-term investments unless the state makes credible commitments to honor its contracts and respect individual ownership rights. Because the state is usually the most powerful agency in a community, and because circumstances often tempt rulers to take the short view and expropriate private wealth, institutional arrangements for controlling opportunistic behavior by the state have profound implications for economic growth.

The fifth study, by Anne Krueger, is restricted to one economic sector and provides a longitudinal dynamic analysis of the process of regulation, explicitly considering the interaction between economic and political organizations over time. The study brings out the complexity and changing nature of the process, making clear that none of several competing economic theories of regulation applies all the time.

The sixth study, by Steven Cheung, also looks at the process of regulation in a single market – here, the rental housing market in Hong Kong. The study concentrates on unintended side effects of regulation and explores how, in a complex world, actors may respond to regulations with adjustments at various unexpected margins and create outcomes that generate further institutional change.

The dynamic process initiated by government intervention in a market or in some economic activity may converge on a tolerably low-cost solution and avoid extensive dissipation of resources. In the Hong Kong housing market new regulations eventually managed to limit dissipating behavior at the various margins. However, regulations can also create a dynamic process that converges on high-cost outcomes, involving the dissipation of the regulated resources and/or increasingly inefficient production methods and technologies. The seventh study, by Robert Higgs, analyzes a perverse regulatory path.

In order to exploit the wealth-enhancing potential of technological change, new types of institutional arrangements are often needed. The aviation industry provides good examples of technologically induced institutional change. The eighth study, by William Riker and Itai Sened, studies the emergence of brand-new property rights and stresses the relative role of political organizations in their creation.

The final study, by Lee Alston and Joseph Ferrie, takes a macro, or general equilibrium, view of institutional change in a democratic society and explains institutional change in terms of complex relationships between diverse economic and political organizations and sectors. Alston

and Ferrie link production methods and technological change in agriculture in the U.S. South, the structure of Southern labor contracts, and the organization of the political system – particularly the U.S. Congress – to the growth of the welfare state.

A note on the economics of institutions

THRÁINN EGGERTSSON

1. INTRODUCTION

In this essay I argue for a research program in the economics of institutions that combines the best of all worlds. I argue for parsimony in structuring theories and a standardization of theoretical terms, but I also argue for the economic principle of judicious substitution at the margin when research methods are selected. As I see it, the maximization of net output in research requires a flexible use of the inputs, the matching of tools to the tasks at hand, while recognizing at the same time that eclecticism is not a free good. The optimal strategy involves a delicate balance that I outline in general terms.

The research program summarized and discussed here concerns the economics of institutions, particularly the relationship between institutions and wealth, the classic theme of Adam Smith. The following section contains a brief summary of a theoretical framework for the economics of institutions.[1] The core of the framework is a modified version of the neoclassical model in economics. However, I suggest that the optimal deviation from the basic model varies with the level of analysis and the type of variables to be endogenized. It is recognized that some lines of research will require extensive adjustments in the neoclassical model, perhaps to a point where the model becomes barely, if at all, recognizable.

In many instances, the basic neoclassical model, extended to include the concepts of transaction costs and property rights, is an effective tool

This is a shortened, revised, and edited version of an article published in *Acta Sociologica* 36 (1993), pp. 223–37, entitled "The Economics of Institutions: Avoiding the Open-Field Syndrome and the Perils of Path Dependence."

[1]The research program is discussed extensively in Eggertsson (1990), except that various ideas are elaborated here. We label the program alternatively *neoinstitutional economics* or the *economics of institutions*.

for studying the link between institutions and wealth. For other cases, especially for the study of changes in informal institutions, such as norms and customs, probably an alternative or a complement to the neoclassical model of choice is required. Furthermore, the appropriate mix of research methods obviously depends on the state of the arts in scholarship. A clear-cut breakthrough in modeling human decisions could justify a wholesale rejection of the rational choice perspective, but I am not aware of any such development. The third section of the essay considers criticism of the economics of institutions, paying special attention to the concept of power and the model of choice.

