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Economic Systems Of Foraging, Agricultural, And Industrial Societies

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Conclusions and an Agenda for Future Research

This study applies a uniform method of analyzing economic systems at various stages of development, ranging from foraging to advanced industrial/service economies. Although such an approach does not result in a generalized “theory of economic systems,” whatever that may mean, it does permit us to discover for economies with any given focus of production an important order arising out of the chaos of case studies, statistics, anecdotes, and factoids that govern most discussions. As a result, theorizing can begin about their institutional orders from a solid empirical base.

The most important empirical results can be quickly summarized: Economies at every stage of development feature a small number of distinct economic systems, defined in terms of particular groups of institutions that cluster together. From the statistical analysis presented in previous chapters, many of these economic systems do not seem to be generally determined by the social structure, political organization, or physical environment of the societies but rather appear as independent entities, worthy of study in their own right.

These economic systems provide an analytical framework within which a variety of economic activities can be placed in context and examined. Designation of the economic system also allows us to distinguish those characteristics typical of all societies with the same focus of production from those that are shared only by those societies with the same system and those that are unique to a given society. Moreover, in certain cases, these economic systems have an important impact on the performance of the economy.

In the transition from foraging to agriculture, the particular economic systems did not appear to have influenced which societies made this transformation. Instead, other factors such as the stress on the land played more

important roles. Unfortunately, we currently do not have enough evidence to determine in what manner the system influenced this transformation. By contrast, the characteristics of the economic system appeared to play an important role in the transition from agriculture to manufacturing, as evidenced by data on eighteenth- and nineteenth-century industrialization and also on developing economies at the end of the twentieth century.

The preceding chapters have, of necessity, focused on details; the general conclusions summarized herein would not have stood on a firm foundation without a careful analysis of the available statistical data. Now, at the end of this study, it is time to reexamine my results from a broader perspective and to ask how they can be extended and deepened.

A. The Existence and Delineation of Economic Systems

1. A Brief Review

In the previous chapters, I use a cluster analysis to show that, at each stage of economic development, only a small number of different economic systems can meaningfully be isolated. This approach takes into account the major institutions and organizations in these economies that define property relations and structure the distribution of goods and services. The results of such an analysis for the industrial/service economies, which accord with our expectations about such systems, give us confidence in the results of economies at lower levels of economic development.

The type and number of institutions taken into account depend on the complexity of the economy. For my sample of forty-four foraging societies, I use ten key institutional and organizational variables to determine the clusters (which are, in turn, used to examine another twelve foraging societies that had begun the transition to agriculture). For my sample of forty-one agricultural societies, I select twenty-two such key institutions and organizations for this statistical analysis. For the analysis of the transition from agriculture to industry, I use two samples. The first is a sample of more than twenty national economies in the eighteenth and nineteenth centuries, although the available data do not lend themselves to a cluster analysis. The second is a sample of forty-two developing nations where such an analysis could be carried out using thirty-one indicators (Appendix 6-8). For the exploration of industrial/service market economies at high levels of economic development and complexity, I examine forty indicators of institutions and organizations for twenty-one OECD nations. Finally, I investigate particular

characteristics of thirty-three Marxist economies and compare their impact on economic performance with various market economies. In brief, in this analysis I take account of more than two hundred different economies, ranging along the entire development spectrum from extremely simple gathering economies to the most complex industrial/service economies.

If the proposition about the limited number of economic systems were wrong, the empirical analysis would reveal either a large number of clusters defining the economic systems at each level of economic development or relatively little reduction in the multidimensional variance of the institutional variance. But this does not happen.

The level of economic development plays a critical role in this analysis because it is correlated not just with many of the particular systemic characteristics, but also, in many cases, with the type of economic system. Such correlations, of course, do not tell us which caused which; unfortunately, the nature of the available data does not easily allow refined statistical tests to separate the direction of causality. For our purposes, however, it is sufficient to realize that the level of economic development is a crucial key to understanding these systems and their characteristics.

