Development Centre Studies

Institutional Efficiency and its Determinants

THE ROLE OF POLITICAL FACTORS IN ECONOMIC GROWTH

OECD

By Silvio Borner, Frank Bodmer
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FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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LE RÔLE DES FACTEURS POLITIQUES DANS LA CROISSANCE ÉCONOMIQUE

Foreword

This book is published in the context of the OECD Development Centre's work on institutions, governance and growth which began in the 2001/2002 work programme and was continued into the 2003/2004 programme under the "Social Institutions and Dialogue" theme.

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Preface

How much attention should the analyst pay to economic institutions — primarily property and contract law — in studying economic development and growth? What is their policy relevance? Can one safely assume them as exogenously given, for better or for worse, and move on to the familiar, trusted ground of macroeconomic and structural issues in discussing development policy?

The authors of this book place economic institutions and the political institutions responsible for creating and enforcing them (or not doing so, as the case may be) at the very centre of their analysis. In doing so, they draw on the rich and rapidly growing literature of the new institutional economics (NIE). The NIE revives an old school, drawing on economic history, political science, sociology and psychological economics for insights that can considerably enrich analysis within the neoclassical and Keynesian traditions of economic thought. In doing so, it has become both a theoretical and a resolutely empirical discipline. It also is especially useful, as this book shows, in the study of economic development and development policy. Policies succeed or do not succeed in myriad different cultural, political and economic settings in the developing world. Not enough is known about why this is so and how it happens. NIE scholars with an interest in economic development try to fill that gap. They seek to untangle the influences of institutions on the economic and policy setting, measure their effects with sophisticated empirical tools and thus develop insights that can find practical use in policy making.

The authors point out, however, that the NIE — which focuses on areas ranging across property rights, transaction costs and asymmetric information — still lacks "an integrated approach that analyses both the impact of institutions on economic development and the determinants that shape institutional quality" (p. 4). Their work attempts to carry us closer to such an approach, which they believe must have several elements:

- It must distinguish between political institutions, which govern the process from which formal rules and the legal system emerge, and economic ones, the property and contract laws that co-ordinate economic activity;

- It must identify and, if possible, measure the transaction costs resulting from the creation and enforcement of economic institutions, which never are perfect, anywhere. Poor economic institutions cause high transaction costs and crippling economic inefficiency; good ones entail low transaction costs that spur economic activity and create a sturdy environment for capital accumulation and growth;
- It must clearly define a serviceable notion of institutional efficiency, because institutional quality becomes the key issue;
- It must develop an empirically testable framework for analysing the determinants of institutional efficiency and measuring its impact on economic development.

These elements establish a line of reasoning that traces institutional quality back to government and the processes that it can control to create and enforce efficient economic institutions. In pursuing the analysis, the study makes a key distinction between the strength of government — its power to create and enforce — and its commitment to institutional efficiency. As the reader will discover, this distinction, to which this very brief description cannot do justice, leads to rich insights about the determinants of institutional efficiency itself.

The study proceeds methodically and carefully. The opening chapter provides a condensed introduction to the NIE, sets forth the main ideas developed later in the book and outlines the conceptual approach. Chapter Two presents a handy survey of the literature on growth and on institutions and ties them together. Chapter Three moves to the heart of the authors' approach. It analyses the distinction between economic and political institutions and develops the concept of institutional quality (efficiency), then moves on to discuss the role of the state in fostering it. This sets the stage for an exploration of the critical elements of the state's role — its strength, its commitment and the linkages between them.

The next three chapters develop and perform the empirical work. Chapter Four, in an organisational scheme almost identical with the conceptual development in Chapter Three, describes and presents the series of institutional measures employed later. Chapter Five, after discussions of methodology, variable definitions and model specifications, establishes the link between institutional quality and economic development. Chapter Six then looks behind that link to explore empirically the determinants of institutional quality itself. Along the way — but certainly not "in passing" — the authors shed some clear and definitive light on two debates still raging in the literature. One concerns the relative merits of democracy and autocracy in creating and enforcing good economic institutions. The other, perhaps more unsettling, is about whether certain legal traditions ("French", "British" or "Socialist", to put it crudely) or certain cultural heritages ("Catholic", "Muslim" or "Protestant", even more crudely) are good or bad for institutional quality. The reader will find the effort to seek the study's conclusions on these issues well repaid.

Before the concluding chapter, the study comes back to earth in Chapter Seven from the preceding generalised, cross-country regression analysis to perform a case study on a single country, Argentina under President Menem in the 1990s. The authors find that both their analytical framework and their empirical findings fit this case well, as they doubtless will fit many others.

This book moves in the direction of a clearer understanding of the "Why" and the "How" of the role of what has come to be called "good governance" in development policy parlance. Talk about good governance, especially when it comes from developed countries, can tend to sound like preaching. This study goes deeper, with reasoned theory and empirical validation, to help our understanding of why institutional quality is important for healthy economic progress, how it may be produced and how it facilitates the success of sound economic policy.

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December 2003

Chapter One

The Economics of Institutions

Introduction

According to Easterly's timely and somewhat shocking recent book *The Elusive Quest for Growth* (2001) we still do not really know how poor countries can catch up with the rich ones. Africa and large parts of Asia have fallen back again, and Latin America has reached another point of breakdown and return to the infamous square one.

After World War II the main source of growth and development seemed definitively to lie in capital accumulation. The idea had backing from diverse theoretical approaches such as the models of Harrod and Domar, Arthur Lewis and W.W. Rostow. "Development was a race between machines and motherhood" (Easterly, 2001, p. 31). This approach became the so–called capital fundamentalism, which generated the notion that foreign aid could fill the gap between national savings and required investment. Yet the aid–to–investment link on the one hand and the investment–to–growth link on the other proved to be empirically weak, unstable and unreliable. "The aid–financed investment fetish has led us astray on our quest for growth for fifty years. The model should finally be laid to rest" (Easterly, 2001, p. 44).

A similar empirical disappointment befell the Solow model, although, to be fair, Solow never intended its application in the "tropics". Its hope of convergence between countries with high incomes per capita did not materialise on a world scale. Moreover, "Seventy percent of these Third World countries (the poorest four fifths of countries in 1960...[for] which we have available data) grew more slowly over the whole period than the median growth of 2.4 percent per capita for the richest countries. They were falling behind, not catching up." History provides the clue to the paradox of non–convergence. The rich countries of today were already relatively rich 200 years ago. "The income they had attained nearly two centuries ago was already a meaningful predictor [of] whether they would become rich."

No straightforward and stable convergence relationship exists. Robert Barro (among many others) has found convincing evidence of "conditional convergence", however. "For a given starting level of real per capita gross domestic product (GDP) the growth rate is enhanced by higher initial schooling and life expectancy, lower fertility, lower government consumption, better maintenance of the rule of law, lower inflation, and improvements in the terms of trade. For given values of these and other variables growth is negatively related to the initial level of real per capital GDP" (Barro, 19979, p. 1). About 10 years ago, researchers started to look at conditional convergence in a different way, linking it with the new institutional economics (NIE) (Borner *et al.*, 1995; Knack and Keefer, 1995). Looking at Barro's list of factors to control for when testing the convergence hypothesis, one cannot miss that they all are politically or institutionally determined. The role of the state stands out clearly with respect to inflation, the level of government consumption or the maintenance of rule of law. Other factors, such as initial schooling, fertility, mortality and even the terms of trade are not exogenous but largely institutionally determined. The present study tries to define theoretically and measure empirically what it calls "the quality of institutions" as the main determinant of long–term growth.

The New Institutional Economics

Institutions are "the rules of the game" (North, 1990*a*) that shape human behaviour in a society. Economic institutions consist of property and contract rights. Political institutions determine the structure of the state and the procedures of the political decision-making process. For production and exchange, the quality of property rights is central. They determine a society's ability to accumulate and use the factors of production. Political institutions on the other hand are key in shaping and safeguarding these property rights. Adam Smith recognised the importance of property rights for the functioning of markets and exchange. He wrote:

> "In all countries where there is tolerable security [of property], every man of common understanding will endeavour to employ whatever [capital] stock he can command…. A man must be perfectly crazy who, where there is tolerable security, does not employ all the capital stock which he commands.... In those unfortunate countries, indeed, where men are continually afraid of the violence of their superiors, they frequently bury and conceal a great part of their stock, in order to have it always at hand to carry with them to some place of safety"[1].

For a long time after Smith, property rights and other aspects of economic institutions did not form an important part of economic analysis. The emphasis rested on the act of exchange itself rather than on the conditions which make it possible. The frictionless world of Walrasian economics provided the framework. Institutions began to receive their due attention only with the work of Alchian, Coase, Demsetz, North and an increasing number of others. This first generation of institutional economists worked mostly with informal methods often based on empirical observations, but the last thirty years have seen increasing work by theoretical economists such as Akerlof, Spence, Stiglitz and others. Their contribution has not only changed the focus of economic theory but also decisively influenced other fields, such as macroeconomics, labour economics and development economics. This work has recently created a new interest in the role of economic and political institutions in economic development.

Different forms of contractual arrangements lie at the core of the NIE. The Walrasian framework, the exchange of homogeneous goods in an anonymous market place, can be appropriate if the focus is on goods such as coffee or wheat. In such markets, information is of no special concern because it is easy to obtain. The NIE focuses on more specific exchanges where the assumption of homogeneity is not justified. Here, information requirements become central and will determine the conditions of exchange.

The first research, represented by the work of Alchian, Demsetz and North, focused rather informally on the evolution of property rights. This work had many aspects, but a common theme was how economic conditions shape institutions. Demsetz (1967) provided famous examples, analysing the evolution of contractual arrangements among the American Indians in response to changing economic conditions such as increased fur prices or an increasing population density. In the same vein, North analysed the evolution of property rights and contractual arrangements through history[2]. This research views economic conditions as the causes of changing property rights and the evolution of property rights as efficiency enhancing.

Coase (1937) and Williamson (1975, 1985) focused on, among other things, the organisational forms of exchange in capitalism. They noted that exchange through the market leads to transaction costs if both parties do not have all the information important for the exchange. However detailed, a market exchange contract can never stipulate all possible contingencies. In this situation, it might be more efficient to use non–market exchange, specifically the internal organisation of production and exchange in a firm.

In the early 1970s, formal models began to find use in solving problems of asymmetric information[3], where only one side of a transaction has access to information about the quality of a product or an action. A first such problem is called "adverse selection". Akerlof (1970) showed that if there is incomplete information about the quality of used cars, the resulting market might be very thin, with only "lemons" on offer. A second problem involves signalling. Spence (1973) demonstrated that a job applicant might use education as a signal for his or her abilities. Third, principal–agent problems concern the relation between the owner (principal) and the manager (agent) of a firm (Ross, 1973). Only the agent knows his or her level of effort, but exogenous shocks may influence the firm's profits. The problem is to design a contract that gives the agent incentives to contribute effort without punishing him or her unduly for events that lie outside his or her control. Fourth, Stiglitz (1974) analysed a very specific contract, for sharecropping, interpreting it as a simultaneous solution to the problems of risk sharing and provision of incentives to the sharecropper. Finally, Rothschild and Stiglitz (1976) investigated moral hazard in insurance markets[4].

The economic analysis of law applies economic concepts to the analysis of contract law. Here also, one focus lies on whether the evolution of contract law is efficiency enhancing. It is demonstrably so in the British common law tradition where the judges have much discretion effectively to create new laws by creating precedents. The Continental European (civil law) tradition, on the other hand, restricts judges to interpreting the legal codes set by law–making bodies — parliaments and governments. The work of political institutions as law–making bodies becomes much more important in these systems[5].

A general insight from this literature is that contracts will necessarily be incomplete. It is neither possible nor desirable to specify all contingencies, because it is not possible to provide the correct incentives for one side without worsening them for the other. The task is to find an optimal balance. A solution will be optimal only in the sense that no improvement is possible given the specific state of information. A hypothetical welfare loss remains in any situation, not (a utopian) one of complete information.

The literature on growth and institutions originally had a very different focus. It investigated the effects of (exogenous) institutional arrangements on economic growth. In such a framework, institutions are determined outside the economic sphere, in the realm of politics. This line of analysis therefore lies closer to the older development of economics literature, which saw the state as a prime determinant, for good or bad, of economic development. It emphasises political and cultural restrictions on the exchange of goods and the development of efficient economic institutions. In common with the NIE it considers transaction costs and property rights. Because these intellectual antecedents lie in the economic development literature, a short overview of this literature follows. A more detailed description of the literature on growth and institutions will appear in Chapter Two.

The Role of Institutions in Economic Development

Experience with economic stabilisation programmes and the effects of aid policies on developing countries revived interest in institutions. Traditionally, it focused mainly on technical issues such as the implementation of fiscal and monetary policies or the mobilisation of sufficient funds to channel into investment. Yet the effects of these policies were perceived increasingly as very limited[6]. At the same time, the success stories — mostly the East Asian countries that had managed to catch up fairly quickly — received closer analysis. Historically, the first was Japan, whose industrialisation started in the 19th century. After World War II, South Korea, Chinese Taipei, Singapore and Hong Kong came along. In all except for Hong Kong, the state played a very active role in the choice of industrialisation projects and the mobilisation of funds[7]. Yet active state roles yielded much worse results in other places, such as Latin America or Africa. This raised the question of why some countries managed to implement successfully policies that led to striking failures in other countries.

A last element in this new focus on institutions was an upsurge in empirical work on the conditions of growth. In this literature, political and other institutional variables soon moved to centre stage, for two key reasons. First, the catch–up that follows from the Solow growth model could be observed only partially in reality. Related to this, capital accumulation could account for only a small part of the differences in living standards between countries. This implied other factors triggering or blocking productivity and economic growth. They had to be related ultimately to institutions and national cultural backgrounds. Therefore the role of the state moved once more to the forefront.

