Adam Przeworski

Institutions Matter?[1]

THE THEORY OF 'NEW INSTITUTIONALISM'[2] CONSISTS OF TWO propositions: 1) 'Institutions matter': they influence norms, beliefs, and actions; therefore, they shape outcomes; 2) 'Institutions are endogenous': their form and their functioning depend on the conditions under which they emerge and endure.

Now, the embarrassingly obvious observation is that if endogeneity is strong, then institutions cannot have a causal efficacy of their own. Imagine that only those institutions that generate some specific outcomes, say those that perpetuate the power of the otherwise powerful, are viable under the given conditions. Then institutions have no autonomous role to play. Conditions shape institutions and institutions only transmit the causal effects of these conditions. The question, thus, is how to distinguish effects of institutions from those of the conditions that give rise to them.

Thirty years ago, Alasdair MacIntyre published an essay entitled 'Is the Science of Comparative Politics Possible?', a question to which, for some of the reasons outlined below, he responded with a resounding 'no'.[3] I must admit that, when I read it the first time, I

[1] This is a revised version of the *Government and Opposition*/Leonard Schapiro Lecture, delivered to the British Political Science Association, Lincoln, England, 8 April 2004.

[2] See Douglass C. North, *Structure and Change in Economic History*, New York, W. W. Norton, 1980; Douglass C. North, *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press, 1990; Douglass C. North, 'Some Fundamental Puzzles in Economic History/Development', in W. Brian Arthur, Steven N. Durlauf and David A. Lane (eds), *The Economy as an Evolving Complex System II*, London, Addison-Wesley. 1997, pp. 223–37.

[3] Alasdair MacIntyre, 'Is a Science of Comparative Politics Possible?', in Peter Laslett, W. G. Runciman and Quentin Skinner (eds), *Philosophy, Politics and Society*, Oxford, Basil Blackwell, 1972, pp. 8–26.

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treated this essay as an obscurantist salvo. But in the past few years, as I read about the impact of political institutions, I was struck by how little robust, reliable knowledge we have about the impact of institutions. I was thus forced to return to MacIntyre's question: Is it that we do not know yet, just because our knowledge is fragmentary and our methods imperfect, or is it because some answers are unknowable, unknowable because it is impossible to sort out the impact of institutions from the impact of the conditions under which we observe them?

Let me rush to admit that our intuitions tell us that sometimes they do, that institutions prevent people from doing what they would have otherwise done or induce them to do what they otherwise would not have done. But how can we determine what people would or would not have done, if the institutions were not there? The question entails counterfactuals, and counterfactuals, as W. V. Quine once remarked, are 'dubious devices'.[4] As you see, the focus of what follows will be methodological. But the issue has practical, policy, consequences. Particularly now, when the United States government is engaged in wholesale institutional engineering in far away lands, scepticism and prudence are in order. The policy question is whether one can stick any institutions into some particular conditions and expect that they would function in the same way as they have functioned elsewhere. Note that when the US occupying forces departed from West Germany and Japan they left behind them institutions that took root, that were gradually adjusted to local conditions, and continued to organize the political lives of these countries. When the US occupying forces left Haiti in 1934, they also left as their legacy a democratic constitution, authored by the assistant secretary of the navy, who was none other than Franklin D. Roosevelt. Yet this constitution did not prevent President Vincent from becoming an absolute despot one year later. Why, then, did similar institutions succeed under some but not under other conditions?

To shake somewhat your faith in institutions, imagine a text on the same topic that we would have read some 25 years ago: 'Institutions are epiphenomenal', we would have read. They are a phenomenon that, in a dictionary (Webster) definition, 'occurs with and seems to result from another'. Political institutions, we would have

[4] W. V. Quine, *From the Logical Point of View*, Cambridge, MA, Harvard University Press, 1953, p. 42.

read, can at most organize power that lies elsewhere: in the relations of military force, in the economy, in the control over mass media. 'One cannot stop a coup d'état by an article in the constitution', any article in the constitution, Guillermo O'Donnell once remarked to me.

