# Introduction to New Institutional Economics: A Report Card

Paul L. Joskow

# Introduction

During the first three decades after World War II, mainstream academic economists focussed their attention on developing and expanding the theoretical foundations for what is commonly called neoclassical economics, and on the development and application of econometric techniques to measure empirically the parameters of these theoretical models, and to test hypotheses about their properties. In microeconomics we saw the development of rigorous theoretical models of consumer demand, firm production, and cost functions; the foundations of competitive market equilibrium, with and without uncertainty; and the implications of a wide range of market imperfections (e.g. externalities, oligopoly, asymmetric information) on firm behavior and market performance. Econometric techniques to estimate the parameters of demand and cost functions, and to measure the effects of market imperfections on prices, costs, and other market attributes, were also developed and applied.

In macro-economics we saw the development of theoretical models to explain key determinants of aggregate economic activity – income, consumption, investment, inflation, unemployment, and economic growth. This work focussed initially on the rigorous theoretical articulation of the foundations of Keynesian economics, and then on alternative non-Keynesian and post-Keynesian models linked more closely with neoclassical micro-economic foundations of firm and consumer decision making, price and wage formation in markets, and investments in human capital. This theoretical work was accompanied by new econometric techniques to use macro-economic data to estimate the parameters of key aggregate economic relationships. These empirical relationships were used, in turn, to create large macro-economic models to assist in making predictions of the components of aggregate economic activity and the effects of government tax, expenditure, and monetary policies on these variables.

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In parallel with these developments in "positive" micro-economics and macro-economics substantial efforts were made to develop rigorous theoretical foundations and supporting econometric techniques for evaluating the societal implications of individual and market behavior and performance, and the effects of various public policies on social welfare – modern welfare economics. Going beyond simple utilitarian models of social welfare, this work confronted the challenge of dealing with diverse consumer preferences and interpersonal comparisons, aggregation of consumer preferences, and the ethical implications of wide distributions of income and wealth in the population.

There can be no doubt that the developments in economics during the three decades following World War II were extremely important from both an intellectual and a practical perspective, and they have helped to expand dramatically our understanding of many aspects of market structure, economic behaviour, and economic performance, especially in developed economies. The tools that were developed are widely used in government policy making and business decision making. And progress continues in theory and empirical applications within the neoclassical tradition. Nothing in this essay is meant to diminish the many important advances in economics that have been achieved during the last fifty years.

It appears to me, however, that the incremental knowledge resulting from the ongoing work in this neoclassical tradition, especially in microeconomics, began to yield significantly diminishing returns by the late 1970s. The low-lying fruit had been picked and the remaining fruit in the tree began to become much more difficult to find and harvest. Moreover, in many ways these developments were less than fully satisfactory, or at the very least, provide an incomplete framework for understanding many important economic phenomena.

This work had a number of deficiencies. It adopted either an *a*-institutional or a *non*-institutional approach to economic analysis. The basic underlying legal institutions that are widely assumed to be necessary to support the behavioral assumptions and market structures being analyzed – such as credible property rights, enforceable contracts, private ownership, well-functioning capital markets, and corporate governance systems – were either implicitly assumed to exist and to operate costlessly and perfectly (or not at all in the case of externalities), or were effectively ignored completely or swept under the rug. Firms were black boxes characterized by productions functions and their horizontal expanse governed by economies of scale driven by the underlying technological attributes of these production functions. The inability to measure significant economies of scale at the plant level

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econometrically led many industrial organization economists to the conclusion that firms were too large and that deconcentration policies would have potential competitive benefits with little potential economic costs. Vertical integration and associated vertical contractual arrangements were difficult to explain with the prevailing tools, except trivially by appeals to unspecified "economies of vertical integration" or as strategic responses of firms to increase market power at one or both levels of the production chain (Joskow 2004). Technological changes which led to the introduction of new products and new production processes were understood to represent important components of economic growth and consumer welfare, but the theoretical and empirical foundations for understanding the rate and direction of innovation and how they are influenced by micro-economic, macro-economic, institutional, and policy considerations was poorly understood. Economic growth was driven by changes in capital and labor inputs, exogenous technological change, and poorly understood differences between countries over time and space.

Benevolent governments with public interest goals and perfect information were available to make policies "in the public interest." Whilst it was recognized that governments could do things which could either improve or undermine economic performance, the economic and political considerations that led to alternative government policy initiatives, and affected the structure and behavior of government institutions which influenced economic growth, from legislatures to courts, were largely ignored. Micro-economic theory focussed on private profitmaximizing firms while large portions of economic activity were governed by state-owned firms, state agencies, and non-profit organizations. The nature of the choices between different governance arrangements and their consequences were largely ignored. Finally, although the theory and associated empirical analysis developed during this post-World War II period was "generic", in the sense that it was thought to be applicable to any economy, in practice it was difficult to apply generically. This was particularly problematic in application to developing countries without somehow taking account of the "idiosyncratic" and unmeasured attributes of social, political, and economic attributes of "institutions" in different countries. There was little progress in understanding these "idiosyncratic" attributes which characterized institutions in different countries, how and why they mattered, their linkages to historical and cultural attributes, and how they could or would change over time in response to changes in the economy, economic growth, changes in government and legal institutions, and to policy initiatives mediated through these institutions.