The NIE focuses on the evolution of institutions rather than on the limits that they pose for economic development. In general, it is rather optimistic about the possibilities for the evolution of efficiency–enhancing economic institutions, but it also adapts to situations of political or cultural restriction on the evolution of institutions. The emphasis of development economics, however, centres rather on situations where "bad customs" or "bad politics" hinder the evolution of efficient economic rules. Yet one branch of Development Economics took up the theme of the evolution of property rights quite early. The analysis of contractual arrangements in agriculture started with Cheung (1969) and has since seen many important contributions. The basic question was how an apparently inefficient arrangement like sharecropping could survive as it did for so long and under such varied circumstances. Cheung offered risk sharing as the explanation. A share contract shifts part of the risk from the tenant to the landowner, who presumably can better bear it. Stiglitz (1974) added to this the impossibility of both landowner and tenant monitoring each other's behaviour perfectly. In this case, a share contract might be more efficient than a more high–powered contract which leaves either side as the residual claimant[8]. Recent research has moved on to start applying the insights and the technical apparatus of asymmetric information analysis to development problems[9].

Much of traditional development economics takes the institutional setting as exogenous to the economic sphere. Developing countries have two main sources of institutions. The first is tradition, which creates informal institutions. It is often seen as a hindrance to development because its rules are not based on the necessities of a market economy. The second is the state, which generates formal institutions and is often considered as the driving force of modernisation. Gershenkron (1962), for example, gives the state a decisive role in starting the process of industrialisation, a role that goes beyond the state's function as provider of public goods such as health, roads or law and order. Yet this view ignores that the state can be a source of additional distortions. Most basically, it has to collect taxes, which distort economic decisions. Developing countries often use very distortive tariffs or production taxes. The state also can use its power for other ends, such as to favour a small group or groups at the expense of the general interest. Given these problems, and if one accepts the view that traditions are often detrimental to development, the question then becomes one of finding an institutional setting that can limit the state's actions so that the general public interest can prevail.

The problem therefore becomes a dual one. First, the state should have the capacity to protect property, enforce contracts and provide public goods. Second, it should also be limited to doing essential and legitimate things. Wide disagreement prevails on the extent of these essential and legitimate state tasks. Traditional liberals such as Hayek or Nozick would limit the role of the state to the absolute minimum[10] — basically the provision of law and order — while using the private sector wherever possible, *i.e.* in the provision of education, health care and roads. In this view, the key challenge is to provide a set of rules under which neither a minority nor a majority can encroach on the rights of other citizens.

An Introduction to the Approach of this Study

The NIE covers many areas, ranging from property rights and transaction costs to asymmetric information. It still lacks an integrated approach that analyses both the impact of institutions on economic development and the determinants that shape institutional quality. Building such an approach requires several ingredients. First and foremost, it must distinguish between political and economic institutions. The former shape the political process, whose outcomes are formal rules and the legal system. The economic institutions are the property and contract laws that co–ordinate economic interactions. Second, it should take into account the different forms of transaction costs that arise from "producing" institutions — i.e. the process of creating and enforcing them, a distinction usually not made in the literature. The approach taken here will combine these different elements in order to define the notion of institutional efficiency and to provide a framework for analysing its determinants as well as its impact on economic development.

Economic institutions co–ordinate all forms of production, exchange and distribution. These activities cause transaction costs, which lie at the heart of the economic analysis of institutions. These costs arise from the separation of buyers and sellers and ensuing information problems. This separation causes a number of difficulties. First, incomplete information necessitates mechanisms to guarantee desired behaviour. These are usually contracts that contain a number of contingencies. Second, the contracts must be enforceable, which requires institutions capable of enforcing them, usually the state. The state in turn is structured by political institutions, which co–ordinate processes to create and enforce the legal environment. Therefore, transaction costs arise in a static framework from specifying and enforcing property and contract rights. In a dynamic framework, the specification and enforcement of contracts needs to be upheld over time. This becomes important as soon as one of the parties has to make a transaction–specific investment that gives rise to sunk costs[11]. A better institutional framework lowers transaction costs. This leads to a more efficient allocation of physical and human capital, increases specialisation in production, expands markets and trade and encourages investment. Nevertheless, while the general problem concerns transaction costs, a narrower concept is needed for a study such as this one[12].

Transaction costs come to the fore as soon as exchange occurs through the market. Therefore, the requirement that property rights be well defined does not imply contracts specified for each and every contingency, but it does imply contract enforceability. Only with that will parties consider entering into exchanges and making contracts.

The enforceability of contracts becomes more important the longer the time involved, for investment amortisation periods can last many years. Therefore, investments in human and physical capital are especially sensitive to the security of property rights, as the above quote from Adam Smith indicated. The types of exchanges that take place will generally depend on how property rights are defined and enforced. If roving bands control them with the brute force of arms, very little exchange will occur, because venturing out of a secure hiding place will be hazardous. In other situations, the enforceability of contracts might be limited to certain areas or certain groups[13].

It is important to distinguish between creating or changing institutions and enforcing them. The mere existence of a written rule does not suffice for enforcement at any time and irrespective of the parties involved. Particularly in developing countries, the systematic rule of law often is not guaranteed. Whether the rules are enforced often depends on the people affected and their positions of power. In general, the creation, alteration and enforcement of institutions cause transaction costs. As in analysis of the optimal provision of goods and services, institutional optimisation occurs when marginal social benefits equal marginal transaction costs — another reason why an efficient set of institutions does not mean that property rights are fully specified or enforced under all circumstances.

The state usually has a comparative advantage in enforcing property rights, for a number of reasons. First, it by definition has legal jurisdiction over its territory. This solves co–ordination problems that arise with the private provision of property rights[14]. Second, the state ideally has a monopoly on the use of force, which resolves the problem of whose rights should prevail. Third, states can negotiate and co–operate among each other, which further reduces co–ordination problems. To play this role properly, the state — or rather its government — must have the necessary means as well as legitimacy. One aspect of this legitimacy is that the power of the state is bound and its behaviour can be controlled. These two aspects are called here the "strength" and the "commitment" of the state.

Based on these considerations, institutional quality or efficiency can now be defined. It is a set of economic institutions that is efficient if the state has no feasible alternative to create and enforce property and contract rights which everyone finds at least as good and which at least one of the economic actors strictly prefers. This assumes as given a certain set of either democratic or autocratic political institutions. It also assumes that the process of creating and enforcing property and contract rights causes transaction costs. Therefore, even in an ideal world of efficient institutions (which can exist in a democracy as well as in an autocracy), they are incomplete. In other words, they are never fully specified or completely enforced.

In practice, one can define institutions as more efficient if they reduce transaction costs. This definition is fairly narrow and limited to economic institutions. Political institutions do not enter directly but act only as determinants of the quality of economic institutions. The latter mainly characterise the environment for doing business. The political institutions determine the process of "producing" the economic institutions.

With a usable definition of the quality of institutions and its link to economic development, one finally can focus on the determinants of institutional quality. These reside in the political commitment of the state to provide efficient institutions and its administrative capacity to implement them[15]. In the literature, the degree of commitment is the main point of interest, whereas the state's capacity or strength to specify, alter and enforce institutions is assumed implicitly. Reality shows the inappropriateness of such an approach owing to the weakness and arbitrariness of state administrative capacity in most developing countries. Thus, the strength of the state needs emphasis as well. This notion captures whether the state is powerful enough to form institutions and enforce them throughout its entire territory.

In contrast with the strength of a state, which examines its ability to form and enforce favourable rules, the idea of state commitment focuses on whether the state is compelled to enforce established rules. A state's commitment to the rules is secured if it is costly for the government to cheat. In concepts first developed by Hirschman (1970) this occurs if a society has embedded democratic control mechanisms (allowing for the "voice" option), openness (allowing for the "exit" option) and transparency (reducing information costs).

An Overview of the Book

The ultimate aim of the study is to obtain an empirically testable framework for the analysis of institutional quality, its effects on economic development and its determinants. This will be closely related to the growth literature. The next chapter therefore gives an overview of the literature on growth and institutions. Chapter Three describes in detail the approach just outlined above. Chapter Four provides the empirical counterparts to these concepts. Chapter Five investigates the relation between the measures of institutional efficiency and growth, using economic estimations of growth and investment equations. Chapter Six turns to the determinants of institutional efficiency, *i.e.* the state's strength and commitment. Chapter Seven applies the analytical framework in a case study of Argentina under Carlos Menem. It shows the usefulness of the approach in diagnosing and interpreting the ills of specific countries and policies. A final chapter draws key conclusions from the study as a whole.

Notes

1. Smith (1776, p.169), in De Long and Shleifer (1993).
2. North (1981), Davis and North (1971), North and Thomas (1973).
3. A still very good introduction to these models can be found in Varian (1992), Chapter 25.
4. Richter and Furubotn (1997) give a detailed overview of later developments.
5. For a comprehensive overview, see Cooter and Ulen (1996).
6. See e.g. Borner *et al.* (1995), Funke (1993), or Sachs (1996).
7. The recent literature on the East Asian Miracle was started by Wade (1990). See also World Bank (1993) and Weder (1999) for recent assessments.
8. An overview can be found in Barzel (1989).
9. An example is the analysis of credit co–operatives, see e.g. Hoff and Stiglitz (1990).
10. Hayek (1960), Nozick (1974).
11. This problem has been analysed in many different contexts and is also known as the hold–up problem; see e.g. Williamson (1985) for the theory of the firm, Joskow (1988) for electricity production, Becker (1975) for the acquisition of firm–specific human capital.
12. For an estimate of transaction costs in the wider sense of the term for the United States, see Wallis and North (1986).
13. For interesting examples, see Greif (1993) and Greif *et al.* (1994). See also Olson's (1993) analysis of "roving bands".
14. This gives rise to an externality or common pool problem, see Shleifer and Vishny (1993) or Olson (1993).
15. See Morissey (1995) as well as Root and Weingast (1995) for a similar approach.

Chapter Two

Growth and Institutions

Introduction

Growth regressions have included many different aspects of the institutional setting, most of them related to activities of the state. While private development of institutions can be important (e.g. agricultural labour contracts or rural bank co–operatives), the state does most formal institution building. The state has a comparative advantage in securing property rights based on the legal system, which has the characteristics of a public good. The legal system depends on political institutions. An important question concerns the type of political regime — democratic or authoritarian — under which property rights are more secure.

Other government activities certainly have importance too. On the positive side, government provides public goods (infrastructure, security) and services with positive externalities (education, health). The Solow growth model included education as a determinant of the quality and productivity of labour and therefore of growth. On the negative side, government must finance its expenses through taxes, which lead to distortions and therefore lower welfare. Some taxes are more distortive than others are. Widespread use of tariffs, production taxes and subsidies, typical of developing countries, is especially detrimental to welfare. Many types of government spending will also contribute little or nothing to development. The rest of this chapter provides an overview of the different institutional measures considered in growth regressions. The definition of institutions employed is broad. It includes variables for the political system (its form and stability) and other government activities, distributional and cultural variables and variables describing property rights.

A Short Introduction to Growth Accounting

A basic task of the empirical growth literature is to explain the wide variation in living standards across countries. In a neoclassical production function, $Q = A*f(K,L)$, growth can arise from either the growth of inputs (labour L and capital K) or the growth of productivity (A). The first growth models, like the Harrod–Domar formulation, focused on capital accumulation, which was thought essential for growth[1]. Modern growth theory started with the work of Solow (1956), who investigated the relative contribution of the different factors and found that the growth of inputs could account for only a small part of output growth. The largest influence came from the shift factor A, which has come to be called the Solow residual. Denison (1967) amended this finding. He and others also tried to account for the quality of inputs and other factors. While this work lowered the share of the residual, it remained uncomfortably large. This remains a shortcoming. A large part of growth still must be explained by factors that lie outside the economic model[2].

A related question asks whether developing countries are catching up with the income levels of rich nations. Barro and Sala–i–Martin (1992) show such convergence as observable only if one holds constant a number of variables that proxy for steady–state incomes. Moreover, the estimated rate of convergence depends on a high estimate of the capital share and therefore important capital accumulation. Countries thus will converge, but not to identical income levels; the evidence speaks against unconditional convergence. This finding need not be pessimistic, as long as policy decisions can influence the steady–state incomes to which countries converge. It adds to the interest in analysing the role of policies in a growth framework and provides a sound theoretical underpinning for it[3].

One response to the large Solow residual has come on the theoretical level. New models have generated productivity growth endogenously[4]. The residual remains responsible for a large part of output growth, but the residual itself is explained within the models. While this solves the problem on a theoretical level, it is not fully satisfying because these models fail to turn up clear, testable empirical predictions about growth rates across countries. The empirical literature thus has moved in an altogether different direction, trying to explain the Solow residual by including political and cultural variables. They lie outside the models but can in principle be influenced by policy decisions. This has improved the policy relevance of the growth literature as the focus has moved away from capital accumulation (and the recommendation to foster savings) to other policy areas.

A further impetus for this change came from experience with the stabilisation programmes of the IMF and the structural programmes of the World Bank. It became increasingly clear that political and institutional conditions are important for the success or failure of such programmes. Moreover, the experience of the East Asian "Tigers" with heavy government intervention led to further interest in the political preconditions for economic growth. Their successful state interventions stood in stark contrast to the failure of import substitution policies in Latin America and elsewhere. One hypothesis held that different cultural backgrounds and more equal income distributions made it possible for East Asian governments to follow more encompassing policies with more focus on the general interest rather than on special interests. Another "Tigers" theme concerned the merits of productivity advances *versus* those of capital accumulation as growth drivers. Young (1995) noted that Hong Kong grew mostly from productivity gains whereas the other Tigers relied on capital accumulation. He argued that Hong Kong's performance came from its more liberal, market–oriented policies. The other three Tigers had much more state intervention aimed, among other things, at high saving and investment rates — a more resource–intensive development mode demanding a correspondingly large curtailment of consumption.

King and Levine (1994) discussed capital accumulation in a more general setting. They asked whether it is a driving force of growth as in the Solow model or rather a by–product. It is clear that investment and growth go together, a point confirmed in many regressions. DeLong and Summers (1991), one such study, cited evidence to indicate that the causation might go from growth as the driving force to investment, with investment rates adapting to growth rates. This poses some difficult econometric issues, but it underlines the importance of political factors.