Suppose we are playing basketball. There are two teams, some perfectly universalistic rules, and an impartial referee to administer them. But one team consists of players who are seven feet tall and the other of people who barely exceed five. The outcome of the game is predetermined. The rules of the game treat everyone equally, but this only means that the outcome depends of the resources participants bring to it, 'brute, pre-institutional power'. This was Lenin's understanding of democracy: 'if the rich can buy elections, democracy will serve the rich', we would have read.[5]

You may retort, 'We could change the rules, say lower the height of one of the baskets, and equalize the chances.' But if tall people are the ones who decide what the rules should be, if the people who have brute power are the ones who mould the institutions, they will not agree to it. After all – we can go back to Rousseau for this observation – institutions are established in a society that has some power relations and they must reflect the distribution of this power.[6] Otherwise, they will not last. In the political science jargon, they will not be 'self-enforcing'.

But this is what we would have read 25 years ago. Here is what we read over and over today: 'Institutions matter'. The problem with Ecuador is that it does not have independent judiciary. Install independent judiciary, establish clear property rights, instigate the rule of law, create independent central banks, reduce regulation, and manna will fall from heaven. In the language of Washington consensus, this is the 'third state of reforms'. The new passion of the US government and many international organizations is institutional engineering.

Yet somewhere in this paean to institutions, we will still hear that institutions are endogenous, meaning that each institutional arrangement can function only under some conditions or at least

[5] V. I. Lenin, 'Letter to the Workers of Europe and America', in *Against Revisionism*, Moscow, Foreign Languages Publishing House, 1959 [1919], pp. 479–86.

[6] For a discussion of this theme in Rousseau, see Steven Holmes, 'Lineages of the Rule of Law', in José Maria Maravall and Adam Przeworski (eds), *Democracy and the Rule of Law*, New York, Cambridge University Press, 2003, pp. 19–61.

that the effects of particular institutions depend on the conditions under which they function. And here lies the crux of the difficulty: if different institutions are possible only under different conditions, how can we tell whether what matters are institutions or the conditions? I am always suspicious of the boxes in which the World Bank or the United Nations Development Programme highlight the exceptional successes of the policies they advocate. I suspect that these successes were exceptional because the circumstances were unusual: otherwise we would see tables or graphs, not boxes.

ENDOGENOUS INSTITUTIONS: CHOOSING GOVERNMENTS BY ELECTIONS

To pose it in the words of J. S. Mill, 'To What Extent Forms of Government are a Matter of Choice?' I will only give the flavour of what is involved in this question, by discussing one example of endogenous institutions that will serve us later.[7] I will focus on the institution of choosing rulers by elections. The question I want to analyse as an illustration of the general theme of endogeneity is 'When do political parties obey results of elections?'

The story goes back to Herodotus. If all men are equally strong and equally armed, he thought, then the reading of votes tells everyone what would happen if things came to blows. A group of men gathered on top of the hill shouts approval of particular candidates (or policies) and everyone can hear which group is larger and therefore stronger. Or, if you wish, we count secret ballots, chads and all, and one party obtains a majority of votes. The winner moves into the White, Pink, or Blue House, perhaps even a *palais*, and the losers go home. But why do the losers go home? Why don't they storm the palace? Is it because the constitution says that whoever obtains the majority should move in and whoever does not should go home? Or is it because the losers know that they would be beaten had they tried to move in? Does the constitution oblige the losers or do they accept the verdict of the polls only because they are physically weaker?

Centuries later Condorcet, while interpreting voting in modern times as a reading of reason, observed that

[7] John Stuart Mill, *Considerations on Representative Government*, Buffalo, NY, Prometheus, 1991.

> When the practice of submitting all individuals to the will of the greatest number introduced itself into societies, and when people accepted to regard the decision of the plurality as the will of all, they did not adopt this method as means to avoid errors and to conduct themselves on the basis of decisions based on truth, but they found that, for the good of peace and general welfare, it was necessary to place authority where the force was.[8]

Obviously, today men are no longer equally armed: arms are controlled by specialized bureaucracies. Hence votes no longer provide a reading of what would occur if a violent conflict were to erupt. But the question stands: Why do the winner and the losers behave in a way that is consistent with the rules? Are they obeying the rules or are they doing what they would have done even if there were no such rules?

Let me bring in a piece of historical information. In rich countries both the winners and the losers always obey the results of elections. No democracy ever fell in a country with a per capita income higher than that of Argentina in 1975. This is a startling fact, given that 35 democracies spent more than 1,000 years under more affluent conditions and not one died. They survived wars, riots, scandals, economic and governmental crises, hell or high water. Yet, at the same time, about 70 democracies collapsed in poorer countries. Moreover, the poorer the country, the less likely it is that democracy would collapse.