The importance of the level of economic development becomes particularly apparent when we compare the economic systems of high- and low-income market economies at the end of the twentieth century. The economic systems of the two groups of countries had quite different characteristics and clusters of institutions. Indeed, over a span of thirty years in the latter part of the twentieth century, the defining characteristics of the different economic systems of the OECD nations changed as the level of per capita GDP rose.

2. Some Implications of the Results

METHOD AND THEORY. The research presented in the previous chapters shows that all types of economies – foraging, agricultural, or industrial/service – can be successfully analyzed using the same approach and with the same statistical methods. This does not, however, imply that we can develop a grand typology of economic systems over all time and space or that some overarching theory can explain how they all function. These different types of economic systems at various levels of development seem to me to be too diverse to allow many useful generalizations.¹

¹ Nevertheless, in special cases, meaningful comparisons can be made. For instance, although I have not placed great emphasis on nomadism in the chapters on preindustrial societies, in comparison with other societies with the same focus of production, both nomadic foragers and

Despite my skepticism that a single theory can be developed that will embrace all economic systems, some parallelisms between the economic systems of foraging, agricultural, and industrial/service economies can be found. For instance, within each of these major groups, we find some economic system in which political forces were significantly more centralized: the politically oriented system among the foragers, the individualistic societies among the agriculturalists, and the Nordic and West European systems among the advanced market economies (as well as the East European Marxist systems, if we wish to include all industrialized economies). Nevertheless, this political emphasis is tied to quite different social and economic characteristics so that these parallelisms lie primarily on the surface. For instance, in the politically oriented foraging societies, the leaders collected taxes or tributes but were limited in what they could extract because of the relative ease with which a family could leave the band and join another. At higher levels of development, however, the leaders of the more politically centralized societies faced no such constraints. Other parallelisms along social or cultural dimensions are even more difficult to find.

THE LOGIC OF INSTITUTIONS. My delineation of different economic systems implies that the logic of institutions – that is, complementarities and coherence in the configuration of economic institutions of a society – has analytical usefulness. The tightness of this logic, however, is a key issue. For instance, societies at the same level of development and with the same type of system can have somewhat different economic institutions. That is, not all of the economies with a given type of system necessarily feature all of the same economic institutions and organizations that are typical of the system. For a given nation, such differences with the average characteristics of the system can be slight, so that we can consider it to lie close to the center of the cluster; whereas other nations might have greater differences and lie closer to the border separating one economic system from another. For instance, in Chapter 7, I show that France appeared close to the border separating the West and South European systems and that Switzerland was

nomadic agriculturalists (herders) are more likely to exhibit group possession of a territory than the private ownership of land. All types of nomads, however, have some other kinds of private ownership: the foragers own their tools and, perhaps, certain trees; and the herders own their flocks. Greater inequalities of wealth (at least before redistribution of income occurs) might also be more likely to arise among nomads than settled foraging or agricultural communities. For instance, a nomadic hunter, gatherer, or fisher might have a run of bad luck for a considerable period of time; or a nomad herder's animals could be wiped out in a short time because of disease, attacks by wild animals, or theft.

close to the border between the AS+ and the West European systems. Thus, the logic of institutions has some flexibility and represents a general tendency rather than a binding constraint. Of course, if this logic were completely inflexible, economic systems would have difficulty adapting to the functional necessities of a higher level of economic development, and economic progress might be considerably hampered.

In considering why certain economies perform better than others, many have focused their attention on “key institutions.” If the logic of institution holds, however, such institutions are related to others so that the question is whether it is the impact of the “key institution” alone or together with related institutions that provides the crucial explanation. For instance, is it primarily the strength of property institutions alone, as some have argued, or in conjunction with institutions facilitating trade, labor mobility, and the flow of capital that caused such differences in growth between West Europe and the rest of the world in the nineteenth century?