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These limitations of neoclassical economics are now widely recognized, and "mainstream" economics has now moved forward to address them. A growing number of scholars are engaged in research to respond to these limitations in a number of different ways. We see this evolution in several apparently different but fundamentally interrelated "new" fields of economics: law and economics, political economy, behavioral economics, organizational economics, evolutionary economics, the economics of contracts, and new institutional economics (NIE). In some ways these fields are not "new" at all since their origins may be traced back to pioneering research, sometimes largely ignored at the time, which was produced decades ago. However, in other important ways these fields are indeed new. First, they do not reject the basic progress which has been made in the neoclassical tradition over the last fifty years, but recognize both its strengths and its limitations. Second, they do not reject the basic analytical tools that have been developed over the last fifty years - mathematical modeling and econometric analysis - but use these tools to address a broader set of issues. Third, they supplement these methods of modern economic analysis with additional analytical and empirical methods and analyses which include, for example, case studies and experimental methods which are appropriate for addressing the relevant issues more completely. Fourth, they draw on scholarship from a broad range of social and behavioral sciences: history, law, political science, anthropology, psychology, sociology, and other disciplines to address issues that neoclassical economics addresses poorly or not at all. Fifth, they recognize that economic theory and empirical regularities are often not "generic," and are more or less relevant, or relevant in different ways, depending on economic, social, political, and legal attributes of different countries. One size does not fit all and, in particular, differences between developed and developing countries can lead "reasoning by analogy" to result in serious errors. Finally, rather than taking a position outside of economics and looking in at it, often critically, these efforts seek to be fully integrated into advances in economic theory, empirical methods, and applications. This transformation of economic analysis was, and continues to be, heavily influenced by the perspectives and pioneering research undertaken under the banner of "New Institutional Economics."

# What is new institutional economics?

The effort to move economics beyond the limitations of neoclassical methods and models, and the progress that is being achieved, is truly exciting. It is not my intention, however, to discuss all of these

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developments. Rather, I want to focus on developments in institutional economics or, more precisely, NIE, which motivated the founders of the International Society for New Institutional Economics (ISNIE) in 1997. I recognize that "mainstream" economic research has now turned its attention to many of these issues. However, this transformation both preceded and was heavily influenced by the work of scholars who we associate with NIE.

The founders of ISNIE had (and have) a broad range of interest in and approaches to economic analysis. Nevertheless, they shared a common set of basic beliefs which defined the research topics they would focus upon and the research methods that they would use and sought to foster:

- Legal, political, social, and economic institutions ("institutions") have important effects on economic performance. The effects of alternative public policies aimed at improving economic performance in various dimensions will vary along with the institutions that are available to respond to them.
- Institutions may be analyzed using the same types of rigorous theoretical and empirical methods which have been developed in the neoclassical tradition whilst recognizing that additional tools may be useful to better understand the development and role of institutions in affecting economic performance.
- Theoretical and empirical analysis should be interactive and evolve together over time. Theory identifies relationships that may be examined empirically, whereas empirical regularities and "anomalies" raise questions about the relevance of received theory and suggest new targets of opportunity for theoretical advances.
- Interdisciplinary research may make important contributions to understanding the role of institutions and how they affect economic behavior and performance. Contributions from history, law, psychology, anthropology, sociology, religion, and related disciplines may play an important role in advancing our understanding of institutions and their effects on the economy and the consequences of economic policies.
- Longer-term dynamic considerations associated with technological change, the diffusion of innovations, and the impacts of institutions on both should play a more central role in economic analysis.
- Our understanding of institutions should be rich enough to allow us to apply economic theory and empirical knowledge to a wide range of economic, cultural, and political settings: developed and developing countries; countries with a range of political systems, including

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variations of the implementations of "democracy"; countries with a range of cultural, religious, ethnic, tribal, and family traditions.

• Institutional analysis seeks to understand the role of government and political institutions in policy formation, implementation, and economic performance, but it does not itself have a political agenda.