Institutional variables affect income levels through two channels. First, they influence productivity, i.e. the Solow residual. Second, they modify the rate of investment and thus indirectly the level of income through capital accumulation. This second effect does not appear with institutional variables included in a growth regression, because the contribution of capital is already accounted for. Therefore, parts of the growth literature estimate only investment functions. Many different indicators have been used in regressions to take policy measures into account. They include variables on the form of the political system (democracy or autocracy), political stability, fiscal and other policy indicators and measures for property rights.

Political Variables

The Form of the Political System

A first, hotly debated topic concerns the form of government more conducive to growth. Bardhan (1993, p. 45) states the basic dilemma. "Democracies might actually be more susceptible to pressures for immediate consumption and other particularistic demands that may hamper long–run investment. On the other hand, authoritarian rulers who have capacity to resist such pressures may instead be self–aggrandizing, plundering the surplus of the economy." In general, economic freedom is viewed as related to political freedom (Hayek, 1944). North (1995, p. 25) states that "[W]hile economic growth can occur in the short run with autocratic regimes, long–run economic growth entails the development of the rule of law and the protection of civil and political freedoms." As Olson (1982) has noted, however, political freedom facilitates demands for redistributive policies by special interest groups. Such pressure–group efforts may imply legislative deadlock and sub–optimal policies and therefore negatively influence growth. It is no surprise, therefore, that empirical research on economic growth fails to find a clear relation between measures of democracy and economic performance (Barro, 1996, 1997; Durham, 1999). In a recent survey of the literature, Brunetti (1997) compares 17 different studies that find positive, negative or non–significant correlation between growth and democracy. Durham (1999) notes that the absence of continuous regime–type measures that focus on institutions rather than outcomes besets studies on whether democratic or authoritarian regimes grow faster. He presents an alternative regime–type proxy and finds empirical evidence, considering different development levels, that dictatorship is more conducive to growth in developing nations, while democracy is more so in advanced countries. Miner (1998) on the other hand, using a case study framework, finds a positive effect for regime change towards democracy in a number of developing countries. The present study argues that the effect of the political system is indirect, influencing the way institutions are built and maintained. The effect thus runs from the political system to the quality of institutions and only from there to growth. Moreover, democracy makes governments more accountable and thus improves their commitment to chosen policies.

The Stability of the Political System

Whatever the form of the political regime, the outcome of the political process has importance. Political instability subsumes many kinds of events, such as political murders, coups, revolutions or war. They all lead to insecurity, which hampers the prospects for investments that must be amortised over long periods. Predictability can therefore be a crucial determinant of investment. It might also affect the Solow residual directly if the residual is interpreted as the result of a process of knowledge accumulation, which depends on investment in physical and human capital.

Many publications have found evidence for a positive effect of political stability. Barro (1991) and Barro and Sala–i–Martin (1995) include a measure for revolutions and political assassinations, but it is not significant in all specifications. Alesina *et al.* (1996) analyse the effect of coups and find a negative effect for the countries and periods where such unconstitutional government changes took place. Alesina and Perotti (1996) look at the effect of a composite measure for political instability on investment, finding the expected negative effect. Svensson (1998) finds a negative effect of instability on investment, but Brunetti (1997) compares several institutional variables and finds that as long as measures for property rights are included in growth regressions, political instability has no significant effect on growth rates. An interpretation of this result is that while political instability is an indicator for a bad institutional setting, it goes together with other problems — such as badly defined property rights — that are much worse for economic growth.

Fiscal Policy and Government Spending

Fiscal policy and government spending on education, health or infrastructure do not refer directly to institutions, but they often serve as good indicators of the institutional setting that a government creates. Also, they obviously constitute policy measures relevant to growth accounting. Fiscal policy can affect growth rates through two channels[5]. First, spending must be financed by taxes, which distort economic decisions and thereby lead to welfare losses. Second, rent seeking can be a problem with any type of government spending. It acts basically like a second tax by diverting activities into unproductive uses. If government spending is to outweigh these negative effects, its implicit rate of return must exceed the excess burden of the tax. This is most probable for investment spending in its widest sense, including spending on physical as well as human capital. It could also be true for health spending, which has large externalities. Empirical work (e.g. Barro and Sala–i–Martin, 1995) bears out these expectations, at least for education spending. Easterly and Rebelo (1993) find a positive effect for spending on capital goods, but Devarajan *et al.* (1996) find a negative one when they control for overall spending. They explain this by arguing that in many countries there is too much spending on capital goods and too little on general spending, such as for education or health.

It is well known from the public finance literature that certain types of taxation lead to larger distortions than others do. These are usually those indirect taxes that violate the conditions for productive efficiency, above all tariffs and production taxes. Unfortunately, both are very important in developing countries because they can be levied easily. Setting and collecting tariffs also become simplified with limited numbers of ports, roads or other points of entry. The same is true for production taxes if they apply to industries with small numbers of producers, often the case in manufacturing or extractive industries. Despite these clear predictions, the empirical growth literature has not found significant effects for different tax types. Easterly and Rebelo (1993) attribute this to the endogeneity of the tax regime; richer countries tend to rely more on direct taxes. Nevertheless, one variable that does enter the regressions positively and fairly robustly is the budget surplus.

In many countries, governments have an alternative way of collecting revenue, one even easier administratively than the aforementioned taxes: the inflation tax. When the central bank is not independent, a government can finance a budget deficit by selling bonds to its captive central bank or by printing money directly. This corresponds to a tax on holding money and leads to a distortion, as do other taxes, even though money — by greasing the wheels of exchange — lies at the heart of a market economy. Furthermore, the inflation tax raises more revenue if it is applied unpredictably. It might therefore be especially detrimental to economic development. Kormendi and Meguire (1985) find evidence for this proposition. Cukierman *et al.* (1992) point out another effect. Countries with higher political instability are more prone to use the inflation tax.

Property Rights

Weak property rights increase transaction costs and thereby hinder economic development. While the basic argument is simple, determining the mechanisms and finding indicators to capture the quality of property rights are much less so. The existing literature has used several measures. One is the black market currency premium (see e.g. Barro and Sala–i–Martin, 1995). It can measure the distortions introduced by the government in the foreign exchange market, but might capture a wider range of problems related to weak government institutions as well as to macroeconomic policy mistakes. It usually gets the expected negative sign in growth regressions and is fairly robust. Clague *et al.* (1996,1999) introduce the share of contract–intensive money, i.e. deposits of the public in the banking system. It reflects the confidence of the public in the banking system and in the stability of monetary policy. Mauro (1995) uses a measure for corruption, arguing that corruption acts like a tax on transactions. He finds the expected negative effect. Knack and Keefer (1995) use two indicators collected by private agencies to measure the security of property rights. The International Country Risk Guide (ICRG) and Business Environmental Risk Intelligence (BERI) each report a series of indicators for the security of contracts and property rights. Knack and Keefer (1995) find that the ICRG indicators especially relate closely to country performance in growth regressions. Other indicators have been constructed from interviews with businesses on how they view the security of property rights. Borner *et al.* (1995) did this for several Latin American countries and found the data to show a significant relation to growth rates. Borner *et al.* (1997) extended this technique to transitional economies, and Brunetti *et al.* (1998) used it for a larger number of countries. Both studies confirmed its usefulness. It does have a drawback: the resulting series for institutional quality are expensive to collect and available only for a few years, which makes them less suited to regression analysis.

On the Determinants of Institutions

Like the effects of investment on growth, those of institutions can also be indirect. Some variables may have no clearly discernible effect on growth but could be determinants of institutional quality itself. Important variables in this group are the level of inequality, ethnic fractionalisation and the legal tradition. Inequality has long been seen as related to development. The connection was first thought to run from development to inequality, with inequality first rising then falling as a country grows (the Kuznets curve). More recently, the reverse has moved to the centre of attention. In contrasting Latin American and East Asian countries, it has been suggested that greater inequality might have caused the comparatively poor performance in Latin America. It displays much higher degrees of inequality, which could have led to less stable politics owing to constant demands for redistribution and their repression. Indeed, the history of many Latin American countries has been characterised by vicious struggles over the redistribution of land and other assets. A number of studies have confirmed this hypothesis in cross–country analyses. Alesina and Perotti (1996), Chong and Calderón (1997), Rodrick (1999) and Keefer and Knack (2000) all find evidence in its favour.

Ethnic divisions can have similar effects because they also lead to divided societies. They can also generate redistributive struggles, as different ethnic groups are mostly interested in the welfare of their kin rather than that of the country at large. One can expect such divisions to reinforce political instability and poor economic institutions. Easterly and Levine (1997) find evidence in favour of this hypothesis, as does Collier (2000).

Countries with continental European civil law or socialist legal traditions have been found to exhibit inferior government performance (Chong and Zanforlin, 1998; La Porta *et al.*, 1999). In contrast, the British common law tradition is more favourable to business activity. Regarding work ethic and tolerance, La Porta *et al.* (1999) use religion as a proxy. They find that significant population shares of Catholics or Muslims predict inferior institutional quality. Landes (1998) singled out these two religions as hostile to institutional development, whereas a significant share of Protestants has the opposite effect. La Porta *et al.* (1999) find that countries that are poor, close to the equator and ethno–linguistically heterogeneous exhibit inferior government performance.

North (1981) and Rosenberg and Birdzell (1986) stress that, as the scale of economic activity expands, better institutions become affordable. Clague *et al.* (1996) find empirical evidence for this by using the initial GDP as a proxy for the level of economic development. They also find that the number of years a country is independent improves institutions. The idea is that the longer a country is independent, the more efficient its institutions will be, because time will help to consolidate them. Keefer and Knack (1996) investigate the role of democracy in the quality of institutions. They find that a variable from Jaggers' and Gurr's (1996) data set, namely a measure of constraints on the executive, relates strongly to the quality of institutions. Finally, Chong and Calderón (1997) analyse the correlation between education and institutional performance. They presume that a better educated population is likely to produce a better educated and less corrupted bureaucracy, and thus more efficient institutions.

Conclusions

A wide body of literature analyses the influence of the political system and economic institutions on economic development. A general finding is that with healthy economic institutions the political system has less importance. In the perspective of the present study, however, this literature suffers from a number of shortcomings. First, there is little systematic analysis of the relation between the political system and the quality of economic institutions. Second, and related to this, the analysis of different institutional measures — of the political system, property rights and determinants of the quality of institutions — is not done in an integrated way, based on a common conceptual framework. Third, most of the cited studies use different concepts of "good economic institutions", which renders comparisons difficult. The aim here, therefore, is to develop a single measure for the quality of institutions, a measure whose causes and consequences can be analysed in a common framework.

Notes

1. A very vivid discussion of the capital accumulation thesis can be found in Easterly (2001).
2. Mankiw, Romer and Weil (1992) develop this point in a different setting.
3. We will come back to the convergence debates in discussion of the regression framework in Chapter Five.
4. This literature started with Romer (1986) and has seen many contributions since then. For a comprehensive overview and discussion of its results, see Aghion and Howitt (1997).
5. A general overview of fiscal policy and growth can be found in Tanzi and Zee (1997).

Chapter Three

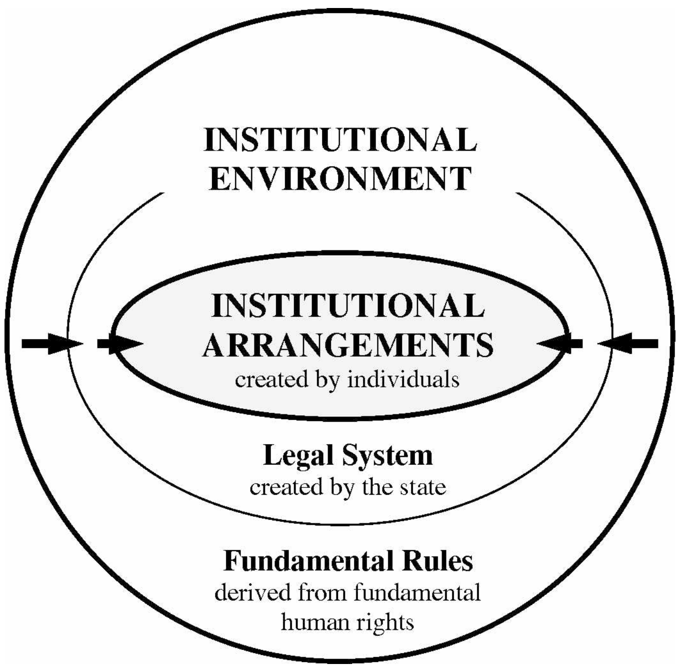
Institutional Quality and its Determinants

Introduction

This chapter prepares the background for the analysis that follows. It first explains the significance of institutions in society and how they differ from organisations. It discusses in two subsequent steps the roles of economic institutions, which facilitate economic interactions among individual players, and political ones, which define the political process and the collective role of the state. The final sections specify the crucial term "institutional quality" and discuss its determinants, in which the state plays a very important role. The state must be both strong enough to create and enforce good property rights and bound by the rule of law not to surpass certain limits.

Institutions, the "humanly devised constraints that shape human interaction" (North, 1990*a*, p. 3), define the rules of the game. They include formal rules and informal conventions or behavioural norms, plus the enforcement characteristics of both. Formal institutions (the main focus of attention here) exist on three levels (see Figure 3.1). First, *fundamental rules*, derived from basic human rights, are normally laid down in a country's constitution. Second, based on the fundamental rules, *the legal system* contains property and contract laws as well as rules about the structure of the state and the political decision–making process. Among other things, these political institutions define the degree to which a state is democratic or autocratic. The fundamental rules and the legal system together constitute the institutional environment (Davis and North, 1971, pp. 6–8). Third, within this institutional environment, individuals and organisations enter into contracts or *institutional arrangements* to co–ordinate their activities[1]. The three levels of institutions are strongly interdependent. Crucially, the value of an arrangement between two or more individuals or organisations depends decisively on the quality of the institutional environment. "Talk is cheap", but so is a paper contract — unless the quality of the institutional environment renders it "dear".