The logic of institutions also raises some important issues about how institutions change. When nations sharing the same type of economic system change, do these institutions mutate in the same way or in different ways? When we examine the transition from foraging to agriculture, or from agriculture to industry, are the functional necessities more or less constraining, so that the types of economic systems in all nations with a given economic system become ever more similar (contracting clusters) or different (expanding clusters)? The cluster analysis suggests that the functional necessities that shape economic systems are less restrictive for agricultural societies than for either foraging or industrial/service economies, even though we cannot assess at this time whether these functional necessities in industrial/service economies are becoming ever more restrictive as the level of economic development rises.

EVOLUTION. This investigation of the economic systems of preindustrial societies has an important implication for a long-standing debate among anthropologists about the meaningfulness of the concept of “societal evolution.” Robert Carneiro (1970; 2003) provides a useful cumulative scale of societal complexity in which the societies at a lower level do not have certain key characteristics of societies at a higher level (e.g., the extraction of metal from ore), whereas those at a higher level have all of the key characteristics of those at a lower level (e.g., the making of pottery). His scale gives a very concrete meaning to societal evolution, and I use it as a measure of economic development. Although his scale employs several

hundred cultural characteristics, it does not focus on economic institutions and organizations, which define the economic system.

My results are relevant to this debate on evolution in two respects: First, I show that certain economic systems occur only in specific ranges of the development scale, which supports Carneiro's schema of unidirectional evolution. Then, I also demonstrate that at particular levels of economic development, several different economic systems may be found. This means that alternative configurations of institutions can exist at any given level of societal complexity and, hence, we must consider societal evolution as a multilayered process. Such an approach takes into account a different array of traits than Carneiro's scale, thereby deepening our understanding on how these preindustrial societies develop.

ECONOMIC FUNCTIONS AND INSTITUTIONS. The institutions through which certain activities are carried out are also greatly different among those in foraging, agricultural, and industrial/service economies. For instance, one type of distribution mechanism – namely, the sharing of food – appeared more prevalent among the foragers than the agriculturalists.² In part, this was because random elements played a more important role in hunting, gathering, and fishing than in plant or animal production; in part, because the foraging communities were generally smaller and, one can conjecture, socially more cohesive. In industrialized economies, however, the sharing of food has been carried out primarily through transfer expenditures by the government, a type of transaction that, in most preindustrial societies, was a relatively minor method of food redistribution.

3. Possible Extensions of the Analysis

The type of cluster analysis I use to delineate economic systems can be extended in a number of directions.

TYPES OF ECONOMIES. In my investigation of preindustrial societies, I focus on those that are predominantly foraging or agricultural. But, a large number of societies lie somewhere in between, relying partly on foraging and partly on agriculture for their food. They deserve investigation. In my sample, I also have relatively few instances of societies where a strong state played an

² Because I could not develop a consistent code for food sharing in agricultural societies, this proposition could not be proven; it is based on impressions gained from ethnographical observations of agricultural societies when the ethnographers focused interest on such matters.

important economic role, and even in the few that I have, I focus primarily on the economy at the village level. Certainly, the economic role of ancient states deserves greater attention. For lack of readily obtainable information, I also do not carry out a cluster analysis on Marxist economic systems; this would also be a very important investigation.

TYPES OF INDICATORS. For the preindustrial societies, I coded only those indicators of the major economic institutions and organizations that could be most easily gleaned from the more than seven hundred ethnographies I consulted. This coding task, though wearisome, should be extended to cover a broader range of indicators. For the advanced market economies, I also rely primarily on the most readily available indicators of institutions and organizations, most of which were calculated by others. This same tedious research needs to be expanded for yet more indicators because not all important economic institutions have been covered. Furthermore, for the advanced market economies, we need such indicators not just for the current period, but also for years in the past. For instance, in the period between the world wars, cartels and certain state administrations of industry were very important in certain countries (e.g., Germany and Japan), and these institutional elements are not well captured in my list of indicators. The task of devising such indicators for the past raises some difficult estimation problems, especially because some of the indicators for 1990 are based on surveys that were not carried out in the past.