When we adopt a phrase like "new institutional economics" to define a framework for social science research it is fair to ask how this work differs from "old" institutional economics. It is quite clear that "institutional economics" had achieved a bad reputation among post-World War II academic economists in the USA and some other countries. Indeed, the economic research which flourished during this period was, at least in part, a reaction to the "old" institutional economics which was the focus of economic research in the previous decades. The criticisms of "old" institutional economics, while perhaps not entirely fair, are important to understand. Much of what passed as institutional economics lacked rigorous and systematic theoretical foundations. It lacked comprehensive supporting empirical analysis. It was often country specific or even case specific and little effort (or non-credible effort) to generalize was made. It tended to become politicized and driven by political agendas. The identification of institutional economics with Marxist economic theories and political agendas was especially damaging, though many institutional economists (e.g. John R. Commons [1932-33]) were hardly Marxists. Moreover, as neoclassical economics became the central focus of modern economic analysis institutional economics became the home of the disgruntled and disaffected critics of the new methods being used in economics, and of modern market economies more broadly. We see this no more clearly than in France where a schism emerged between "institutional economists" in university positions, and neoclassical economists, often trained as engineers, using mathematical methods and empirical analysis in engineering schools, public enterprises, and some research institutes. Clearly, NIE is very different from old institutional economics.

We should recognize as well that the reaction to old institutional economics also reflected its perceived failure to explain the economic issues and problems which were revealed by the Great Depression and the associated failure of micro-economic and macro-economic policies to bring the world quickly out of the Depression. The consequences of the Great Depression, and the difficulties economists and policy makers had in explaining or responding to it, brought a new generation of brilliant individuals into economics seeking to better understand economic phenomena so that economics and economic policy could better serve the

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interests of the people. From this perspective, NIE may be somewhat more in the position held by neoclassical economics at the end of World War II: it is a reaction to perceived deficiencies in the state of economic science. But, whilst there were many outstanding post-World War II economists who remained interested in important foundations and aspects of economic institutions (e.g. Ronald Coase, Herbert Simon, Richard Cyert, Jacob Marshak, Roy Radner, Kenneth Arrow, and others), much of this work was largely ignored by mainstream economists until relatively recently. In this sense, mainstream neoclassical economics may have thrown some babies out with the bath water, though the bath water was not lost for ever.

# A framework for new institutional economics

When we seek to examine the role of "social, cultural, political, and economic institutions" on "economic behavior and performance" we have cut a very large slice of cake to chew on. As I will discuss presently, NIE has not tried to focus on all institutions that might fit under this umbrella. Nor has it focussed on all aspects of economic performance. Whilst the field has been reasonably inclusive, it has also been reasonably well-focussed. To better understand the (perhaps soft) boundaries of NIE it is useful to work from a more expansive description of the full range of relevant institutions, and the relationships between them, and then to identify the subset of institutions upon which research in NIE has focussed.

The most useful framework to work from is the one proposed by Oliver Williamson (2000) a few years ago. I will make use of Williamson's analytical framework here, including a number of adaptations of my own to it. Williamson's framework identifies four interrelated levels of social or institutional analysis.

Level 1: Embeddedness, or Social or Cultural Foundations. The highest level of the institutional hierarchy encompasses informal institutions, customs, traditions, ethics and social norms, religion, and some aspects of language and cognition. This level provides the basic foundations for a society's institutions. These basic social and cultural institutional foundations change very slowly over time, with adaptation periods of as long as a thousand years and no shorter than a hundred years.

Level 2: Basic Institutional Environment. This second level of the institutional hierarchy encompasses the basic institutional environment or what Williamson calls "the formal rules of the game." At this level are defined constitutions, political systems, and basic human rights; property rights and their allocation; laws, courts, and related institutions to

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enforce political, human rights and property rights, money, basic financial institutions, and the government's power to tax; laws and institutions governing migration, trade, and foreign investment rules; and the political, legal, and economic mechanisms which facilitate changes in the basic institutional environment. The nature of the basic institutional environment at any point in time reflects, among other things, the attributes of a society's basic social and cultural foundations. In a society in a dynamic equilibrium, a given set of basic institutions at this level will be compatible with the society's social foundations at any particular point in time. Changes in the basic institutional environment occur more quickly than changes in the cultural or social foundations (Level 1), but change is still relatively slow and partially constrained by the slow rate of adaptation of the underlying social and cultural foundations, with response times as short as ten years but as long as a hundred years.

Level 3: Institutions of Governance. This third level of the institutional hierarchy encompasses what Williamson calls "the play of the game." Given the basic institutional environment, choices are made about the institutional (governance) arrangements through which economic relationships will be governed given the attributes of the basic institutional environment. The basic structural features of the institutions (e.g. competitive markets), through which individuals trade goods, services, and labor are defined; the structure of contractual or transactional relations, the vertical and horizontal structure of business firms, and the boundaries between transactions mediated internally and those mediated through markets; corporate governance, and financial institutions that support private investment and credit, are defined at this level. The choice of governance arrangements is heavily influenced by the basic institutional environment as well as by a country's basic economic conditions (e.g. natural resource endowments) at any point in time. Changes in governance arrangements also take place more quickly than do changes in the basic institutional environment. Williamson suggests a change time frame of one to ten years.

