



## **THE FOUNDATIONS OF NEW INSTITUTIONAL ECONOMICS**

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### **Improving the performance of economies**

I intend today to try to provide a useful agenda for research that I hope will facilitate improving the performance of economies generally and particularly in Latin America. So I'm going to open by some background discussion of the nature of institutions, why we need to have a theory of institutional analysis, and why the present theories that we've inherited from social sciences – particularly economics – don't do what we need to have done to be able to improve performance. Let me start off with some fundamentals. We know a lot about economic performance. We have evidence about the performance of economies around the world. We have good statistical data on gross national product, per capita income, and what they mean and what they don't mean, since they are very imperfect ways of measuring performance.

### **What do we know about good economic performance?**

We also know what it takes to make economic growth. That's very straightforward. Economic development is a function of the productivity of an economy, nothing more and nothing less. If an economy is productive, it's going to be rich. If an economy is not productive, it's going to be poor. Therefore, what we need to know is how to get a country to be productive and realize the potential that we know exists around the world. Now, we not only know what makes for economic growth – productivity – but we also know the kind of institutions that produce it. Generally they are very straightforward, and I'm sure you're all familiar with them. You have to have well-defined and specified property rights that provide incentives for people to be productive; that's the first thing.

### **Institutions necessary for productivity and economic growth**

Then you've got to have a political system that will put in place a legal system and a judiciary that will enforce contracts and agreements at low cost. You not only have to be productive, but you've got to see that you have the institutional framework to take advantage of that productivity. That requires third-party enforcement of contracts and agreements, and you have to have it done on a level playing field that is open to everyone and not just to a select few. Now, I hope you are saying to yourself: if we know all of that, how come we're not all rich? That's a good question. Because it's one thing to know the sources of economic growth; it's another thing to know the kind of institutions you've got to put in place to realize economic growth. It's still something more to know how to get them.



## **Why do we need the theory of institutional analysis?**

Why do we need this theory? The answer is straightforward. The theory we've developed in economics was never designed to tell you how to get economic growth. What we call neoclassical economic theory was designed to talk about how well-developed markets work and how to improve performance of already well-developed markets. But we have a much more fundamental problem. We've got to know how to create efficient markets, not only economic markets, but first of all political markets. Because (as I hope to show you) it is political markets that first put in place the economic rules of the game and enforcement. So if you don't have a policy that is going to encourage putting into place sufficient property rights and a judicial system, you're not going to get them.

## **Deficiencies of the neoclassical theory**

The economic theory we have has three deficiencies. First, it's frictionless. It assumes markets work perfectly without any resources devoted to making them work, that you don't have any government or institutions. You don't need them because everybody knows everything. The second problem that we face is that it's static. The theory we've inherited in economics is concerned with performance of an economy at a moment of time. Therefore, the policy implications you derive are once-and-for-all changes that will produce the results you wanted. That doesn't help you a bit. We live in a dynamic world of continuous change, in which you've got to have comprehension of time, of the way humans learn, and of history. It is the historical past that constrains the present and the future, so you need to overcome static.

## **The non-ergodic character of economics**

Third, economics assumes it's an ergodic world. I usually have to pause and wait for people to run out and get the dictionaries, but I'll save you the time. An ergodic world is a world in which there is a constant underlying structure to, in this case, the economy. So all you've got to do is find what that underlying structure is and then you can solve any problem you have. Now, that may be true with the physical sciences, which is where economics inherited that idea. Whether in chemistry or physics or genetics, you can go back to fundamentals and find out the basic unit, whether it's elements or protons or neurons or genes. Then you build up on that to confront the problem and deal with it.

## **We live in non-ergodic economies**

We don't have anything like that in social sciences. In fact, all of the fundamentals are here in our head. The problem in a world of continuous change not only is that you've got to be concerned with the dynamics, but also – and this is much tougher and where we face really fundamental dilemmas – we're creating new and novel worlds that never existed before. An assumption that economics is ergodic is simply wrong. I am an



economic historian, and I've written about 10,000 years of economic history. The kind of problems that humans faced back in the Neolithic revolution in 8,000 B.C. don't look at all like problems we get later. By the time you get to the world we're in, it's a whole different world, completely different, and it completely, fundamentally has got to be rethought.