REFINEMENTS OF THE ANALYSIS. In carrying out the various cluster analyses, I employ some indicators of economic institutions and organizations that do not serve to differentiate one economic system from another. And, as mentioned, some economic indicators, which might possibly be important, do not come readily to hand and, therefore, are not included – for instance, the security of property rights in preindustrial societies. Although I am sure that the economic systems derived from my analysis broadly delineate those which exist, much closer attention needs to be given to determining the most effective types and numbers of indicators so that the boundaries of the various economic systems can be drawn with greater confidence.

A TESTABLE THEORY OF THE LOGIC OF INSTITUTIONS. My method of analysis has been primarily inductive. It shows which institutions cluster together in various economic systems but does not explain why such clusters are found. More specifically, do institutions cluster together because, as a group, they can operate more efficiently or effectively? Or do they cluster

together because they emanate from the same political or social forces? (Such issues are investigated briefly in Chapter 6 for advanced market economies and shown to be crucial for the Marxist economies in Chapter 8.) Or do they cluster together because they stem from the same set of external causes?

Given the mathematical tools available to economists, it would certainly be easy to generate such a theory, even though it could never be empirically tested. Although such intellectual games may be useful for young scholars to obtain their doctorates or to gain promotion to a higher academic rank, such an approach is useless for the long-run advancement of the study of economic systems. In the words of Bertram Russell, it has all the advantages of theft over honest toil. Instead, such general theories of economic systems must be testable, preferably by the scholar proposing them, so that their usefulness can be demonstrated.

B. Causal Independence of the Economic System

Heavily influenced by Karl Polanyi and his epigone, most social scientists seem to believe that preindustrial economic systems are embedded in a social–political–environmental matrix, which ultimately determines the major shape of the system. They also seem to argue that this is not the case with modern industrial economies. In previous chapters, I address this matter in a very simple way: by lining up a series of indicators for important social, political, and environmental variables and testing whether the particular values for these indicators vary significantly from one economic system to another while holding the level of development constant. If any significant correlation emerges, I then try to determine if the relationship is real or spurious and in which direction the arrow of causality points.

For preindustrial societies, this investigation is very straightforward because I find very few such statistical relationships. Thus, their economic systems appear quite independent of these social–political–environmental forces that have received such loving attention and such determined protection by anthropologists. Moreover, cultural diffusion also seems to have played a relatively minor role in determining the type of economic system a preindustrial developed because most – but not all – of the various types of preindustrial economic systems were found in widely separated locales.

By contrast, the four types of economic systems of the OECD nations were correlated with some political, ideological, social, and cultural variables. This suggests that such noneconomic factors might well have played a certain role in the development of these systems. For instance, the countries with a Nordic economic system have had more left-leaning populations;

and almost all of the countries with Marxist economic systems were dictatorships, which held their economic systems together.³ The OECD nations with the same economic system also appear geographically and historically linked; thus, diffusion also appears to have had a causal role in their formation. In brief, my results appear to turn the conventional wisdom about the role of noneconomic factors in preindustrial and industrial economic systems upside down.

Again, my analysis can also be extended in different directions. In particular, more subtle types of social–political–environmental variables and their relation to the economic systems need to be explored. As noted in Chapter 6, the form of government, the *de facto* political power held by certain important groups, and the dynamic between these groups have an important impact on the security of property rights, which is a very important institutional variable influencing economic groups. The relationships between the various types of economic systems and a variety of these noneconomic variables need to be modeled in a more sophisticated fashion, as demonstrated in recent studies by Lindert (2004a, 2004b) and Acemoglu, Johnson, and Robinson (2004).

Such research efforts are vitally important for focusing attention on a key theoretical question left unanswered in this study: namely, the causal factors underlying institutional complementarities. In brief, the logic underlying the logic of institutions is far from clear and needs to be explained before we can fully understand either the structure or the functioning of economic systems.