Level 4: Short-term Resource Allocation (Neoclassical Market Economics). This level refers to the day-to-day operation of the economy given the institutions defined at the other three levels. Prices, wages, costs, and quantities bought and sold are determined here as are the consequences of monopoly, oligopoly, and other neoclassical market imperfections. Williamson would include agency theory and incentive alignment within and between organizations here. I would, instead, consider these arrangements to be more appropriately included under the Level 3 institutions of governance. Indeed, these developments reflect the shift

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of "mainstream" economic research to the consideration of governance arrangements and institutions more generally.

The division of social, political, legal, and economic institutions into four levels is necessarily somewhat arbitrary. However, I think that this qualitative characterization is quite useful. A society's social and cultural foundations place constraints on the attributes of the basic institutional environment that will be feasible at a particular point in time. For example, societies that have no tradition of private property, and have relied instead on communal exploitation of resources and collective allocation decisions, cannot be expected overnight to successfully adopt the basic institutions of capitalism that characterize the USA or Western Europe. Nor will societies with hierarchical non-democratic political systems, easily shift instantly to modern democratic political or human rights institutions (these are positive not normative observations). Similarly, when certain basic institutions, such as private property rights, centralized monetary institutions, and decentralized credit institutions, first begin to be introduced we cannot simply assume that they will instantly have the same attributes as they do in societies with many years of experience with them. Moreover, the institutions of governance that have attractive allocational and adaptive properties with one set of basic institutions may have different and less-attractive attributes with another set of basic institutions. Finally, familiar capitalist market institutions may not work very well if the supporting institutional infrastructure composed of basic institutions and compatible governance arrangements is not in place. Alternative allocation mechanisms may be better adapted to the supporting institutions that are in place at any particular point in time.

Williamson's framework also makes important observations about the speed with which adaptation may be expected to take place. Changes in basic social and cultural foundations take place most slowly, and are most "embedded" in the institutions of a society. To the extent that changes to the basic social and cultural environment also constrain the choice of basic institutional arrangements, adaptation at this second level may be slowed as well. Within the boundaries established by the basic social and cultural environment, the basic institutional environment may also be expected to change fairly slowly. This not only places limits on the speed with which the basic "modern" institutions of capitalism will be adopted and work well, but may also influence the most effective intermediary governance arrangements compatible with the state of the basic institutional environment. Periods of relatively rapid change in social and cultural norms, and the basic institutional environment, may be expected to lead both to rapid change and potentially

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significant instability in governance arrangements as well. Adapting to rapid changes at these levels may lead to major dislocations and adaptation costs as a society moves forward (or perhaps two steps forward and one step backward) with fundamental changes at all levels.

Williamson's framework also makes it clear that the speed and direction of changes at these levels is not exogenous or necessarily monotonic. Change is stimulated through two basic paths. First, the performance of the society, broadly defined to include aggregate income and wealth (the size of the pie), distributions of income and wealth (how the pie is shared), quality of life and its direction of change, the incidence of poverty and starvation, personal and family security, responses to changes in the availability of natural and human resources (driven by natural, human, and political variables), and opportunities for individuals to fulfill their ambitions for themselves and their families will influence the rate and direction of change. Good performance supports the status quo. Poor performance stimulates change, but not always in a direction that makes thing better overall.

Second, changes in lower-level institutions in the hierarchy may stimulate supporting changes in higher-level institutions. For example, increased reliance on long-term contracts between "strangers" rather than relying on transactions between members of the same family or ethnic group (Greif 1993) may lead to pressures to better define the basic institutions governing enforcement of private property rights and contractual performance. Or the effects may be more indirect: industrialization may lead to more air pollution and, in the absence of clearly defined property rights and enforcement institutions, or more informal institutions to mediate between those who benefit and those who are harmed by pollution, may create pressures for governments to enact laws to control pollution, effectively deciding who has the property rights to clean air and water.

Whatever the pathways of change, both the speed and nature of any changes will necessarily be affected by the time that it takes to make significant adjustments in the attributes at the different levels of this institutional hierarchy. Adjustment and adaptation lags, and costs, become important considerations in implementing public policies to improve economic performance.

NIE has focussed primarily on analyses of aspects of institutional arrangements that fall in Level 2 and Level 3 of this hierarchy (or both). At the ISNIE annual conference in 2003 about 85% of the papers presented fell within these categories and were divided roughly equally between them. Only 5% of the papers were on topics that would be categorized as Level 4 (and some of these featured applications of