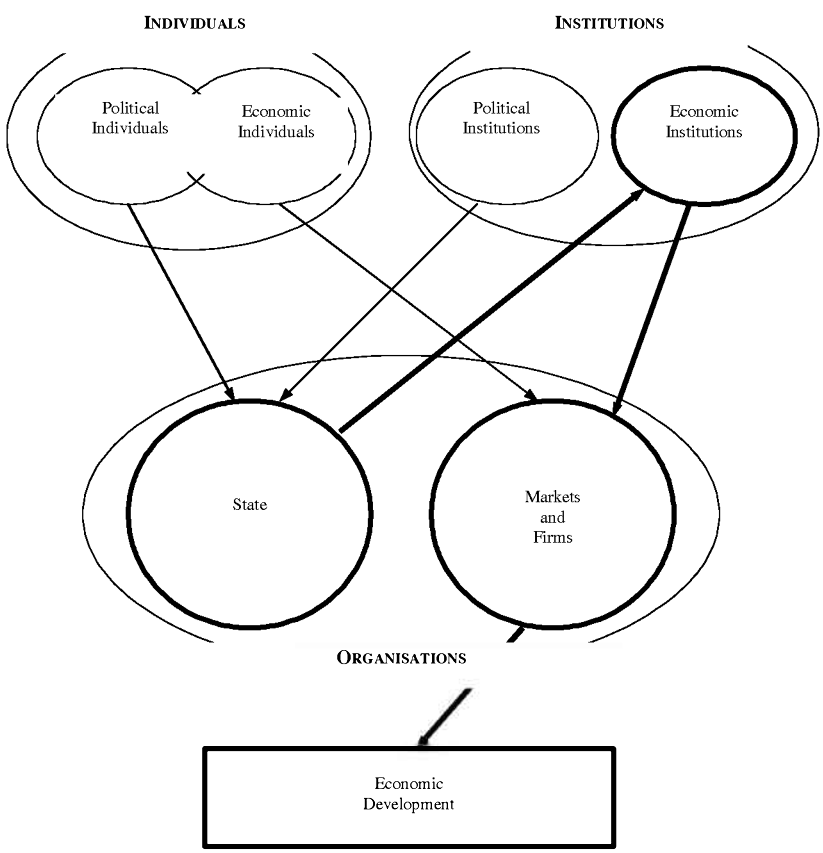
Figure 3.1. **The Three Levels of Institutions**



Institutions are absolutely necessary for well functioning markets, for two main reasons. *First*, the fact of scarcity makes necessary the specification of institutions, mainly property rights. No institutions would be necessary in a paradise with neither scarcity nor other conflicts. In a world of scarcity without property rights "exchange" would occur exclusively through violence and the survival of the strongest. With property rights but without contract rights market transactions also would not occur, although peaceful autarky with legal protection of property would be possible. *Second*, market failures can occur, in the sense that markets cannot exist or that they lead to socially undesirable outcomes[2]. Institutions overcome these failures. Production externalities, where activities of one player may impose costs or benefits on another, constitute one source of market failure. The assignment of property rights internalises such externalities. Public goods whose consumption is non–rivalrous and whose provision is non–excludable constitute another source of market failure. They require institutions allowing their socially efficient provision. Uncertainty, imperfect information and individuals' bounded rationality can be still another source. Human beings cannot foresee all the future states of the world, so uncertainty necessarily arises. As the acquisition of information is costly, individuals might even rationally choose to be imperfectly informed. Finally, human beings are boundedly rational owing to their cognitive limitations[3]. Institutions reduce uncertainty and information costs and provide decision rules of thumb for different kinds of problems. "Rational individuals, confronted with the limitations of individually rational behaviour, create institutions that, by creating new incentives or by imposing new constraints, enable them to transcend these limitations" (Bates, 1995, p. 35). Thus, scarcity of resources and the different reasons for market failure require institutions to co–ordinate the interactions of individuals and organisations.

Organisations differ from institutions. While institutions represent the rules of the game, organisations represent the players (and the arbiter) (North, 1990*a*, pp. 3–4). This view regards organisations as a nexus of contracts, treaties and understandings among their individual members (Alchian and Demsetz, 1972). Individuals, economic organisations (firms and markets) and political organisations (interest groups, political parties or the state) interact in their daily lives. They create and enforce institutions that eventually determine the pattern of economic development (Figure 3.2).

Figure 3.2. **Institutions, Organisations and Economic Development**



Economic Institutions

Economic institutions consist of property and contract rights. They co–ordinate all economic interactions in production, exchange and distribution. Property rights stem from property law, whereas contract rights are specified by contract law and by economic actors' institutional arrangements. Thus, individuals and organisations create contract rights on the one hand, while the state specifies them through contract law on the other. The state also creates property rights through property law. It therefore becomes responsible for the enforcement of all economic institutions.

This analysis refers exclusively to institutions created and enforced either by the state or by individuals or organisations. In other words, it views institutions as the result of an intentional process[4]. Different economic, political and cultural theories of institutions describe the intentions behind this process. Economic theories (Demsetz, 1967; North, 1981) hold that institutions are created and enforced when it is efficient to do so. Political theories (Marx, 1872/1974; North, 1990*b*; Olson, 1993) focus on redistribution rather than efficiency and hold that those in power shape institutions to stay in power and to transfer resources to themselves. In the cultural theories (Weber, 1980; Putnam, 1993; Fukuyama, 1995; Landes, 1998), societies hold beliefs that govern the creation and enforcement of formal institutions.

The problem of transaction costs relates closely to economic institutions. Market transaction costs are the costs of negotiating and concluding institutional arrangements, then of monitoring and enforcing them. They arise as soon as the creation and enforcement of contract rights become costly. Coase (1992, pp. 717–718) stresses this link between transaction costs and the economic institutions specified by the legal system:

> "If we move from a world of zero transaction costs to one of positive transaction costs what becomes immediately clear is the crucial importance of the legal system in the new world.... As a result, the legal system will have a profound effect on the working of the economic system and may in certain respects be said to control it."

A problem in the literature on economic institutions is its tendency toward the tautology that "existing institutions minimise transaction costs because transaction costs minimisation is their function." (Bates, 1995, p. 45). This results partly from not distinguishing between the normative and the positive view of institutions. In reality, institutions often are created to serve those in power. "The effort to uphold these institutions, even in the face of changes in transaction costs, information flows and their increasing disutility, leads to the formation of dominant interest groups." (Harriss *et al.*, 1995, p. 10).

Political Institutions: The State

Political institutions define the structure of the state as well as the political process. Thus, they shape the creation and enforcement of economic institutions, particularly economic policy and its administrative implementation. They influence the behaviour of politicians, political parties, voters and interest groups, and thus define how institutions are created, altered and enforced. The emergence and evolution of the rules stem from the motivations and decisions of individual actors (Clague, 1997, p. 2). This makes it important to pay attention to how institutions emerge, either spontaneously or as the intended result of collective action. A growing body of literature poses collective action problems with creating institutions as the major theme[5]. Research on the new political economy (NIE applied to polities) has focused largely on developed countries, mainly the United States[6].

The institutions likely to be created and enforced depend on the structure of politics or, as repeatedly stressed, on the nature of political institutions. Institutions often are imposed by ruling elites rather than chosen democratically. This issue links to the more basic one of how states emerge. It is specific to the inherited power of interest groups and political agents. Creating and enforcing property and contract law, which includes the enforcement of individual property and contract rights, entails political transaction costs (Richter and Furubotn, 1996, pp. 50 and 54–56). These costs depend — again — on the form of political institutions[7].

Before defining the quality of political institutions in operational terms, one must first explain how to interpret the state. North (1981, p.21) defines the state as:

> "…an organization with a comparative advantage in violence, extending over a geographic area whose boundaries are determined by its power to tax constituents.... [An] organization which has a comparative advantage in violence is in the position to specify and enforce property rights."

North's characterisation of the state thus contains three elements. First, its task is to specify and enforce property rights. Second, within its geographical boundaries it can use violence to fulfil this task. Third, it can tax its citizens to finance its activities. Tax revenues are invested in the state's capacity to specify and enforce property and contract rights. The state's activities presume a high "sunk" investment, *i.e.* in building and maintaining the legal system with courts and the police force. For this reason, the state usually has a comparative advantage in "producing" economic institutions.

Missing in this definition, however, is the state's legitimisation. It derives its authority not only from the monopoly of force but also from its legitimacy. This view is based on Weber's traditional definition of state's *legitime Gewaltsamkeit* (lawful violence) as the principal basis of the rule of men over men[8]. Correspondingly, social norms provide in his view an important ingredient for the state's authority. Where the state's authority is based only on force, it will be incomplete and costly to enforce[9]

Thinking about the state as a single, homogenous body has important drawbacks that cannot be overlooked. Such a state is quite similar to the profit–maximising firm in neo–classical theory, "a strange bloodless creature without a balance sheet, without any visible capital structure, without debts, and engaged apparently in the simultaneous purchase of inputs and sale of outputs at constant rates"[10]. The abstract concept of the state is just another such "strange bloodless creature", a black box from which all good and evil emanate. This box will have to be filled with some content, but after a definition of the quality of institutions.

The Quality of Institutions

What are "good" property and contract rights? To define efficient economic institutions normatively would not be so hard, but explaining their "quality" positively becomes much more difficult. One can grapple with this positive question by analysing empirically the determinants of institutional quality, for which the literature has not yet provided a precise definition. North (1981, 1990*a*) or Umbeck (1981), for instance, call a property–rights system efficient whenever the rights are fully specified and enforced under all circumstances. The literature also hardly makes a clear distinction between economic and political institutions. Empirical work often combines them with labels like "political instability" or "good government" (see, for example, Alesina *et al.*, 1996 or La Porta *et al.*, 1999).

This study tries another approach to analysing institutional quality. As already noted, the creation and enforcement of institutions cause transaction costs and therefore the institutions can never be completely specified. Political institutions define this process, and the economic institutions are the product of it. Now, following the definition of pareto–efficiency, one may call a set of economic institutions efficient if there is no feasible alternative for the state to create and enforce property and contract rights that everyone finds at least as good and which at least one of the economic actors strictly prefers. This assumes as given both the political institutions and the transaction costs of creating institutions. It further assumes no wealth effects (Milgrom and Roberts, 1992, pp. 35–38). The wealth of the individuals involved is assumed to have no influence on the outcome of the agreement. The definition holds in a static context as well as a dynamic one when expectations are introduced. Uncertainty affects dynamic efficiency as soon as the economic actors are risk averse, which means that uncertainty about future property and contract rights and/or about the level of transaction costs leads to institutional inefficiency. Moreover — and to repeat — as soon as the creation and enforcement of institutions cause transaction costs, efficient institutions are necessarily incomplete, *i.e.* they cannot be fully specified or completely enforced. As Willie Stark, the Governor in *All the King's Men* says more metaphorically:

> "[The law] is like a single–bed blanket on a double bed and three folks in the bed and a cold night. There ain't ever enough blanket to cover the case, no matter how much pulling and hauling, and somebody is always going to nigh catch pneumonia. Hell, the law is like the pants you bought last year for a growing boy, but it is always this year and the seams are popped and the shankbone's to breeze. The law is always too short and too tight for growing humankind."[11]

The State and Institutional Quality

Efficient economic institutions do not fall like manna from heaven, and they will not necessarily emerge from rational self–interest. Rather they have to be consciously and collectively created. After the preceding explanation of what institutional quality means, a central question arises. How do some countries come to have good institutions while others do not? The state is responsible for the creation and enforcement of a large part of property and contract rights. Its behaviour therefore determines institutional quality decisively. A deeper understanding of that decisive influence can emerge from an approach based on the distinction between the strength and the commitment of the state.

To create a good institutional environment the state must be both capable and committed to the task. Being "capable" means that it must be strong enough both to specify good property and contract laws and to enforce them within its entire territory. Being "committed" means that the state is itself pledged to the rules. Its strength and its commitment are interdependent. An effective binding mechanism influences the state's costs of violating the rule of law and hence the resources available for such activities. Both the strength and the binding of the state are each a necessary condition for economic growth. This approach will help evaluation of whether inefficient institutions are due to the state's weakness and/or its lack of commitment in creating and/or enforcing institutions.

In a broad sense, the state is an organisation of individuals, political groups and political institutions; it shapes their interactions. Its potential to apply physical force is essential. At the same time, this monopoly of force leads to a fundamental dilemma. As Weingast (1993, p. 1) indicates, "A state strong enough to protect property rights and enforce contracts is also strong enough to confiscate the wealth of its citizens." The state's power must be put under control to assure its own commitment to the institutions and to avoid the dilemma[12]. This reasoning leads to the following, more complete restatement of the two necessary conditions for the state to perform as the decisive determinant of institutional quality:

- *The Strong State:* A state must be strong enough to specify an efficient set of property and contract rights as well as to enforce them within its territory; and
- *The Committed State:* The state itself must be completely committed to the rules of the society in order to be compelled to create and enforce the best set of economic institutions and not to be allowed to violate them for selfish purposes[13].

Clague *et al.* (1996, p. 36) say:

> A state "must be strong enough to keep even the largest enterprises and strongest Mafiosi from infringing on the rights of weaker parties. It must also be so strong that it is expected to last at least as long as the longest–term loans and investments. It must, while it has pervasive authority and enduring strength, also refrain from infringing on the rights of those subject to it.... This combination of strong, pervasive, lasting, and — at the same time — restrained government is rather rare. So are countries that achieve their economic potential."

Many studies deal with the commitment problem of the state, but its administrative capacity has been largely neglected in economic development theory as well as in political implementation through international donor organisations such as the International Monetary Fund and the World Bank[14]. Sachs (1996, p. 23) is rather harsh with the IMF's and the World Bank's stabilisation and structural adjustment programmes for calling "on weak, debt–ridden governments to introduce value–added taxes, new customs administrations and many other wonderful things, often within months. It was, alas, part of the course, when the bank set 111 conditions in its policy framework paper on Kenya". A definition of the state's power and how it can be made operational and thus measurable is needed.