C. **Impact of the Economic System on Economic Performance**

Unfortunately for this study, preindustrial societies did not have central statistical offices and most visiting anthropologists evinced little interest in filling this void. Because of a lack of comparable data on such outcome as growth, fluctuations, inflations, and other macroeconomic measures of economic success, I could not determine the impact of the economic system on economic performance.

Even without such comparative macroeconomic performance tests, however, we can still test hypotheses about the relationships between different

³ Of course, a number of market economies are (or were) dictatorships as well, so that it was the combination of a Marxist ideology and a monopoly on political power that gave the relatively economically advanced Marxist nations their distinctive economic systems.

types of economic systems and their microeconomic performance. More specifically, existing ethnographic case studies of societies with different economic systems can certainly provide considerable insight into a number of such questions. For instance, which of two or three societies with different economic systems was best able to handle a famine, drought, or some other external shock with the least loss of life? Which was best able to handle the consequences of contact with the West – for instance, forced sedentarism, restriction of territory, or elimination of entrenched local practices such as the slave trade? Which was best able to handle the economic demands of a war or a welcoming feast thrown for a neighboring community or some other situation requiring a large mobilization of resources? Which had the economy most troubled by social tensions or internal warfare over food or other vital resources? Which was the most likely to feature individual economic behavior that damaged the smooth functioning of the economy?⁴

Such comparisons, of course, require an enormous amount of digging into the ethnographic literature. Moreover, this research must be carried out with the realization that such comparisons of two or three societies with different economic systems cannot provide conclusive evidence for the proposition under investigation, even while they can permit the systematic accumulation of evidence from which generalizations can later be drawn. Such work also provides some useful guides for future ethnographic fieldwork of aboriginal societies – assuming, of course, that any such societies remain uncontaminated by contact with the West.

For the industrial/service economies, several different extensions of the analysis of economic performance in this study can also be envisioned. Given limitations of space, I deal with only the most obvious macroeconomic indicators of performance. Investigation of the impact of the economic system on more subtle macroeconomic phenomena is vitally important for policy-makers. For instance, what is the differential impact of various monetary and fiscal policies on the performance of nations with different economic systems? What is the impact on economic performance if a nation with a given economic system is lacking one or more institutions that the other nations with the same economic system have? Or, what are the types of special economic difficulties that arise in nations whose institutional configurations lie close to the border of another economic system? A considerable number of other questions about microeconomic performance can be added to this list.

⁴ Given the emphasis of Marxism on the struggle between different economic groups in the formation and growth of industrial/service economies, it is surprising that Marxist anthropologists have not paid more attention to such struggles in preindustrial societies.

An equally difficult and fundamental task is separating the influence on economic performance of specific economic institutions from the influence of the economic system as a whole. As noted in Chapter 1, adherents of the “new institutional economics” have set themselves the task of investigating the impact of individual institutions on performance. But, certain institutions reinforce (or negate) the impact of others, so that it is not enough to correlate performance with one institution; rather, a whole cluster of institutions must be taken into account. For instance, as mentioned in Chapter 6, Timur Kuran analyzes the economic underdevelopment of nations in the Middle East in terms of the interaction of three economic institutions. Of course, once we begin to talk about clusters of institutions, we are focusing on whole economic systems or at least on sizable segments (subsystems) of them. The analysis of economic performance thus becomes more difficult because we are not just exploring which institutions influence the economic outcome and then assessing the relative importance of each. We must also determine which combination of these institutions plays the leading causal role.

D. Change of Economic Systems

Systemic change can occur within or without a change in the focus of production, and it is useful to discuss these two processes separately because external forces might operate quite differently in the two cases.

1. Systemic Change Accompanying a Change in the Focus of Production

The change of economic systems occasioned by a shift either from foraging to agriculture or from agriculture to industry can be approached by looking at either the beginning or the end of the process. In this study, I focus most attention on the beginning. Concerning the transition from foraging to agriculture, I draw two major conclusions.