Here are some stories. There was an election in Costa Rica in 1948, when that country had a per capita income of about $1,500. The election was technically tied: the two candidates received almost the same number of votes and there were widespread allegations of fraud, so that it was impossible to determine who in fact did win. It was not clear who should decide, but the congress took it upon itself to declare as the winner the candidate who officially received somewhat fewer votes. A civil war ensued, in which about 3,000 people were killed. At another time, there was an election in another country. The election was technically tied: the two candidates received almost the same number of votes and there were widespread allegations of fraud, so that it was impossible to determine who in fact did win. It was not clear who should decide, but the Supreme Court, appointed in part by the father of one of the candidates, took it upon itself

[8] Condorcet, 'Essai sur l'application de l'analyse de la probabilité des décisions rendues a la pluralité des voix', in Olivier de Bernon, *Sur les élections et autres textes*, Paris, Fayard, 1986, pp. 9–196.

to declare as the winner the candidate who officially received somewhat fewer votes. Then everyone drove home in their SUVs to cultivate their gardens. They had SUVs and gardens because this country has a per capita income of about $20,000.

Whatever the reason for compliance, these facts tell us that political parties obey if the country is rich, while they may or may not if it is poor.[9] Note that the institution, at least at some level of abstraction, was the same in the two countries: there were elections, winners were supposed to be those who received a majority of votes, there was a congress and a court, either of which could have picked the winner in case of a draw. What was different were the conditions: $1,500 in one country, $20,000 in the other. I am led to conclude, therefore, that the institution of choosing the government by elections is endogenous with regard to conditions.

This is just an illustration. But there are general reasons to think that institutions are endogenous. And if they are endogenous, if history does not randomize institutions with regard to conditions, then to tell whether institutions matter we must be able to isolate their effect from that of the conditions under which they function. This is the difficulty we face.

CONDITIONS, INSTITUTIONS AND OUTCOMES

I will use as an example the question of whether political regimes – dichotomized as democracies, by which I only mean regimes where rulers are chosen by elections, and dictatorships, where they are not – affect economic performance, specifically the rate of economic growth.[10]

Examine the first row of Table 1, in which annual observations of countries are ranked from the lowest to the highest per capita

[9] For an explanation of these patterns, see Jess Benhabib and Adam Przeworski, 'The Political Economy of Redistribution under Democracy', unpublished MS, New York University, 2004, and Adam Przeworski, 'Democracy as an Equilibrium', *Public Choice*, forthcoming, 2004.

[10] For an analysis of this question, based on data covering 135 countries between 1950 and 1990, see Adam Przeworski, José Antonio Cheibub, Michael E. Alvarez and Fernando Limongi, *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990*, New York, Cambridge University Press, 2000.

Table 1

n-th lowest GDP/cap n	Country	Year	GDP/cap	Quality	Regime	Growth under DEM	Growth under DIC
1	Zaire	1998	197	N.A.	DIC	N.A.	3.06
. . .	. . .	. . .	. . .	N.A.	DIC	N.A.	. . .
140	Niger	1997	424	N.A.	DIC	N.A.	3.38
141	Niger	1995	425	N.A.	DEM	2.70	N.A.
. . .	. . .	. . .	. . .	N.A.	. . .	. . .	. . .
. . .	. . .	. . .	. . .	N.A.	DEM	. . .	N.A.
. . .	. . .	. . .	. . .	N.A.	DIC	N.A.	. . .
. . .	. . .	. . .	. . .	N.A.	. . .	. . .	. . .
5260	Singapore	1997	17559	N.A.	DIC	N.A.	7.67
5261	U.S.	1994	18500	N.A.	DEM	–1.73	N.A.
. . .	. . .	. . .	. . .	N.A.	DEM	. . .	N.A.
5282	Luxembourg	1998	22626	N.A.	DEM	4.18	N.A.
Average						3.65	4.26
N						2358	2924

income.[11] We observe that in 1998 the income of Zaire, which was ruled by a dictatorship, grew at the rate of 3.06 per cent. Would the rate of growth of Zaire in 1998 have been different had it been a democracy? This is what we want to know when we ask about the impact of political regimes on growth. But we do not observe 1998 Zaire as a democracy, only as a dictatorship. True, we could look for a case that was like 1998 Zaire in every aspect other than its political regime. But what are we to do if we cannot find a democracy like Zaire in 1998? As you know, democracies are very rare in poor countries such as Zaire, which in 1998 had a per capita income of $197. Indeed, the 140 observations with the lowest per capita incomes are all for dictatorships. In turn, we observe that 1998 Luxembourg, which was a democracy and had per capita income of $22,626, grew at the rate of 4.18 per cent. Was its growth faster because it was a democracy? Again, we may try to find a dictatorship that would look in all respects like Luxembourg. But the wealthiest dictatorship we observed between 1951 and 1999, Singapore, had per capita income of $17,559. Hence, we will not find a single case of a dictatorship as wealthy as Luxembourg during the same time span.