The Role of the State I: The Strong State

Although the concept of power does not typically enter the economic analysis of the state, several studies have explored it. Myrdal (1968) characterised a "soft state" as lacking social discipline owing to severe deficiencies in legislation, law observance and enforcement. A surge of literature (e.g. Wade, 1990) on the Asian newly industrialised countries (NICs) attributes their success exactly to the presence of a strong state. Krueger (1993, p. 3) sees an important determinant of economic development in politically strong leadership. She also underscores the value of a well functioning bureaucracy capable of carrying out the goals of the political leadership. In a somewhat different view, Shleifer and Vishny (1993) and Rodrik (1996) interpret a "hard" or "strong" state as a government's ability to discipline its own bureaucracy and private pressure groups.

A strong state is therefore able to create and enforce good institutions and to monitor them effectively, sustained by a competent bureaucracy. Fatton (1989) criticises such a broad generalisation in a paper characteristically titled "The Theoretical Softness of the 'Soft State'". In his view, it cannot distinguish between a state weak owing to a lack of power and one merely lacking the intention to create and enforce good institutions. Fatton's critique deserves serious consideration, but one needs first a definition of power in economic terms before turning to a new and more precise definition of a strong state. "In a zero transaction cost world, bargaining strength does not affect the efficiency of outcomes; but in a world of positive transaction costs it does — and it thus shapes the direction of long–run economic change" (North, 1995, p. 20). In this light, and relying on an economic definition of power provided by Harsanyi (1976) and Bardhan (1991), one can define a strong state as one having enough resources to create and enforce efficient property and contract rights as well as to guarantee political stability. The state's power is larger the smaller are its opportunity costs in "producing" efficient institutions and the larger are the opportunity costs of its citizens in resisting them.

The Role of the State II: The Committed State

Institutions usually are not created to be (socially) efficient; rather they are created to serve the interests of certain groups. This draws attention to the reasons for a lack of state commitment. Rent seeking is an important reason for institutional failure. Rents arise through the state's power to influence market outcomes and to redistribute incomes. They create an incentive for agents to leave productive activities for non–productive ones, to acquire access to these rents. The withdrawal of resources from productive uses continues until the expected marginal returns to a factor from productive and rent–seeking (unproductive) activities are equalised[15]. The cost of rent seeking is the waste of resources in unproductive activities. It causes additional welfare losses through the inefficiency of the resulting institutions. Assuming that the non–creation, non–enforcement, and violation of an efficient set of institutions are all ruled out by an effective state commitment, the state may be called effectively committed if its opportunity costs of applying the rules are smaller than the opportunity costs of violating them.

Political institutions with federalist structures and a high degree of democratic participation usually reinforce a committed state, but an effective commitment does not necessarily link with democratic control and participation mechanisms. On the contrary, it may even serve the interest of a tax–extracting autocrat to provide protection of property and contract rights to enhance tax revenues (North, 1981). Such an "encompassing interest" leads to self–commitment (Olson, 1993; McGuire and Olson, 1996). Even though the ultimate goal is appropriation by the ruler, its effect is to increase efficiency. In order to extract a maximum of tax revenue, the tax base has to be large as well!

Jesus Gil y Gil, eccentric president and owner of *Atletico Madrid*, a Spanish soccer club, provides an interesting example (Werz, 1999, p. 6). He is (in)famous for being at loggerheads with the law. At the time of writing he was accused of embezzlement and involved in over 80 legal battles. In June 1991 he became mayor of Marbella, a mondaine Mediterranean seaside town. Before he assumed office, Marbella was basically in a shambles, with criminal incidents at a peak, widespread drug addiction and a corrupt police force. Its wealthy inhabitants abandoned it and real estate prices plummeted. Gil y Gil acted immediately. He dismissed the whole local police force and founded a new academy to train 200 new police officers with no corrupt past. Since then, Marbella has improved remarkably. It now is known as one of the most secure and cleanest places in the country. Real estate prices have soared by up to 800 per cent. Gil y Gil's behaviour stemmed neither from altruism nor from any special affinity towards Marbella, although he declares both incessantly. As the owner of 300 apartments and 23 firms in Marbella, his motivation to provide secure property links surely to his "encompassing interest". Autocrats with such interests may want to implement efficient and hence growth–inducing institutions, but only if their expected time horizons are long enough. An autocrat expecting only a short period in power has no interest in introducing social welfare–maximising institutions if this lowers short–run tax revenues (Olson, 1993).

The Link between Strength and Commitment of the State

Soskice *et al.* (1992) show how a credible commitment to refrain from politics of predation can enable policy makers to increase the flow of capital to their underdeveloped regions. Bates (1995, p. 39) quotes several studies of how credible binding mechanisms lead to more resources contributed to the state, thus enforcing its power. North and Weingast (1989), exploring the creation of new political institutions in Britain following the Glorious Revolution, find that by shifting power to Parliament the monarch could better signal to capital owners his commitment not to use his powers against their interests. As a result, the state could secure a far greater volume of loans at lower interest rates. Similar research by Root (1989) on the Old Regime in France, by Conklin (1993) on sixteenth–century Spain and by Firmin–Sellers (1995) on institution building in two regions of Ghana in the first half of the last century sustain the binding hypothesis. Improving the state's binding increases citizens' will to support the ruler with resources in order to establish police forces and law courts. Volckart (1999) shows in an overview of German history that the modern tax–state was in place not earlier than the 18th century. In the high middle ages, political institutions had resulted from a bargaining process between the lords and their vassals. The lords received support in exchange for supplying military security and formal rules for property rights. With larger tasks, such as financing a standing army, it became necessary to tap new sources of finance, like taxes. In order to raise taxes, the lord had to grant privileges to special interest groups, giving them the voice option and thereby introducing a binding mechanism on the behaviour of the lords.

Notes

1. The distinction between "institutional environment" and "institutional arrangement" relies on Davis and North (1971, p. 6). The former means the long-lasting "set of fundamental political social and legal ground rules that establishes the basis for production, exchange, and distribution" whereas the latter is an "arrangement between economic units that governs the ways in which these units can cooperate and/or compete". The distinction between "fundamental rules" and "legal system" follows Brennan and Buchanan (1985, p. 105).
2. See Bates (1995, pp. 29-35) for a short overview of different forms of market failures and the institutions created to overcome them.
3. One might regard an individual's information processing as a production process with information as a costly production factor and the individual's bounded rationality as the production technology.
4. Richter and Furubotn (1996, p. 8) call this view "constructivist rationalism". The second view is that institutions emerge spontaneously.
5. See notably Wade (1990), and Ostrom (1990).
6. See North (1995, p. 25). He states that "[W]hile a great deal is known about the characteristics of the polities in the Third World countries there is very little theory about such polities."
7. See for instance North (1990*b*, p. 359).
8. See Weber (1980, p. 822).
9. Weber (1997) contains an interesting discussion of the role of social norms for the functioning of the rule of law, as well as an application to Russia after the transformation from communism. She finds that the legal system works much better in provinces with a greater acceptance of state authority. There, less recurrence to alternative forms of contract enforcement such as the Mafia occurs.
10. Boulding (1950, p. 34), quoted in Toye (1995, p. 53).
11. Warren (1996, p. 136).
12. See Root and Weingast (1995, pp. 139-144) for a similar distinction between a strong and a limited state as a precondition for credible rule of law in society.
13. This means that whenever the state — *i.e.* its rulers — is not fully committed to the rules, it uses its discretionary power to its own rather than to the social advantage. This can be done in order to stay in power and to transfer resources to itself and/or powerful groups.
14. Among the few exceptions are Wing Ying Tang and Hedley (1998) who show in an examination of 20 Asian-Pacific and Latin American countries that the state's effectiveness explains approximately two-thirds of the variance in national economic growth.
15. See Krueger (1974), Posner (1975), and Buchanan (1980) for their seminal works on rent seeking.

Chapter Four

The Institutional Measures

Introduction

This chapter develops operational indicators for institutional quality, the strength and commitment of the state and the political variables. All will serve in the next two chapters to test the theory. The indicators build on variables commonly used in the literature. They are combined using principal components analysis, a data–reduction technique that allows the summarisation in one newly constructed variable of the information in a potentially large number of variables. This allows single measures for the institutional settings in question, e.g. for the perceived quality of economic institutions. Each such index is a weighted average of the principal components of its corresponding variables, with the weights given by the share of the variables' variance explained by each principal component[1]. Scully (1992) has used this method to construct indices for political and economic liberty, Alesina and Perotti (1996), Loayza and Palacios (1997) and Demetriades and Luintel (1996) used it to construct policy and political stability indices. Its main advantage lies in helping to reduce the multicollinearity problems typical in growth regressions by reducing the number of independent variables. It also allows a reduction of the dependent variables, which permits focus on a single measure for institutional quality rather than the host of measures typically analysed in the literature[2]. Although it is a convenient way to reduce dimensionality, it comes at a price. The constructed variable cannot be interpreted in terms of the underlying variables used to construct the index (Greene, 1993, p. 424). This leads to some limitations on the interpretation of the results and on policy conclusions. Nevertheless, the gain in simplicity is worth this price.

The Quality of Economic Institutions

The quality of economic institutions relates closely to the security of property rights, which face many threats, such as outright expropriation by the government, insufficient protection of contracts or non–compliance with obligations (debt default, repudiation of contracts etc.). Another problem, the unavailability of a secure medium of exchange, could arise from high and unpredictable inflation or other restrictions on the use of money, such as price and exchange controls or an overvalued official exchange rate. A single variable is not likely to capture all these different aspects, and this study applies a principal components analysis to five different variables commonly used in the literature to identify the quality of institutions. From this, it creates a single indicator to measure the quality of economic institutions for three decades separately, namely the 1960s, 1970s and 1980s. The indicator is a weighted average of the principal components of the black market premium, the depreciation rate of the currency, the amount of "contract–intensive" money, an indicator measuring the quality of a state's creation and enforcement of institutions, and the country debt–default risk.

The black market exchange rate premium is frequently used as a general indicator of trade, exchange rate and other price distortions. It reflects a state's discretionary power in issuing licences and approvals for international economic transactions. Hence, it can be viewed as a restriction on contract and property rights[3]. The depreciation rate is similar to the inflation rate in that it takes into account that devaluation is an indirect form of expropriation because it taxes the holding of liquid assets. The concept of "contract–intensive" money is based on the idea that the share of money held in the form of currency is larger in an economy where property and contract rights are insecure. It is calculated as the share of currency in total quasi money (M_2) (Clague *et al.*, 1996). The "International Country Risk Guide" (ICRG) is an indicator provided by a private risk–rating agency for potential foreign investors. It includes measures of government repudiation of contracts, the risk of expropriation, the rule of law and the quality of the bureaucracy[4]. Finally, the country debt–default risk is an indicator of the risk of default on sovereign debt provided by Institutional Investor, another private risk rating agency[5]. Table 4.1 shows the decade averages of the constructed indicator for each country where full data are available in the sample (the higher the value the better the quality of economic institutions). Countries are ranked according to their values for the 1980s.

Table 4.1. **The Quality of Economic Institutions**
(Decade Averages)

Country	1960-69	1970-79	1980-89	Country	1960-69	1970-79	1980-89
United States	4.20	4.22	4.19	Tunisia	2.15	2.31	2.30
Switzerland	4.00	4.08	4.13	Turkey	1.88	1.87	2.30
Japan	4.09	4.09	4.11	Côte d'Ivoire	2.15	2.42	2.28
Canada	4.02	4.07	4.07	Indonesia	1.37	1.95	2.26
Germany	4.01	4.10	4.05	Costa Rica	2.37	2.50	2.25
Netherlands	3.71	3.94	4.01	Ecuador	2.25	2.46	2.22
United Kingdom	3.74	3.82	3.99	Jamaica	2.34	2.22	2.18
Finland	3.86	3.89	3.96	Zimbabwe	n.a.	2.20	2.12
France	3.45	3.83	3.95	Malta	2.29	2.20	2.10
Austria	3.63	3.79	3.91	Paraguay	2.00	2.19	2.08
Norway	3.79	3.87	3.91	Sri Lanka	1.52	1.72	2.01
Australia	3.97	3.97	3.88	Philippines	2.17	2.20	2.00
Sweden	3.79	3.89	3.87	Egypt	1.46	1.52	1.98
Denmark	3.77	3.85	3.86	Malawi	n.a.	n.a.	1.97
New Zealand	3.71	3.79	3.82	Argentina	2.13	2.23	1.95
Belgium	3.28	3.57	3.64	Jordan	2.50	1.86	1.92
Italy	3.29	3.47	3.59	Morocco	1.96	1.98	1.88
Iceland	3.57	3.56	3.58	Senegal	n.a.	1.82	1.88
Singapore	3.50	3.44	3.51	Dominican Republic	1.80	1.93	1.86
Spain	3.29	3.39	3.39	Nigeria	1.82	2.00	1.82
Ireland	3.47	3.45	3.37	Algeria	n.a.	1.93	1.81
Portugal	2.90	2.94	3.14	Zambia	2.00	1.94	1.81
Malaysia	2.79	3.03	3.13	Poland	n.a.	2.40	1.80
South Africa	3.16	3.28	3.12	Pakistan	1.45	1.67	1.73
Korea	n.a.	3.10	3.05	Peru	1.81	1.72	1.68
Botswana	n.a.	n.a.	2.94	Togo	n.a.	1.62	1.68
Thailand	2.33	2.69	2.93	Honduras	1.43	1.64	1.68
Papua New Guinea	n.a.	n.a.	2.90	Burkina Faso	1.00	1.42	1.67
Trinidad and Tobago	n.a.	2.98	2.84	Guatemala	1.41	1.61	1.64
China	n.a.	n.a.	2.80	Liberia	n.a.	2.34	1.63
Chile	2.60	2.49	2.73	Bangladesh	n.a.	1.48	1.62
Israel	2.62	2.76	2.73	Tanzania	n.a.	1.72	1.47
Venezuela	2.98	3.14	2.71	El Salvador	1.49	1.62	1.47
Hungary	n.a.	n.a.	2.69	Haiti	0.95	1.33	1.46
Cyprus	2.62	2.64	2.67	Sierra Leone	n.a.	1.71	1.45
Greece	2.42	2.60	2.65	Congo	1.39	1.29	1.45
India	1.98	2.32	2.52	Ethiopia	n.a.	1.22	1.32
Colombia	2.65	2.68	2.50	Ghana	n.a.	1.55	1.20
Mexico	2.73	2.78	2.50	Sudan	1.00	1.13	1.07
Brazil	2.85	2.91	2.47	Uganda	n.a.	n.a.	0.94
Uruguay	1.90	2.06	2.47	Syria	0.81	1.09	0.92
Yugoslavia	2.69	2.73	2.43	Zaire	n.a.	1.14	0.90
Kenya	2.52	2.54	2.38	Bolivia	0.64	1.12	0.87
Cameroon	n.a.	2.08	2.38	Nicaragua	n.a.	n.a.	0.75
Gabon	n.a.	2.03	2.38	Myanmar	0.38	0.31	0.55

Source: Own calculations, see text for explanations.