### **How do we overcome the limitations of the neoclassical theory?**

Now, that doesn't mean that the theory we derived, particularly price theory, isn't useful. But it means that we've got to continually modify our theory and our understanding of the world so that we're dealing with problems in a contemporary world, many of which are purely novel and have no historical basis for them. How do we overcome these problems? Well, frictionless: we overcome them by institutions. Static: in static, we've got to incorporate time and how human beings learn over time. In ergodic, it means that we've got to be concerned with fundamental change over time.

### **The dangers of over-relying on evolutionary theory in economics**

There is one other missing element that is terribly important. When we economists have borrowed theory to see if we could bring it up-to-date and apply to solve problems, we naturally turned to evolutionary theory. Evolutionary theory was the closest thing to a dynamic body of theory, which we could draw from to try and understand our world. And that's been very useful. Indeed, evolutionary theory is now becoming, and rightly so, a useful set of tools to understand process of change in societies over time. But it has two fundamental limitations. One, it assumes that mutation occurs in societies like it does in the evolutionary physical sciences.

### **Intentionality and institutional change**

In evolutionary theory, mutation occurs by sexual combination and mutation of the offspring. We don't have anything like that in economics and social sciences. But a much more serious limitation is that change and mutation in evolution is blind. It is not done with intentionality, it is purely random. You get mutations, and then those that have survival characteristics persist, and the rest disappear. Human beings don't work like that, we don't work like that. The heart of what you all have to understand, if we're going to improve societal performance, is intentionality of the players. That is, we do things with a view that whoever is making the institutional change, downstream it's going to produce results that will be favorable to the well-being of the people making the change.

### **What are institutions?**

Let me talk a little bit about institutions. Institutions are incentive systems, that's all they are. It's important to understand that, because being incentive systems, they provide a



guide to human behavior. They provide punishments and rewards for doing certain kinds of things. And if they provide rewards for being productive and creative, and punish unproductive, uncreative activity, then you get institutions that are what you want. This is where it gets complicated. They're made up of formal rules, which are constitutions, laws, rules, and regulations that are put in place by government; informal constraints, which are norms of behavior, conventions, codes of conduct, which are equally important and much more difficult for us to model and analyze; and finally there are enforcements. You've got to have some way by which both the formal rules and the informal norms of behavior get enforced.

### **Football / soccer analogy**

Let me illustrate my point by showing that I can apply the same set of concepts to very different problems, and I'm going to talk about football, professional sports. It can be your football, which we call soccer in America, or it can be our football, which is football. The way football is played, whether it's yours or mine, is played with formal rules that define what players can and can't do, norms of behaviors – such as, you're not supposed to deliberately injure players on the opposing team – and enforcement mechanisms, which are umpires and referees who see that the formal and informal rules are lived up to. Now, you probably are much nicer than we are, but let me tell you that in professional football in the United States, if you play dirty, you're going to do very well as long as they don't catch you.

### **Rules of the game**

That means that the way the game is actually played is very different than the formal structure that we set up. To the degree that you can get away with injuring the key players on the opponent's team, the odds are you're going to win the game. Moreover, it's very hard to be able to get effective enforcement. The referees don't see everything, and indeed the referees may even be biased or bribed. The norms of behavior may not be strong enough to get people to live up to standards of honesty and integrity. All of those things suggest an important dilemma about institutional analysis that you must keep in the forefront when you're going to do institutional theory. And that is: institutions are the best game in town, but they're very imperfect with respect to the way in which they produce the outcomes we want.

### **The need for empirical research on how economies work**

You must, therefore, understand how the formal rules and informal norms and enforcement characteristics work in particular markets, what makes them work the way they do, and what makes them work differently from their intention. And that's the beginning of intelligence, the beginning of being able to understand what's happening. The kind of research that I'm hoping to encourage you all to do is one in which you do



empirical research on how the institutions work in particular markets and why they work the way they do.

### **Institutional reform: Overcoming the static limitations**

Now, static, as I said, means that you're concerned with time. One of the things that is the beginning of wisdom in institutional analysis is to recognize that the constraints that you have today with respect to how you can alter the way the game is played are very limited because you've inherited from the past laws, rules, norms, and beliefs. Because you inherited them, they have built into them the views of the players, and many of the players feel that their survival depends on the persistence of those rules. So path dependence is the cultural heritage you have from the past. It is the function of the beliefs and institutions that you have from the past. They tend to be very conservative and they tend to provide built-in protection for the existing structure. If you want to improve institutional performance, you've got to understand your culture, understand your history, your beliefs, your institutions. Knowing that, you can see at what margins and where you can improve performance by modifying the way the game is being played.