Why does it matter?

Suppose that, in general, wealthy countries grow slower than poor ones. Since almost all poor countries are dictatorships and most wealthy countries are democracies, if we look only at the observed world we will conclude that economies grow faster under dictatorships. But this will be an invalid conclusion: the difference will be due to the conditions under which these regimes exist, not to anything they do. This is an example of exogenous selection on observables (per capita income). As another example, consider the possibility that democracies are vulnerable to economic crises, while dictatorships survive them. If we were to compare the growth rates observed under the two regimes, we would conclude that democracies grow faster. And, again, this conclusion would be erroneous: we will have observed this difference only because democracies died when they encountered bad economic conditions and became dictatorships capable of surviving under these conditions. This is an example of endogenous selection on observables (good or bad conditions).

[11] All income figures are in 1985 purchasing power parity dollars.

Finally, consider the possibility that there is some factor that cannot be observed systematically and that affects both the political regime and the rate of growth. Enlightened leaders, for example, may opt for democracy and manage the economy well. If we rely on comparisons of the observed cases, we will – yet again erroneously — conclude that faster growth is due to democracy, rather than to the enlightened leadership. Here selection is based on unobservables. 'Quality' in Table 1 stands for quality of leadership and N.A. indicates that this information is not available.

Since each country during each year is observed only either as a democracy or a dictatorship, the rates of growth under the counterfactual regime cannot be observed: we do not know what would have been the growth rate of Zaire in 1998 had it been a democracy nor what would have been the growth rate of Luxembourg in 1998 had it been a dictatorship. The entire data set looks as follows (see Figure 1). Note that the dictatorial observations are bunched at low income levels, while the democratic ones are spread out. You may also note the line drawn through the dictatorial points (less smooth) slopes slightly upwards, while the one drawn for democracies slopes downwards, and that the scatter for dictatorships is much wider, indicating higher variance of growth rates.

What inferences can we draw from these data? Does democracy promote or inhibit economic growth?

APPLIED COUNTERFACTUAL INFERENCE

The fundamental difficulty is that we observe each country during each year having only one of the two possible institutions, while our question calls for having observed both. Hence, to determine the effect of institutions, we need to generate counterfactual observations. We need to know what would have been the rates of growth had all the countries experienced the two political regimes under the same conditions.

Note that I am conjuring a world in which we have many observations and can use statistical methods. But, as Fearon argued, the problem occurs independently of the number of observations we have, even if we have only one.[12] Take the observation by de

[12] James D. Fearon, 'Counterfactuals and Hypothesis Testing in Political Science', *World Politics*, 43 (1991), pp. 169–95.

Tocqueville, in *L'Ancien Régime et la Revolution*, that France experienced much violence and little change.[13] But imagine that violence occurs only in countries where it is difficult to change things. Then perhaps your conclusion about the degree of change in France will be different. Without conjuring counterfactuals, no lessons can be drawn from history.

Yet conjuring counterfactuals is easier said than done. In spite of valiant attempts by philosophers of science, practical issues are formidable. I will not address all the issues,[14] but two merit highlighting. First, there are no definitive ways to determine which counterfactuals are valid. As the statistician Dawid argues, all inferences involving counterfactuals are metaphysical: in addition to observations, inferences about them must rely on untestable assumptions.[15] The reason is that even if we observe the marginal distributions of outcomes separately under different institutions, as in Figure 1, by construction we cannot observe their joint distribution for each set of background conditions, some of which may be unobservable.