Political Institutions

The efficient allocation of scarce resources, especially in view of inter–temporal decisions (such as investment, saving, lending or research and development) requires efficient economic institutions. Yet such institutions are made, not given, and do not emerge spontaneously from rational self–interest. Economic institutions of different varieties and degrees of efficiency are the product of the quality and form of political institutions.

The Stability of Political Institutions

The quality of political institutions is measured here exclusively in terms of their uncertainty or instability. For the moment, this avoids the dispute over whether democratic or autocratic institutions are more efficient in an economic sense. Chapter Five, however, will evaluate empirically how the form of the political system relates to the quality of economic institutions. Measuring the instability of political institutions again relies on a principal components analysis, this time of ten different variables widely used in the literature, as listed below[6]. Table 4.2 shows the decade average values of the indicator for each country where data are available in the sample (the higher the value the more stable the political institutions). The countries are ranked according to their values for the 1980s. The highest value possible for the indicator 4.00, when all ten underlying variables have the lowest possible value, namely 0. Table 4.2 makes it clear that this indicator — and all the political (in)stability variables used in cross–country studies — only very roughly approximate what one would like ideally to capture. The ten variables are:

The number of assassinations per thousand population;

Major cabinet changes;

Major constitutional changes;

Major government crises;

The number of extra–constitutional or forced changes in the government elite and/or its effective control of the nation's power structure (coups);

Any illegal or forced change in the government elite, any attempt at such a change, or any successful or unsuccessful armed rebellion whose aim is independence from central government (revolutions);

Any systematic elimination by jailing or execution of political opposition within the ranks of the regime or the opposition (purges);

Dummies for countries with genocidal incidents involving political victims or mixed communal and political victims;

Dummies for countries with wars; and

Dummies for civil wars on national territories.

Table 4.2. **The Stability of Political Institutions**
(Decade averages)

Country	1960-69	1970-79	1980-89	Country	1960-69	1970-79	1980-89
Algeria	n.a.	4.00	4.00	Jordan	3.72	2.31	3.80
Australia	3.99	3.99	4.00	Kenya	n.a.	3.99	3.80
Barbados	n.a.	4.00	4.00	Niger	3.11	4.00	3.80
Botswana	n.a.	4.00	4.00	Papua New Guinea	n.a.	n.a.	3.80
Congo	n.a.	2.85	4.00	Switzerland	4.00	4.00	3.80
Costa Rica	3.75	3.80	4.00	Tanzania	n.a.	3.87	3.80
Côte d'Ivoire	2.91	3.80	4.00	Tunisia	3.68	3.68	3.80
Denmark	3.80	4.00	4.00	United States	3.99	4.00	3.80
Ecuador	3.80	2.93	4.00	Pakistan	3.75	2.97	3.79
Fiji	n.a.	3.36	4.00	Greece	3.75	3.54	3.79
Finland	3.81	3.48	4.00	Honduras	3.46	3.88	3.77
Gambia	n.a.	3.36	4.00	Chad	3.16	3.78	3.73
Ireland	3.88	3.49	4.00	Ghana	3.34	3.24	3.72
Luxembourg	4.00	4.00	4.00	Nigeria	2.82	3.53	3.72
Madagascar	n.a.	3.80	4.00	South Africa	3.63	3.67	3.72
Malaysia	3.04	3.79	4.00	India	3.59	3.83	3.72
Malta	n.a.	4.00	4.00	Colombia	3.72	3.31	3.69
Mauritius	n.a.	n.a.	4.00	Yemen	n.a.	2.94	3.68
Morocco	3.56	3.24	4.00	Portugal	4.00	3.88	3.68
Norway	3.80	4.00	4.00	Jamaica	n.a.	3.89	3.67
Paraguay	3.71	3.62	4.00	Burundi	n.a.	3.64	3.66
Senegal	3.13	3.16	4.00	Ethiopia	3.75	3.60	3.66
Sierra Leone	n.a.	3.98	4.00	Indonesia	3.02	3.18	3.66
Singapore	n.a.	4.00	4.00	Sudan	3.66	2.96	3.66
Swaziland	n.a.	4.00	4.00	Philippines	3.26	3.67	3.66
Sweden	4.00	3.88	4.00	Spain	4.00	3.47	3.64
Togo	3.13	3.81	4.00	Zambia	n.a.	4.00	3.61
Trinidad and Tobago	n.a.	3.69	4.00	Nicaragua	4.00	3.82	3.60
Uruguay	3.96	3.68	4.00	Zaire	n.a.	2.71	3.54
Venezuela	1.76	3.87	4.00	Mozambique	n.a.	n.a.	3.53
Bangladesh	n.a.	n.a.	4.00	Syria	n.a.	1.29	3.52
Mexico	4.00	3.80	4.00	Thailand	4.00	3.76	3.48
France	3.87	3.88	3.99	Somalia	2.90	3.61	3.46
United Kingdom	4.00	3.56	3.99	Angola	n.a.	n.a.	3.28
Malawi	n.a.	3.36	3.98	Italy	3.80	2.98	3.23
Argentina	3.13	2.09	3.95	Egypt	3.75	3.83	3.16
Panama	3.23	3.96	3.95	Nepal	3.36	3.80	3.16
Lesotho	n.a.	2.93	3.93	Guatemala	3.49	1.99	3.13
Brazil	3.56	3.40	3.92	Mali	2.97	4.00	3.12
Sri Lanka	3.80	3.72	3.91	Afghanistan	4.00	3.78	3.07
Chile	3.99	3.36	3.89	Haiti	3.75	3.55	3.06
Austria	3.88	3.68	3.88	Peru	3.75	3.76	3.06
New Zealand	3.80	4.00	3.88	Zimbabwe	n.a.	n.a.	3.01
Israel	3.44	3.70	3.85	Mauritania	3.16	4.00	2.94
Rwanda	n.a.	4.00	3.81	Guyana	n.a.	3.07	2.77
Benin	n.a.	3.04	3.80	Belgium	3.80	3.24	2.72
Canada	3.80	3.40	3.80	Bolivia	3.76	1.05	2.49
Cameroon	3.11	3.80	3.80	Guinea-Bissau	n.a.	n.a.	2.30
Central African Rep.	3.16	3.80	3.80	Suriname	n.a.	n.a.	2.30
Cyprus	3.18	3.28	3.80	Uganda	n.a.	3.51	2.28
Dominican Republic	n.a.	n.a.	3.80	Turkey	2.24	3.46	1.97
Gabon	n.a.	3.80	3.80	El Salvador	2.64	3.60	1.87
Iceland	4.00	3.80	3.80	Korea	1.94	3.68	1.59
Japan	3.79	4.00	3.80	Liberia	3.88	3.80	1.52

Source: Own calculations, see text for explanations.

The Form of Political Institutions

The form of political institutions is defined as whether a regime is a democracy or an autocracy. According to Gurr (1990) and Gurr *et al.* (1989), a democratic government has three essential, interdependent elements. The first relates to the institutions through which citizens can express their preferences — usually parliamentary elections, possibly also popular votes. The second refers to institutionalised constraints on the exercise of power by the executive. The third has to do with guarantees of civil liberties. The Polity III dataset of the Inter–University Consortium for Political and Social Research (ICPSR) contains information on the first two of these aspects: the openness and competitiveness of executive recruitment and constraints on executive power. Jaggers and Gurr (1996) combine them in the democracy index used here as the measure for democracy (Table 4.3).

The Role of the State I: The Strong State

How can the state's power be measured? Most available indicators fail to capture the concept developed in the preceding chapter, namely the state's ability to create and enforce efficient economic institutions. A review of previous quantitative cross–country research indicates that most studies use some measure of government finance, most commonly government revenue as a percentage of GDP (Rubinson, 1979; Marsh, 1988). Shin (1990) constructs an index using both government revenue and government expenditure. Wing Yang Tang and Hedley (1998) use government consumption, military manpower and the total fertility rate (!). All these studies thus assume that state strength can be measured by ability to collect revenues, which can then be spent for the creation and enforcement of institutions.

The index constructed here results from principal components analysis of two variables, total revenues and grants, and revenues from taxes on income, profits and capital gains, both as ratios to GDP. The first measures the size of government and is an obvious choice that follows the available literature —with the caveat that a large government can be a mixed blessing, as experience in industrialised countries shows. Chapter Six returns to this point. The second variable measures the state's administrative capacity, on the reasoning that direct taxes, complex to levy, require a sophisticated tax authority and power actually to levy the tax on all or at least most citizens and firms[7]. The index (Table 4.4) covers only 1970–89, because the data, originally from the IMF's *Government Finance Statistics*, are available only for these years. Note that federal countries such as the United States, Switzerland and Germany have lower values than expected, because the variables cover only central government.

Table 4.3. **The Form of Political Institutions**
(Decade averages)

Country	1960-69	1970-79	1980-89	Country	1960-69	1970-79	1980-89
Australia	10.0	10.0	10.0	Pakistan	3.8	2.8	0.8
Austria	10.0	10.0	10.0	Ghana	0.0	1.8	0.6
Belgium	10.0	10.0	10.0	Paraguay	0.0	0.0	0.6
Botswana	10.0	10.0	10.0	Hungary	0.0	0.0	0.5
Cameroon	10.0	10.0	10.0	Poland	0.0	0.0	0.5
Costa Rica	10.0	10.0	10.0	China	5.7	1.8	0.4
Cyprus	7.5	8.8	10.0	Algeria	0.0	0.0	0.3
Denmark	10.0	10.0	10.0	Afghanistan	0.0	0.0	0.0
Finland	10.0	10.0	10.0	Albania	0.0	0.0	0.0
Germany (Fed. Rep.)	10.0	10.0	10.0	Angola	n.a.	0.0	0.0
Iceland	10.0	10.0	10.0	Bangladesh	n.a.	2.3	0.0
Ireland	10.0	10.0	10.0	Benin	1.5	0.2	0.0
Italy	10.0	10.0	10.0	Bulgaria	0.0	0.0	0.0
Jamaica	10.0	10.0	10.0	Burkina Faso	0.0	1.3	0.0
Japan	10.0	10.0	10.0	Burundi	1.0	0.0	0.0
Luxembourg	10.0	10.0	10.0	Canada	0.0	0.0	0.0
Netherlands	10.0	10.0	10.0	Cambodia	0.0	0.0	0.0
New Zealand	10.0	10.0	10.0	Central African Rep.	0.0	0.0	0.0
Norway	10.0	10.0	10.0	Chad	0.0	0.0	0.0
Papua New Guinea	n.a.	10.0	10.0	Chile	0.0	0.0	0.0
Sweden	10.0	10.0	10.0	Congo	1.1	0.0	0.0
Switzerland	10.0	10.0	10.0	Ivory Coast	0.0	0.0	0.0
United Kingdom	10.0	10.0	10.0	Czechoslovakia	0.0	0.0	0.0
Uruguay	1.8	4.6	10.0	Egypt	0.0	0.0	0.0
Mauritius	9.0	9.0	9.8	Ethiopia	0.0	0.0	0.0
Portugal	0.0	4.5	9.8	Gabon	0.0	0.0	0.0
Gambia	10.0	10.0	9.1	Guinea	0.0	0.0	0.0
Israel	9.7	9.0	9.0	Guinea-Bissau	n.a.	0.0	0.0
Venezuela	7.1	9.0	9.0	Guyana	4.3	3.8	0.0
Greece	4.9	4.4	8.8	Haiti	0.0	0.0	0.0
Spain	0.0	2.3	8.7	Indonesia	0.0	0.0	0.0
Ecuador	1.9	1.7	8.6	Jordan	0.0	0.0	0.0
Trinidad and Tobago	8.0	8.0	8.6	Kenya	3.2	0.0	0.0
France	6.2	8.0	8.4	Laos	1.0	0.0	0.0
Colombia	7.0	7.6	8.0	Lesotho	9.0	0.0	0.0
India	9.0	8.3	8.0	Liberia	0.0	0.0	0.0
Malaysia	9.4	7.6	8.0	Libya	0.0	0.0	0.0
United States	10.0	10.0	8.0	Madagascar	2.6	0.4	0.0
El Salvador	2.1	1.8	7.0	Malawi	0.0	0.0	0.0
Peru	4.8	0.0	7.0	Mali	0.0	0.0	0.0
South Africa	7.0	7.0	7.0	Mauritania	0.4	0.0	0.0
Dominican Republic	0.5	2.0	6.8	Mongolia	0.0	0.0	0.0
Fiji	n.a.	9.0	6.3	Mozambique	n.a.	0.0	0.0
Bolivia	0.4	0.0	6.1	Myanmar	1.6	0.0	0.0
Brazil	2.2	1.2	5.7	Niger	0.0	0.0	0.0
Argentina	1.8	1.8	5.6	Panama	4.0	0.0	0.0
Turkey	9.4	7.6	5.5	Romania	0.0	0.0	0.0
Sri Lanka	7.0	7.6	5.2	Rwanda	1.0	0.3	0.0
Honduras	1.0	1.0	4.2	Sierra Leone	4.8	0.3	0.0
Thailand	0.6	2.7	3.4	Somalia	6.3	0.0	0.0
Nigeria	4.8	0.9	3.2	Swaziland	3.0	0.9	0.0
Zimbabwe	7.0	7.0	3.0	Syria	0.4	0.0	0.0
Senegal	0.8	0.4	2.9	Chinese Taipei	0.0	0.0	0.0
Philippines	5.8	0.8	2.7	Tanzania	0.0	0.0	0.0
Sudan	4.0	0.0	2.7	Togo	0.0	0.0	0.0
Korea	1.7	0.2	2.4	Tunisia	0.0	0.0	0.0
Guatemala	1.6	1.6	2.2	Vietnam	0.0	0.0	0.0
Singapore	4.3	2.0	2.0	Yemen	1.2	0.0	0.0
Uganda	4.0	0.0	2.0	Zaire	0.0	0.0	0.0
Nepal	0.0	0.0	1.8	Zambia	3.7	0.6	0.0
Mexico	0.0	0.2	1.0	Lebanon	4.0	4.8	n.a.
Morocco	0.5	0.3	1.0	Nicaragua	0.0	0.0	n.a.
Yugoslavia	0.0	0.0	1.0				

Source: Jaggers and Gurr (1996). A value of 10 means a fully democratic political system, one of 0 a fully autocratic one.