### **Institutional reform: Accounting for human intentionality**

So the static part requires that you understand history, you understand where you've been in order to know where you're going. And you also understand that the heart of what you're concerned with is learning. That is, you're trying to learn enough about how your system works so you can understand it, and therefore make some changes in it. Human intentionality, my next criterion, means that you've got to ask yourself how people understand the world around them. Economics is a theory of choice. What you've got to understand is how people make choices. The trouble with standard economics is that it assumes that people know everything. The rationality assumption assumes that people are perfectly informed, know all of the alternatives, and act on the basis of pure logical calculus. But more important is the belief system people have, which determines what the incentive structure is that they believe will work. Wherever they're from, we've got to understand them.

### **Latin America's heritage of personal exchange**

In Latin America, you have a long heritage inherited from your institutional beginnings, whether from Portugal or Spain. Those institutional frameworks continue to be important features of what you have. Now, Latin American heritage is one of personal exchange. Why personal exchange? Personal exchange has evolved over millennia. Human beings, when they were hunters and gatherers, gradually evolved a genetic predisposition to cooperate with family, with clans, with small groups that you had an interaction with. But also they learned to be very dubious and very leery about engaging in exchange with people you didn't know. Now, that was a genetically valuable survival trait in a world of



hunters and gatherers, but the heart of what makes economies rich is something that Adam Smith said and is still properly quotable: Specialization, division of labor, and the size of the market are the keys to the wealth of nations.

### **Game theory analogy**

But the size of the market requires that you move from personal exchange to impersonal exchange. You've got to develop a structure that can enable you to have exchange with people you don't know, you may never see again. These exchanges are going to take place over long periods of time and they are going to involve honesty and cooperation in a big way. For those of you who are familiar with game theory, the analogy is a very simple one. We say the game theory is one in which it pays to cooperate with the other player, when you have repeated dealings with them, when you have small numbers, and we know a lot about them. Also, game theory tells you that you will defect when you have no more dealings with somebody or you deal with them only once, when you have large numbers of players, and when you don't know them.

### **A world of impersonal exchange**

The movement from personal exchange to impersonal exchange is the most fundamental dilemma that exists in economic development in the world. It took the West five or six centuries to gradually evolve institutions that made possible a world of impersonal exchange. And what is that? Well, you've got to have capital markets and long-distance trade, you've got to engage in worldwide exchange, you've got to deal with people you're never going to see again, and you've got to develop institutions that will allow you to do that and make it worthwhile for the parties to engage in such trade. Personal exchange is natural in the sense that it is genetically inherited for the last three or four million years. Impersonal exchange requires that we fundamentally alter the way the game is played to get cooperation with people we don't know. It also requires a political system that not only will put in place rules that will encourage such development, but has enforcement mechanisms, judicial systems, and a legal system that will allow you to enforce contracts across time and space.

### **Why has the Washington Consensus failed to produce effective markets?**

In Latin America, the problem of creating efficient markets (both political and economic) that are built on impersonal exchange is one which is at the very heart of the problems that you must confront. If that is so, how come in the last 30 or 40 years the Washington Consensus has not managed to produce that? That's easy: the theory they used was wrong. The theory that was used to develop policies with respect to the rest of the world, whether by the IMF or the World Bank, assumed a neoclassical model of the world, in which people had perfect information and in which the essential institutions already existed. All you had to do was incrementally change things at the margins and all would



be well. The term that was used frequently was: all you had to do was get the prices right. If you eliminate price controls, exchange controls, rent controls, everything would work. Well, that's a lot of "apple butter," to use my favorite expression, and you can translate that any way you want.

### **The advantage of institutional analysis theory**

What you've got to do is have a body of theory that's going to confront these problems, and that body of theory is institutional analysis, which is directly concerned with the kind of institutions and with the kind of belief systems that you've got to understand before you get success. This means that you've got to undergo a fundamental transformation. First of all, you've got to understand how your economy works, and to do that you've got to understand and measure the costs of human interaction. That's transaction costs, the costs of measuring and enforcing contracts, whether it's in capital markets or product markets or political systems. And that's the beginning of wisdom, because until you measure, you don't understand what the institutional impediments are to having low costs of transacting. But if you start out by finding out what the costs are, whether it's in the capital market, in product markets, in agricultural loans – then you would be able to begin to confront the issues you've got to deal with.