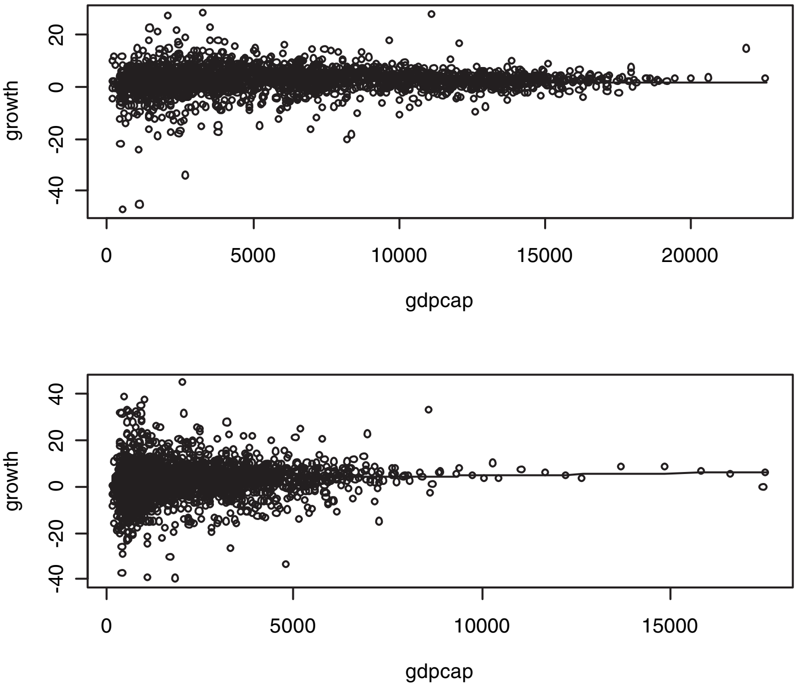
Thus, this is the second point, to engage in practical counterfactual inferences we need some disciplining criteria. As Hawthorn put it, in a book which in my view is still the best on the topic, without such criteria, 'the possibilities we would be entertaining would be possibilities not for an actual, but for what would itself be merely a possible. And at the point, our history or social science would have

[13] Alexis de Tocqueville, *The Old Regime and the French Revolution*, New York, Anchor Books, 1955.

[14] Important works on counterfactuals, apart from those referred to elsewhere in this paper, include: Yuri Balashov, and Alex Rosenberg (eds), *Philosophy of Science: Contemporary Readings*, London, Routledge, 2002; Dorothy Edgington, 'Conditionals', in Lou Goble (ed.), *The Blackwell Guide to Philosophical Logic*, Oxford, Blackwell, 2001, pp. 385–414; Nelson Goodman, *Fact, Fiction, and Forecast*, 4th edn, Cambridge, MA, Harvard University Press, 1979; Paul W. Holland, 'Statistics and Causal Inference', *Journal of the American Statistical Association*, 81 (1986), pp. 945–60; David Lewis, *Counterfactuals*, Cambridge, MA, Harvard University Press, 1973; J. L. Mackie, 'The Logic of Conditionals', in Yuri Balashov and Alex Rosenberg (eds), *Philosophy of Science: Contemporary Readings*, London, Routledge, 2002, pp. 106–14; Judea Pearl, *Causality: Models, Reasoning, and Inference*, Cambridge, Cambridge University Press, 2000; and Robert C. Stalnaker, *Inquiry*, Cambridge, MA, MIT Press, 1987.

[15] A. P. Dawid, 'Causal Inference without Counterfactuals', *Journal of the American Statistical Association*, 95 (2000), pp. 407–24.

Figure 1
Rate of Growth as a Function of Per Capital Income: Democracies (top) and Dictatorships (bottom)



dissolved into a literature of the imagination,'[16] a point also made by Milan Kundera in the *Art of the Novel*.[17]

Hence, the task of comparative politics is heroic. To evaluate the impact of institutions we somehow must use the observed world to make inferences about a hypothetical one. Yet such inferences are subject to several biases:

1) *Baseline difference.* The units observed as democracies may have had different performance as dictatorships to those that were in fact dictatorships or vice versa.

[16] Geoffrey Hawthorn, *Plausible Worlds: Possibility and Understanding in History and the Social Sciences*, Cambridge, Cambridge University Press, 1991, p. 167.

[17] Milan Kundera, *The Art of the Novel*, New York, Perennial, 2003.