2. THE LINK BETWEEN INSTITUTIONS AND WEALTH

An analysis of the link between institutions and wealth can proceed at several levels, depending on which categories of variables are treated as endogenous. A research program for the economics of institutions that is based on an extended version of neoclassical economics capitalizes on the strengths of the neoclassical approach, maintains the continuity in economic analysis, and lowers the cost of transacting in scholarship. However, at the frontier of research there is also a need and scope for experimental work with an alternative paradigm.

To provide a role for institutions and organizations in neoclassical theory, the concepts of transaction costs and property rights are central, following the approach of Ronald Coase (1937, 1960); property rights economists of the Los Angeles–Seattle school, especially Alchian (1977), North (1981, 1990), Cheung (1969, 1970), Barzel (1989), and Demsetz (1988); a number of scholars working in economic history (Libecap 1989), law, and economics (Goldberg 1976a,b; Posner 1986); and students of the economics of organization (Williamson 1985).[2] Figure 1 presents a stylized schema of the main theoretical concepts that form the link between institutions and wealth, as seen from the short-term viewpoint of an individual. *Institutions* are defined as formal and informal rules that constrain individual behavior and shape human interaction; the *institutional environment* varies with a person's position in society (North 1990).

The economics of institutions employs the term *property rights* in a general sense (which does not correspond to its role in legal theory) to define the rights of an actor to use valuable assets (Alchian 1965). The property rights of an actor are embodied both in formal rules and in social norms and customs, and their economic relevance depends on how

[2]For a survey of the state of the art by several key scholars in the field, see Furubotn and Richter (1991, 1993).

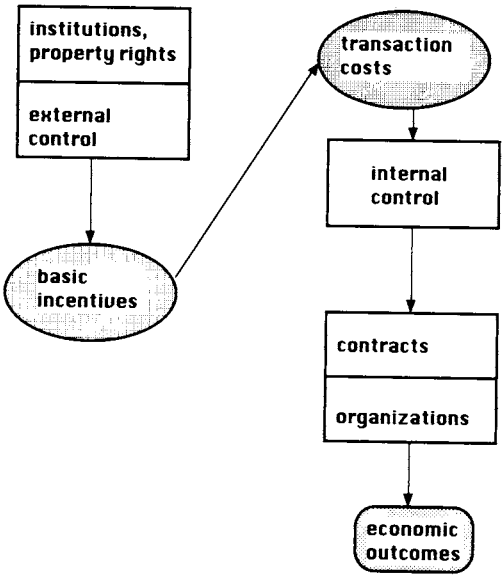

Figure 1. The link between institutions and wealth: the short-term viewpoint of the individual.

well the rights are recognized and enforced by other members of society. It is important to note that the ability (power) of an actor to use valuable resources derives both from external/exogenous control and from internal/endogenous control. *External control* depends on the property rights of an actor or, in other words, on how his or her institutional environment – constitutions, statutes, regulations, norms, enforcement, and sanctions – constrains and directs both the actor in question and outsiders. *Internal control* is established by the actors themselves through various investments aimed at gaining control over scarce resources, involving monitoring, fencing, hiring private guards, checking reputations, and other measures.

The term *transaction costs* refers to an actor's opportunity cost of establishing and maintaining internal control of resources. Transaction costs, the costs of measurement and enforcement, are incurred to protect values both in voluntary exchange and against involuntary exchange, such as theft. The transaction costs of several individuals can be aggregated, and theoretically one can contemplate the transaction costs of a whole economic system. At that level of aggregation, the distinction between internal and external control disappears (assuming an isolated economic system).