### **The example of Venezuela**

By getting at the measurement of transaction costs we can begin to understand exactly what it is that is causing us to have imperfect, imprecise, and inefficient institutions. When you've done the transaction cost measurements, then you're going to have an understanding of how your economy works, and that's the beginning of what you've got to do. Now, let me give you an illustration from some of my experience in Latin America. I was invited by the then-President Caldera to come down to Venezuela in the beginning of the 1990s. He said, "Professor North," and he didn't quite say it in these words, but he said, "We're broke, but the Venezuelan government owns all of the valuable, productive things in steel, and aluminum, and alumina, and so on. And so I want to sell them so I'll have some income, and then with that do the changes that I need to do." But he couldn't find anyone to buy them, and that's when he called me. He doesn't like economists – he told me that right away. "But," he said, "in spite of your being an economist, can you tell me why nobody wants to buy my assets?"

### **Legal impediments lower the value of assets**

Well, it took me about 30 minutes to find out what the problem was: the assets were not worth a hoot (that's another expression that doesn't translate properly). They weren't worth a hoot because the assets were encumbered by various impediments. If you bought a steel mill or an aluminum plant or a power plant, you would be saddled not only with the costs of buying that asset, but also with a variety of impediments to your being able to



use it that were just gigantic. I'll just give you one illustration. At that time in Venezuela you had severance pay, in which for every, I think, two days that a worker had worked in a factory, if he quit, he got one day's pay. Therefore, if you have a steel mill in which workers have been working for 10 or 15 years, and they were either let go or they left, you'd be obligated for four or five years' worth of income to pay them. So what I tried to persuade President Caldera is, you've got to understand that the value of an asset is not only what you can get for it directly, but the encumbrances that go with it are crucial.

### **How to go about institutional reforms?**

And so, if you're going to be successful in improving performance, what you've got to do is understand the existing impediments. You, first of all, have got to understand the cultural heritage, and I want to emphasize this. You cannot make sense out of any economy by just starting and looking at it fresh. If I go and give advice to any economy, I spend at least six months learning their history, their belief system, their values, their institutions. Then, when I want to try to make changes, I'll know the incremental margins, because you can't make big changes. You already have too many vested interests of people wanting to protect existing institutions. But if you understand it enough, you'll know at what margin you can make changes to make the system work better.

### **Institutional reform as marginal change**

So first you've got to be able to understand the existing structure of your economy and the transaction costs. Next, you've got to understand your heritage, and your history, and your background. Knowing what makes for productivity growth, which we do know. Then you can try to see at what margin you could change the way the game is played to make it work better. Now, don't misunderstand me. Having had lots of practice, and being wrong a lot of the times, you learn after a while what you can and can't do. But all of that requires that we understand those things. And what we have to do, what all of you have to do, is you've got not only to understand how your economy works, but you've got to understand your history and your background so that you know the path-dependent limitations on your being able to make change. Then, you're ready to start to improve the way the game is played.

### **How to raise productivity in developing countries?**

Now, not everybody has an equal status in the society. Indeed, here in Brazil, you have enormous income distribution problems and inequalities of wealth, and you have groups that are disadvantaged. You want to modify the market structure to see that you can improve the lot of people that don't have equal opportunity. I don't know enough about Brazil to give you advice, but this is free advice, and it's worth every cent you're paying for it. A necessary condition is to raise the knowledge and skill level of the poor. In the





countries that have been successful in development from backwardness to economic growth, and have done so at all levels – rich, middle class, and poor – all increased performance. South Korea and Taiwan, for example, have done so by enormous investments in education and human skills so that as you become more productive, all groups in the society share in it.

### **How to overcome vested interests opposed to reforms?**

How do you deal with vested interests that want to block reform? That's obviously the central question, and the only way that you're going to deal with it intelligently is if you know enough about the existing institutions and the organizations that support them and are opposed to reform. You've got to understand them because then you'll be able to understand the degree to which you can change the way the game is being played. That requires intimate knowledge of not only institutions, but the existing organizations and their interests, and how the political system works. All of that means that in Latin America, and everywhere else in the world, you've got to understand where you've been. You've got to understand the structure of the existing economy and know enough about the way institutions work so that you can modify the formal rules, the informal norms of behavior, and enforcement mechanisms to make them work more effectively.

I wish you all good luck in doing just that. Thank you.

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