Table 4.4. **The Strength of the State**
(Decade Averages)

Country	1970-79	1980-89	Country	1970-79	1980-89
Trinidad and Tobago	5.89	7.05	Belize	2.23	2.34
Israel	5.82	6.76	Kenya	2.18	2.31
Bulgaria		5.93	Brazil	0.88	2.26
Botswana	3.24	5.74	Morocco	2.11	2.24
Luxembourg	4.82	5.70	Iceland	2.30	2.20
New Zealand	4.80	5.46	Japan	1.81	2.10
Belgium	4.37	5.17	Côte d'Ivoire		2.09
Netherlands	5.06	5.13	Ethiopia	1.42	2.08
Czechoslovakia		5.06	Senegal	1.74	2.07
Congo	2.57	4.91	Gambia	1.64	2.06
Guyana	3.53	4.73	Turkey	1.95	1.98
Hungary		4.70	Nigeria	3.01	1.97
Gabon	3.26	4.69	Sri Lanka	1.83	1.92
Denmark	4.17	4.53	Chad	1.17	1.91
Ireland	3.48	4.49	Ecuador	1.20	1.90
United Kingdom	4.19	4.35	Mauritius	2.13	1.87
Poland		4.10	Costa Rica	1.60	1.82
Italy	2.74	4.00	Korea	1.65	1.82
Norway	3.37	3.89	Switzerland	1.59	1.81
Malta	4.30	3.82	Uruguay	1.67	1.80
Lesotho	2.41	3.75	Mexico	1.52	1.70
Venezuela	3.95	3.75	Tanzania	1.92	1.69
France	3.19	3.68	Mali	1.55	1.66
Australia	3.15	3.62	Burundi	1.67	1.62
Papua New Guinea	3.20	3.55	Thailand	1.19	1.52
South Africa	3.25	3.51	Honduras	1.34	1.51
Sweden	3.29	3.51	Pakistan	1.23	1.51
Zimbabwe	3.21	3.44	Niger	1.46	1.49
Jamaica	2.75	3.38	Guinea		1.49
Egypt	3.22	3.35	Central African Republic		1.44
Togo	3.40	3.33	Bahamas	1.42	1.41
Austria	2.94	3.26	Haiti	1.23	1.38
Finland	3.09	3.20	Madagascar	1.83	1.37
Swaziland	3.33	3.19	Philippines	1.33	1.36
Suriname	3.16	3.18	Rwanda	0.96	1.35
Barbados	3.37	3.15	Burkina Faso	1.25	1.29
Indonesia	2.80	3.12	Colombia	1.33	1.28
Singapore	2.49	3.12	Sudan	1.18	1.27
Malaysia	2.44	3.11	India	1.21	1.26
Portugal	2.48	3.08	Dominican Republic	1.54	1.25
Greece	2.42	3.06	El Salvador	1.22	1.25
Fiji	2.54	3.04	Zaire	2.51	1.24
Tunisia	2.44	2.81	Peru	1.52	1.19
United States	2.72	2.79	Bangladesh	0.94	1.13
Spain	1.94	2.77	Sierra Leone	1.84	1.10
Romania	3.40	2.72	Myanmar	1.13	1.09
Canada	2.67	2.71	Ghana	1.17	1.05
Germany (Fed. Rep.)	2.48	2.68	Paraguay	1.01	0.96
Nicaragua	1.16	2.62	Argentina	0.38	0.95
Syria	2.54	2.61	Nepal	0.72	0.91
Panama	2.33	2.56	Bolivia		0.90
Malawi	1.99	2.54	Guatemala	0.89	0.87
Zambia	3.38	2.53	Yugoslavia	1.26	0.58
Liberia	2.82	2.45	Uganda	0.81	0.55
Cameroon	1.56	2.43	Guinea-Bissau		0.16
Cyprus	1.89	2.40	Mauritania	3.16	
Chile	2.69	2.38	Benin	2.14	
Jordan	2.87	2.34	Somalia	1.28	

Source: Own calculations, see text for explanations.

The Role of the State II: The Committed State

A credible state commitment emerges from democratic political institutions. It empowers citizens with the "voice" option, which is very different from the "strength" option. Presidential elections held just every five years or so cannot alone guarantee credible commitment. Moreover, a government can break election promises, thus deviating from voter mandates, but still act in a representative manner if real–world conditions change radically in an unforeseen way. Commitment does not look backward to the election day but rather forward to winning future elections on a track record of results of policy choices while a government is in power. Elections *per se* are not very reliable indicators of democracy as a commitment mechanism, especially in dramatic turnaround situations (Borner *et al.*, 1995). Przeworski (1995, p. 11) is absolutely right in stressing accountability *and* responsiveness:

> " ... A government is 'responsive' if it chooses policies which an assembly of citizens, informed as well as the government is, would have chosen by a majority vote. Hence, government may be accountable but not responsive. And, in the end, it is responsiveness that matters."

The commitment mechanism, therefore, should not be tied to mandates, but first to accountability and second to responsiveness. Hence, one must look for a set of institutions that allow citizens to monitor government performance and make objective judgements on the claims of elected politicians. This involves primarily transparency and information. Moreover, in order to go from accountability to responsiveness, citizens must create yet another set of political institutions that induce responsiveness in the sense that politicians will do what citizens would want them to do. More precisely, institutions must make it in the interest of politicians to do what citizens would want them to do. A popular *ex–post* referendum on a government decision is the obvious exemplar of such an institution[8]. Hence, democratic systems will tend to be more committed. At least where "democracy" is not limited to the act of voting, they tend to be characterised by checks and balances. By definition, an autocratic system does not have them, even if the ruler, enlightened or acting out of self–interest, might decide to provide stable institutions.

Table 4.5 displays an index of state commitment constructed in the same manner as the other indexes by combining seven different indicators of control over political authority. They come from the widely used Polity III data set (Jaggers and Gurr, 1996). Not surprisingly, the result looks very similar to the democracy index reported in Table 4.3[9]. The seven indicators are:

The regulation, competitiveness and openness of executive recruitment (three indicators);

The degree of monocracy;

The constraints on the chief executive; and the regulation and competitiveness of political participation (two indicators)[10].

Table 4.5. **The Commitment of the State**
(Decade Averages)

Country	1960-69	1970-79	1980-89	Country	1960-69	1970-79	1980-89
Switzerland	8.11	8.11	8.11	Vietnam	2.55	3.28	3.28
Australia	7.52	7.52	7.52	Laos	0.99	3.28	3.28
Belgium	7.52	7.52	7.52	China	2.39	2.72	3.28
Germany (Fed. Republic)	7.52	7.52	7.52	Cambodia	2.29	1.34	3.28
Papua New Guinea		7.52	7.52	Afghanistan	2.93	1.59	3.27
Austria	7.24	7.24	7.24	Madagascar	3.42	3.36	3.23
Botswana	7.24	7.24	7.24	Nigeria	4.35	1.64	3.17
Denmark	6.96	6.96	6.96	Morocco	2.89	2.96	3.17
Finland	6.96	6.96	6.96	Ethiopia	2.29	2.84	3.16
Iceland	6.96	6.96	6.96	Poland	3.28	3.28	3.13
Ireland	6.96	6.96	6.96	Guatemala	2.75	3.37	3.10
Italy	6.96	6.96	6.96	Hungary	2.83	2.98	3.09
Jamaica	6.96	6.96	6.96	Sierra Leone	5.24	3.29	2.96
Japan	6.96	6.96	6.96	Tanzania	2.68	2.71	2.96
Luxembourg	6.96	6.96	6.96	Swaziland	3.84	3.02	2.87
Netherlands	6.96	6.96	6.96	Myanmar	1.39	1.01	2.83
New Zealand	6.96	6.96	6.96	Guinea-Bissau		3.28	2.80
Norway	6.96	6.96	6.96	Egypt	2.71	2.79	2.79
Sweden	6.96	6.96	6.96	Indonesia	2.80	2.76	2.76
Uruguay	3.75	4.35	6.96	Kenya	3.79	2.71	2.74
United Kingdom	6.96	6.96	6.92	Jordan	2.79	2.66	2.73
Canada	6.92	6.92	6.92	Paraguay	2.37	2.56	2.72
Mauritius	6.20	6.20	6.81	Mongolia	3.28	2.92	2.68
United States	6.92	6.92	6.81	Mauritania	2.77	2.68	2.68
Venezuela	5.89	6.72	6.72	Angola		2.68	2.68
Greece	4.43	3.85	6.55	Algeria	2.35	2.35	2.67
Malaysia	7.25	6.40	6.51	Panama	3.36	1.26	2.63
India	6.75	6.57	6.48	Tunisia	2.29	2.31	2.60
Trinidad and Tobago	5.92	5.92	6.45	Cameroon	3.14	2.58	2.57
Costa Rica	6.37	6.37	6.37	Mozambique		2.49	2.57
Cyprus	5.78	6.10	6.37	Congo	3.51	2.66	2.49
France	5.65	6.27	6.35	Romania	2.68	2.63	2.49
Spain	0.22	1.74	6.34	Guyana	4.30	3.94	2.40
Portugal	2.29	4.23	6.33	Zambia	4.24	2.49	2.29
Israel	6.73	6.20	6.20	Syria	3.17	2.29	2.29
Gambia	6.96	6.67	5.96	Gabon	2.71	2.29	2.29
South Africa	5.98	5.98	5.79	Albania	2.29	2.29	2.29
Colombia	4.51	5.22	5.58	Cote d'Ivoire	2.29	2.29	2.29
Brazil	4.39	3.87	5.54	Malawi	2.29	2.29	2.29
Ecuador	2.05	1.65	5.52	Zaire	2.29	2.29	2.29
El Salvador	3.32	3.25	5.21	Lesotho	6.47	2.89	2.26
Peru	4.24	0.91	5.13	Haiti	2.34	2.45	2.22
Dominican Republic	2.58	3.90	5.09	Uganda	4.37	0.49	1.96
Argentina	4.19	3.77	4.93	Pakistan	4.66	3.63	1.80
Sri Lanka	5.11	5.74	4.88	Central African Republic	2.29	2.08	1.80
Fiji		6.20	4.73	Guinea	2.29	2.29	1.40
Bolivia	1.88	0.33	4.61	Niger	3.28	1.44	1.33
Zimbabwe	5.98	5.98	4.39	Togo	2.24	0.86	1.26
Yugoslavia	3.23	3.23	4.32	Somalia	4.99	0.57	1.24
Turkey	6.54	5.76	4.23	Chile	4.88	1.96	1.23
Thailand	1.34	2.95	4.22	Bangladesh		2.53	1.15
Nepal	2.71	2.79	4.08	Burundi	2.41	0.81	1.04
Honduras	0.99	1.56	3.96	Ghana	1.86	2.26	1.02
Sudan	3.45	2.93	3.85	Benin	2.27	0.99	0.96
Czechoslovakia	3.83	3.68	3.62	Libya	3.74	0.65	0.96
Mexico	3.51	3.53	3.61	Mali	2.25	0.56	0.96
Yemen	1.80	2.26	3.52	Burkina Faso	1.96	2.58	0.81
Senegal	3.31	2.94	3.50	Liberia	2.96	2.96	0.68
Korea, Rep.	3.42	2.63	3.49	Chad	2.29	1.51	0.52
Philippines	5.06	2.77	3.48	Rwanda	2.67	0.95	0.22
Singapore	4.41	3.40	3.40	Lebanon	5.30	5.33	
Taiwan	2.49	2.82	3.36	Nicaragua	2.56	2.56	
Bulgaria	3.28	3.28	3.28				

Source: Own calculations; see text for explanations.

Notes

1. An introduction to principal components analysis can be found in Theil (1971).
2. See e.g. La Porta *et al.* (1999) who have to run a large number of regressions owing to the large number of dependent variables.
3. See Levine and Zervos (1996), Fischer (1993), Barro and Sala–i–Martin (1995), Clague *et al*. (1996) and Easterly and Levine (1997). The black market exchange–rate premium measures the premium one has to pay for foreign exchange, namely US dollars, on the parallel market.
4. The *International Country Risk Guide* has been available only since 1982. Therefore, the decade average for the 1980s is used as a proxy for the 1970s as well as for the 1960s, on the assumption that the different institutional aspects such as the rule of law or bureaucratic quality usually change very slowly over time. A correlation of 0.95 between the average values of 1972–1979 and 1980–89 for the Business Environmental Risk Intelligence (BERI) indicator, a measure quite similar to the ICRG used in this study sustains the procedure. Barro (1994, p. 11) and Easterly and Levine (1997) do likewise in their studies.
5. As the country debt default risk is available only since 1979, its value for 1979 is used as a proxy for the 1960s and 1970s.
6. Indicators for political stability have also been used in Alesina and Perotti (1996), Perotti (1996), Brunetti (1997) and Svensson (1998).
7. Chapter Seven adds the central government budget surplus as a third indicator to the index for strength. It represents the government's power to withstand the demands of interest groups to spend money without corresponding revenue to fund it. The correlation between this index, with three underlying variables, and the index in Table 4.4 is 0.99. On the other hand, the number of observations available drops strongly. This makes the two–variable index preferable for the cross–country work.
8. An economic analysis of the checks and balances in democratic societies can be found in Moser (2000).
9. Indeed, the correlation between the two is 0.94.
10. Henisz (2000) constructs a similar indicator based on the number of different branches of state authority which have veto power.