2) *Effect of the treatment on the treated.* The units observed as dictatorships may have performed differently under democracy to those that were actually observed as democracies or vice versa. This will be true if the choice of regimes is even in part driven by its economic consequences. Notably, under such conditions, the instrumental variables estimator fails to correct this bias.[18]
3) *Post-treatment effect.* I am using here the terminology of King and Zeng, even though I think it is a misnomer.[19] The problem here is that changing just the regime and nothing else that affects the rate of growth may be impossible. Since this problem is subtle, consider an example. The rate of growth of output depends on the rate of growth of the labour force and there is good evidence that the labour force grows faster under dictatorship.[20] Hence, regimes may have two effects on the rate of growth: a direct one (say on factor productivity) and an indirect one, via the growth of the labour force. As long as the indirect effect is the same for all units, this presents no difficulties within a standard regression framework. But if the indirect effect differs across conditions, inference about the effect of institutions is biased. This bias arises because, as Lebow puts it, ' "Surgical" counterfactuals are no more realistic than surgical air strikes.'[21] In the real world, change of one state is associated with a change of others. Hence, perhaps this is a 'non-local' effect.
4) *Distance effect.* King and Zeng show that the distance between the conditions under which the actual cases were observed and their closest observed matches under alternative institutions ('treatments') is also a source of bias.[22] Mukand and Rodrik, for example, observe 'One could argue that these economies would have grown even faster had they embarked on a more orthodox reform agenda. But the difficulty is that those countries that adopted the orthodox policies – Latin American countries – for the most part did worse

[18] James Heckman, 'Instrumental Variables: A Study in Implicit Behavioral Assumptions Used in Making Program Evaluations', *Journal of Human Resources*, 2 (1997), pp. 441–62.

[19] Gary King and Langche Zeng, 'When Can History be Our Guide? The Pitfalls of Counterfactual Inference', http://GKing.Harvard.Edu, 2002.

[20] Przeworski, Cheibub, Alvarez and Limongi, *Democracy and Development*, op. cit.

[21] Richard Ned Lebow, 'What's so Different About a Counterfactual?', *World Politics*, 52 (2000), pp. 550–85; 575.

[22] King and Zeng, 'When Can History be Our Guide', op. cit.

than China and India, not better.'[23] Note that had we not had the Latin American observations, we could not have assessed the validity of the argument. Extrapolating outside the range of observations is less reliable than interpolating within it. But even the distances within the observed range matter, particularly in the presence of non-linearities.

5) *Aggregate effect*. This is a violation of the 'stable unit treatment value assumption' (SUTVA), namely, that observations are independent, which implies that realizations of counterfactuals do not alter the values actually observed. Not all countries can be net exporters: had Latin American countries adopted an export orientation strategy earlier, the performance of the Far Eastern countries that did so would have not been the same.

Different assumptions are needed to correct each of these biases and we have a number of statistical ways to cope with them.[24] But the difficulty is that no assumption and no estimator, corrects for all the biases. Hence, different methods may generate different results, and then we do not know what to conclude. Indeed, if such biases are present, we should expect different assumptions to generate different results.

All these potential biases are more difficult to avoid as the observations become more unbalanced. Suppose that endogeneity is so strong that only institutions A are observed under conditions C, while only institutions B are observed under conditions C': there is no overlap. Matching or propensity-score estimators cannot be used. The distance effect bias cannot be assessed. Direct effects cannot be distinguished from indirect effects, so that the non-local (post-treatment) bias cannot be isolated. Whatever one concludes about the logical validity of counterfactuals, the practical difficulties in making such inferences are overwhelming. What, then, can we do in the presence of endogeneity? All we can do in my view is to try different assumptions and hope that the results do not differ. If they do

[23] Sharun Mukand and Dani Rodrik, 'In Search of the Holy Grail: Policy Convergence, Experimentation, and Economic Performance', unpublished MS, Harvard University, 2002, p. 3.

[24] Paul R. Rosenberg, *Observational Studies*, London, Springer-Verlag, 2001, presents an exceptionally clear discussion of the issues involved. Christopher Winship and Stephen L. Morgan, 'The Estimation of Causal Effects from Observational Data', *Annual Review of Sociology*, 25 (1999), pp. 659–707, is a good review of the alternative statistical methods.

not, we know that the conclusions are at least robust with regard to different assumptions about the sources of bias. If they do differ, all we can do is to throw our hands up in the air.

My final answer is, thus, hesitant. I am willing to believe that where history was kind enough to have generated different institutions under the same conditions we will know more and know better. But history may deviously generate institutions endogenously and this would make our task next to impossible. And, to return to practical issues, we should know what we do not know. We need to be sceptical about our belief in the power of institutions and we need to be prudent in our actions. Projects of institutional reform must take as their point of departure the actual conditions, not blueprints based on institutions that have been successful elsewhere. As a former Brazilian minister, Luiz Carlos Bresser Pereira, once put it, 'Institutions can be at most imported, never exported.'