FUNCTIONAL NECESSITIES. Many argue that this transition cannot proceed without certain functional necessities being met, especially the development of a sense of private property, so that the harvest of a particular plot is understood to belong to the person who prepared its soil, planted the seeds, and weeded it. Most of the foraging societies in my sample were, in this respect, quite prepared for the transition, and I believe this issue to be

overdrawn.⁵ Even when the concept of private property in land is lacking, it can readily evolve under suitable conditions. In the past, this may have taken hundreds of years, but sometimes it can take hold in just a few decades – for instance, among the !Kung San of the Kalahari desert (Yellen, 1998) or the Sirionó of Bolivia (Stearman, 1987).

THE ROLE OF THE EXISTING ECONOMIC SYSTEM AND OTHER VARIABLES. In Chapter 3, I find little relationship between a foraging society's economic system and its transition to agriculture, although the sample for this analysis is small. I also determine that the transition did not seem consistently related to most social-structural or many environmental variables because their possible causal roles differed considerably at different times and places. More promising explanatory variables were sedentarism and increasing population density, accompanied by diminishing returns in foraging. If, because of the growth of population in adjoining areas, small groups within the society were no longer free to move elsewhere to forage when foraging returns declined, then agriculture became an increasingly important option for obtaining sufficient food for survival. Nevertheless, neither sedentarism nor higher population density, taken in isolation, appeared to be sufficient causes for the transition. Moreover, some societies returned from agriculture to foraging, when the technology of foraging improved (e.g., the introduction of the horse), and the introduction of agriculture could be delayed by various artificial means for limiting population growth.

The passage from an agricultural to a manufacturing/service economy appeared to be a different type of transformation. The evidence from the industrial revolution in Europe in the eighteenth and nineteenth centuries suggests that a number of important institutional factors were involved, many of which appeared to be related to the economic system. These included high literacy, high agricultural productivity, increasing commercialization, and farms with stable tenure arrangements, where influences of the community or the landlord on farming decisions were minimal. Using a sample of developing countries at the end of the twentieth century, I find further support for the linkage between economic system and economic development. Nevertheless, as I argue in Chapter 5, although a commercialized agricultural economic system seems *most likely* to make the transition into

⁵ As noted in footnote 19, Chapter 3, even our nonhuman primate cousins have certain notions of private property in regard to both territories and nonfood items. See also Pryor (2003b) and Boehm (2004).

manufacturing, it is neither a necessary nor a sufficient condition for such a transition. For instance, the Netherlands was the most commercialized nation in Europe in the eighteenth century and it shared the other features aiding industrialization but was one of the laggards in industrialization. Many developing nations today have highly developed commercial sectors and some of the other reinforcing characteristics as well but have relatively little manufacturing except, perhaps, for that financed and managed by Western entrepreneurs.

From these studies of the quite different transitions from foraging to agriculture and from agriculture to industry, I must conclude that the search for a single all-embracing theory (in Marxist terminology, for the “laws of motion”) is probably fruitless. Nevertheless, the separate investigation of each of these transitions yields useful insights into the impact of economic systems.

2. Systemic Change Without a Change in the Focus of Production

With the exception of a few words about the U.K. economy in the second half of the twentieth century, I say little in this book about how a society might shift from one economic system to another while maintaining the same focus of production. Such an analysis would involve investigation of the behavior of economic systems of various societies over a long period of time; for the most part, I rely on snapshots of societies at particular moments in time. At least for foraging societies, moreover, such historical studies are very rare indeed because most of these groups lived their lives “outside of history.” Of course, the lack of much factual information has not prevented theorists from speculating: some have explained such systemic changes in terms of gains in efficiency or productivity, for example; others, in terms of population movements involving the conquest of groups with one economic system by those with another system. Such armchair theorizing is a pleasant way to pass the time, especially while leaving the hard work of empirical validation to others. Given the incentive system in academic economics, this may not ever happen.