From the individual viewpoint, institutions and their manifestation,

property rights, define the opportunity set, the basic system of incentives, and the transaction costs associated with various investments. As economic theory has elaborated for more than two hundred years, the creation of wealth is enhanced in various ways by cooperation, specialization, and exchange. These activities take place against the institutional framework and are constrained by transaction costs, as property rights never provide the actors with full protection and full certainty. Voluntary exchange involves the transaction costs of contracting. In order to lower their transaction costs in exchange, individuals resort to various measures that are embodied in *contracts*.[3] The structure of contracts reflects both the traders' institutional environment and various internal rules, which they set themselves. The state can play a very large role in lowering the cost of contracting of individual actors by providing clear and stable property rights, including a consistent system of enforcement, and also by supplying standards, such as weights and measures, which lower measurement costs. Economies of scale make the state relatively efficient both in lowering the cost of contracting and in disrupting contracting.

Finally, the term *organization* refers to a set of actors who cooperate or act jointly in production (North 1990). The output of organizations ranges from commodities (firms) and statutes (legislatures) to religious services (churches), and our approach makes an important distinction between the players and the rules (institutions) by which they play.

The behavioral link between institutions and wealth involves complex and only partly settled theoretical issues, but, at the risk of oversimplification, we make the following generalizations. The creation of value is curtailed:

1. when property rights to valuable assets are undefined or unclear because vague property rights tend to give rise to wasteful behavior;
2. when property rights to valuable assets belong to and stay with individuals who do not put the assets to their most valuable uses.[4]

For instance, the failure of the Soviet system can be characterized in terms of our framework as being caused by institutions that created vague property rights with high measurement and enforcement costs,

[3] As used in the economics of institutions, contracts are essentially a theoretical fiction. The view of exchange relationships as being embodied in a network of contracts, including ethnic trading networks, and the recognition that the structure of contracts involves informal rules, such as norms and even religious beliefs, suggest a need to study the role of social structures in facilitating exchange. Landa (1994) has studied how culture and ethnicity influence commercial morality.

[4] Barzel (1989) provides an excellent discussion of theory, explaining the link between property rights, incentives, and economic outcomes.

which increased over time. In the Soviet system, effective property rights were held by individuals who did not put assets to their most valued use, and the arrangement created an acute conflict between individual and group rationality (Eggertsson 1994).

Figure 1 illustrates how research in the economics of institutions can be segmented into analytical levels depending on which variables are endogenous. Various constellations are possible, but we consider the following three possibilities.

The first level of analysis attempts to explain how variations in institutional arrangements affect economic outcomes or wealth; and for this purpose institutions, organizations, and contractual arrangements are treated as exogenous variables. Traditional neoclassical economics, which assumes the existence of mature market organizations, is a special case belonging to this category.[5] However, in order to explore a variety of institutional arrangements (even variation within the category of mature market institutions) and to understand the consequences of institutional change (for instance, the transition to markets by former Soviet-type economies), the neoclassical model must be augmented by the concepts of transaction costs and property rights. Also belonging to this category is a substantial part of the work in law and economics that explores the economic consequences of various legal arrangements (Posner 1986; Cooter & Ulen 1988).

The second analytical level attempts to explain how the institutional framework affects the structure of economic organizations and contractual arrangements. The basic notion here, as illustrated in Figure 2, is that in each case the institutional framework defines and limits the set of practicable forms of economic organization available to economic actors. Pioneering work in this area was undertaken by Coase (1937) and Cheung (1968). Belonging here are contract economics (Werin & Wijkander 1992), the work of Williamson (1985, 1993) on the economic institutions of capitalism, and various contributions in industrial organization (Milgrom & Roberts 1992). These studies, although somewhat heterogeneous, are of the neoclassical tradition (albeit marginally in the case of Williamson), and all emphasize transaction costs. Relatively few studies have explored the adjustment of organizations to institutional arrangements other than the market institutions of capitalism, and the analysis typically focuses primarily on measurement and enforcement costs implied by the types of commodities exchanged and by the nature of the exchange. However, there are several noteworthy exceptions, studies that analyze the structure of organization in environ-

[5] Neoclassical economics also assumes that there are no transaction costs involved in using the price system or the firm.