For agricultural societies, the historical record is more complete, especially for Europe. For instance, for Europe we have a large number of studies on particular institutions, such as the rise and fall of serfdom or various land-rental arrangements, or the emergence of such other institutions as banks, guilds, and various types of industrial endeavors. The search for the underlying causes of these changes, and their impacts on the economic system as a whole, has revealed a variety of endogenous factors ranging from

the purely economic, such as changes in population density or inflation, to more political/economic factors, such as the structuring of economic and power relationships between tenant farmers and landlords. The role of exogenous factors was also substantial, like warfare or increased economic contact with other nations. In a large number of these historical studies, however, the focus has been on exploring the path of the society toward industrialization or capitalism, rather than on its shift from one agricultural economic system to another.

Relating such historical materials to the typologies I have developed from cross-section evidence requires more than a shift of viewpoint to determine how economic systems change while maintaining the same focus of production. As noted previously, the research in this book on preindustrial societies deals mostly with communities, whereas many of the historical studies deal more with states and empires. As shown in Chapter 5, however, it is possible to bridge these different levels of analysis. Moreover, as far as I have been able to determine, we have few comparative studies of systemic change in agricultural societies outside of Europe from which to derive hypotheses that could be linked to the cross-section evidence. In brief, a comparative study of how societies change from one agricultural economic system to another would be a very useful full-length book – but it has yet to be written.

Problems also arise in studying how advanced industrial/service market economies move from one economic system to another, in part because of the lack of comparable data (as shown in Chapter 7), in part because the defining characteristics of economic systems have been mutating as the international economic environment has constantly changed, the level of technology has increased, and the general level of economic development has risen. For instance, a defining characteristic of nations with the Nordic economic system in 1990 – namely, an especially high ratio of public consumption to total public and private consumption – began to emerge in these nations only in the late 1950s.

Other critical and unsolved theoretical problems about the patterns of systemic change are raised in this study. For instance, are systemic changes parallel or polyvalent? Do the clusters contract or expand with systemic change? How do the distances between the clusters also change? The evidence on these such patterns is mixed. In Chapter 3, analysis of the change from foraging to agriculture suggests polyvalent change because some causal forces, such as increasing population density, are external to the societies and societies with the same economic system might experience quite different changes in population density. As noted herein, the clusters also appear to expand as agriculture is adopted. In Chapter 5 and Appendix 6-8, analysis of

the change from agriculture to manufacturing suggests parallel change because one type of economic system seems most likely to reach the threshold of industrialization; and, moreover, the clusters appear to contract with industrialization. Finally, the brief discussion in Chapter 7 on systemic changes in OECD nations in both the short and middle run yields mixed results. Nevertheless, I hope to have framed the problem of the characteristics of systemic change so that it can be answered in the future.

E. Coda

Although I hope that this study contributes to our understanding of economic systems, its persistent and much more important message is that we have much more to learn – about their constituent elements, their impact on economic performance, and the ways in which they change. As I repeatedly emphasize, at the present time we have no overall theory of economic systems and, consequently, we cannot explain why, for instance, certain institutions and organizations cluster together or are found in one society but not in another. Although such general theories will probably emerge in the future, they must be constrained by the stylized facts bringing order out of the chaos of existing information. Premature theorizing without such a factual basis – for instance, in the many studies of the role of property rights in the transition to agriculture – will only divert attention from the real economic (and intellectual) problems.

In brief, this study presents a new perspective for defining and analyzing the economic system of any type of economy and it can later serve as the basis for theorizing. This new viewpoint will, I believe, help us understand more clearly the link between complementary institutions and various types of economic performance indicators. The particular economic systems that I have isolated will provide an overall view of the multitude of institutions structuring economic activities as a whole, so that we can step beyond reference to specific economic customs or behaviors and focus more on those with crucial causal implications. It will also provide the framework of analysis for a variety of specific questions about these economies. Most important, I hope to have provided the key empirical results needed by future analysts to build on firm foundation theories about the logic of institutions and about economic systems.