Chapter Five

Institutional Quality and Economic Development

Introduction

This chapter tests two basic hypotheses. First, a better institutional environment speeds capital accumulation and leads to a more efficient allocation of physical and human capital. Both factors increase productivity, because a better institutional environment leads to lower transaction and transformation costs. Second, this in turn increases production and exchange — economic development, in other words. Economies of scale and scope allow individuals and firms to specialise in producing goods in which they have comparative advantage. This encourages both investment and overall productivity. The tests use a cross–country regression framework, with sample of (a maximum of) 133 countries for 1960–89. The results show that the quality of economic institutions, especially, explains a substantial part of cross–country economic growth and investment differences. Furthermore, democracy is negatively correlated with economic growth (but not with investment) as soon as one controls for the quality of economic institutions, but — as Chapter Six demonstrates — democratic institutions are linked to better institutional quality.

The empirical framework uncovers three channels through which political institutions can influence economic development. The first is the direct effect on productivity (the Solow residual), the second operates through capital accumulation, and the third works through the effect of the quality of economic institutions. Political institutions are important "only" as determinants of efficient economic institutions. The simple two–way correlations between growth rates on the one hand and the measures of the form and stability of political institutions and the quality of economic institutions on the other indicate from the start that democracy and the quality of institutions are highly correlated with growth rates. The numbers are: 0.22 for democracy with a significance level of 0.0001, 0.11 (0.062) for political stability and 0.44 (0.00) for the quality of economic institutions.

Some Remarks on Methodology

A useful starting point for the discussion of the regression methodology is the literature on convergence, mentioned in Chapter Two. Early work tested for unconditional convergence, i.e. whether poorer countries were catching up the income levels of richer countries. It found that this was not the case[1]. Convergence did appear, however, once other variables that proxy for cross–country differences in productivity levels were included. This can best be understood in the context of the estimation equation. A typical regression of the growth rate of per capita income includes the initial level of income (GDP_{it}) as well as a number of other variables that explain the steady–state level of income (X_{it}) as independent variables[2]:

$$GROWTH_{it} = a + \beta_0 GDP_{it} + B_1 X_{it} + u_i + e_{it} \qquad (1)$$

Using OLS, it is assumed that u_i is equal to zero, which implies that all countries have the same underlying production function. The first tests for convergence investigated only the relation between the initial level of income and the growth rate. Contrary to expectations, the coefficient for β_0 was positive, meaning that income levels were diverging. This changed when the other variables X_{it} were included. Convergence then was found, for example by Barro and Sala–i–Martin (1992), at the rate of about 2 per cent per year. This means that countries do not converge to identical levels of income but rather to levels specific to each country and dependent on the variables X_{it} — a not unduly pessimistic result as long as policy decisions can influence these variables and as long as correct policy decisions actually get made.

More recent work has also included the country–specific error term u_i, through the estimation, for example, of fixed–effects models[3]. This means that the underlying production functions differ among countries. While these models show a much higher rate of convergence (around 10 per cent in Caselli *et al.*, 1996), not only is the convergence to different income levels, but also policy decisions can no longer influence these steady–state income levels. This highly pessimistic finding is unsatisfactory from a policy point of view[4]. It also seems implausible, because it attributes the catching–up observed for a number of countries, especially in East Asia, to pure chance — random shocks — which the models cannot explain.

A somewhat more optimistic interpretation could claim that the country–specific effects stand for policy variables that are constant over time. These are unobservable and therefore excluded from the model. Yet it is hard to imagine just what these time–invariant and country–specific policy variables could be. Policy should change over time and not be country–specific. A more limited variant would include dummies for certain areas, such as Africa or Latin America. Here, it is more plausible to argue that the area dummies capture effects of policy mistakes or unfavourable conditions common to the whole area. The basic problem remains the same, however; policy obviously cannot influence the location of a country.

There is another — mainly econometric — issue in this modelling choice, discussed, for example, by Barro (1997). One can expect that the right–hand variables, which include indicators for institutions and policy decisions, are measured with error. By eliminating the cross–country information, as in fixed–effects regressions, only the within–country variation is retained. Here, measurement error will become a major concern. Much of the within–country variation will reflect it, which in turn leads to a downward bias in the estimates[5]. For these reasons, this study relies on OLS estimates, adding area dummies to check the robustness of the estimates.

Variable Definitions and Model Specification

The data set created by Easterly and Levine (1997) provides the point of departure. They use a sample with a maximum of 133 countries (excluding Gulf oil states) and three time periods, namely decade averages based on annual data for the 1960s, 1970s and 1980s. Thus, each country has three observations, data permitting. If necessary, the data are augmented with information from other sources. The model measures growth by the real average annual growth rate of GDP per capita (GROWTH). For investment, it uses the share of real gross domestic investment (INV) in real GDP. For the quality of economic institutions (ECON_INST) as well as the stability (POL_STAB) and form (DEMOC) of political institutions it employs the three indicators developed in Chapter Four.

It includes several other measures as control variables. Previous studies have shown them to account for a substantial amount of the cross–country variation in growth rates over recent decades. Real GDP per capita at the start of each period captures the convergence effect. As this effect is non–linear (Baumol *et al.*, 1992), first rising and then falling with per capita income, the estimation includes two variables, the logarithm of GDP per capita (GDP) and its square (GDPSQ), both at the start of each decade. The cross–country growth regressions also include four economic indicators linked to economic performance in past studies. The first is the government budget balance, as measured by the ratio of the central government budget surplus to GDP. Easterly and Rebelo (1993) and others have found that this variable has a positive correlation with growth. Second, to control for spill–over effects from neighbouring countries the regressions include the weighted average GDP growth in neighbouring countries, as suggested by Easterly and Levine (1997). Third, a measure of ethnic fractionalisation is used, also along the lines of Easterly and Levine (1997). They found the expected negative effect. Two dummy variables, for sub–Saharan Africa and for Latin America and the Caribbean are included, as well as period dummies. The authors experimented with other specifications including measures for educational attainment, financial depth (as measured by the share of M_2 in total money holdings), and the openness of the country (as measured by the ratio of exports and imports to GDP). These variables were insignificant, had no effect on the other estimates and were dropped.

Institutions can influence economic development either through productivity (the Solow residual) or through capital accumulation (investment). The study therefore uses both equations to test for the importance of institutions. It does not include country–specific intercepts and thereby assumes conditional convergence. That is, controlling for all kinds of influences — including the institutional environment — and disregarding location in the OECD area or Africa, Asia or Latin America, all countries are assumed to converge to the same steady–state growth rate. Some specifications include area dummies. In them, the convergence will be to a different level for each area. The estimated equations are:

$$GROWTH_{it} = \alpha_0 + \alpha_1 GDP_{it} + \alpha_2 GDPSQ_{it} + \alpha_3 INV_{it} + A_4 X_{it} + \alpha_5 ECON\_INST_{it} + \alpha_6 POL\_STAB_{it} + \alpha_7 DEMOC_{it} + e_{it} \quad (2)$$

$$INV_{it} = \beta_0 + B_2 X_{it} + \beta_3 ECON\_INST_{it} + \beta_4 POL\_STAB_{it} + \beta_5 DEMOC_{it} + e_{it} \quad (3)$$

X_{it} includes the controlling variables discussed above. Because the investment equation excludes the rate of growth, the system is recursive and estimation by OLS leads to unbiased results. One can expect the shocks between the two equations to be correlated, however. Therefore, seemingly unrelated regressions will improve the efficiency of the estimates. As discussed above, α_1 is expected to be positive and α_2 to be negative, implying non–linear long–run convergence.

The Results

Table 5.1 presents the results for the growth equations alone. They are more or less as expected. Convergence is non–linear, first rising then falling. Investment has the expected positive sign, as does the fiscal surplus and the neighbour growth rate, while ethnic fractionalisation comes in negatively. The measure for the efficiency of economic institutions has a positive effect.

The stability of political institutions, on the other hand, seems to be unrelated to growth, while democracy is even significantly negative once area dummies are included. This is similar to the findings in Brunetti (1997), who shows that measures for political institutions are insignificant as soon as a measure for the quality of economic institutions is included. Overall, the regressions indicate that countries where property and contract rights are better protected grew significantly faster over 1960–89. This result remains significant at the 0.01 level and robust with control for investment and a wide array of other factors standard in the empirical growth literature.

Table 5.1. **Economic Development and Institutional Quality**

	Dependent Variable: Real GDP Growth Per Capita			
Variable	(1)	(2)	(3)	(4)
Log of Initial Income	0.045*	0.061*	0.056*	0.072*
	(2.23)	(3.00)	(2.57)	(3.47)
Square of Log of Initial Income	-0.003*	-0.005*	-0.004*	-0.005*
	(-2.59)	(-3.60)	(-3.05)	(-3.98)
Investment	0.114*	0.081*	0.081*	0.065*
	(5.48)	(3.65)	(3.59)	(3.07)
Fiscal Surplus/GDP	0.009*	0.001*	0.001	0.001*
	(2.89)	(2.58)	(1.76)	(3.53)
Neighbours' Average Growth	0.404*	0.404*	0.392*	0.243*
	(4.91)	(5.07)	(4.76)	(2.94)
Ethnic Fractionalisation	-0.012*	-0.013*	-0.012*	-0.011*
	(-2.44)	(-2.79)	(-2.52)	(-2.08)
Quality of Economic Institutions		0.009*	0.012*	0.009*
		(3.61)	(4.11)	(2.92)
Stability of Political Institutions			-0.0005	-0.0004
			(-0.24)	(-0.24)
Democracy			-0.001	-0.001*
			(-1.86)	(-2.34)
Dummy 1970	0.005	0.006	0.003	0.004
	(1.39)	(1.81)	(0.79)	(1.24)
Dummy 1980	-0.003	-0.001	-0.003	-0.004
	(-0.67)	(-0.14)	(-0.61)	(-0.99)
Dummy for sub-Saharan Africa				-0.017*
				(-3.75)
Dummy for Latin America and the Caribbean				-0.018*
				(-5.02)
No. of Observations	199	199	182	182
Adjusted R^2	0.51	0.54	0.55	0.61

Note: OLS estimates, t-statistics in parenthesis; * stands for significant at the 5 per cent level.

The second equation (Table 5.2) tests whether institutions also influence growth through the indirect link of capital accumulation. It includes basically the same variables as in the growth regressions. The fiscal surplus is not significant, the coefficient on the ethnic fractionalisation variable is negative as expected, but not very robust, while the neighbour growth rate still has the expected positive effect. Again, the quality of economic institutions has a strongly positive effect; it bolsters growth through capital accumulation. The measures for political stability and democracy, while positive this time, are not significant at standard levels.

The next step reports estimates using the seemingly unrelated regression technique discussed above, which takes account of the cross–equation correlations. As Table 5.3 indicates, the results are fairly similar to those in Tables 5.1 and 5.2. Experiments with other specifications (not reported) included the measures for democracy and the stability of political institutions separately as the only institutional variables. Neither was significant even when included alone (with only the controlling variables *Xit*).

Table 5.2. **Investments and Institutional Quality**

	Dependent Variable: Investment (Share of GDP)			
Variable	(1)	(2)	(3)	(4)
Fiscal Surplus/GDP	0.001	-0.001	-0.001	-0.0004
	(0.80)	(-1.37)	(-0.99)	(-0.37)
Neighbours' Average Growth	2.166*	1.14*	1.097*	0.962*
	(4.91)	(4.56)	(4.09)	(3.25)
Ethnic Fractionalisation	-0.076*	-0.028*	-0.020	-0.025
	(-4.08)	(-1.99)	(-1.32)	(-2.30)
Quality of Economic Institutions		0.058*	0.052*	0.047*
		(12.53)	(6.64)	(5.56)
Stability of Political Institutions			0.012	0.012
			(1.77)	(1.69)
Democracy			0.002	0.002
			(1.45)	(1.37)
Dummy 1970	0.005	-0.002	0.003	0.004
	(0.34)	(-0.17)	(0.78)	(0.36)
Dummy 1980	0.018	-0.007	-0.006	-0.007
	(1.15)	(-0.58)	(-0.45)	(-0.54)
Dummy for sub-Saharan Africa				-0.012
				(-0.74)
Dummy for Latin America and the Caribbean				-0.019
				(-1.54)
No. of Observations	199	199	182	182
Adjusted R^2	0.34	0.63	0.63	0.63

Note: OLS estimates, t-statistics in parenthesis; * stands for significant at the 5 per cent level.

Table 5.3. **Economic Development, Investment and Institutional Quality**

Variable	Dependent Variables: Real GDP Growth Per Capita and Investment (Share of GDP)			
	GDP Growth	Investment	GDP Growth	Investment
Log of Initial Income	0.056*		0.072*	
	(2.65)		(3.61)	
Square of Log of Initial Income	-0.004*		-0.005*	
	(-3.16)		(-4.12)	
Investment	0.081*		0.065*	
	(3.71)		(3.19)	
Fiscal Surplus/GDP	0.001	-0.001	0.001*	-0.0004
	(1.82)	(-1.01)	(3.67)	(-0.38)
Neighbours' Average Growth	0.392*	1.097*	0.243*	0.962*
	(4.92)	(4.19)	(3.06)	(3.36)
Ethnic Fractionalisation	-0.012*	-0.202	-0.011*	-0.024
	(-2.61)	(-1.36)	(-2.17)	(-1.34)
Quality of Economic Institutions	0.012*	0.052*	0.009*	0.047*
	(4.26)	(6.81)	(3.04)	(5.74)
Stability of Political Institutions	-0.0005	0.012	-0.0005	0.012
	(-0.24)	(1.82)	(-0.25)	(1.75)
Democracy	-0.001	-0.002	-0.001*	0.002
	(-1.92)	(1.49)	(-2.44)	(1.43)
Dummy 1970	0.003	0.003	0.004	0.004
	(0.81)	(0.28)	(1.29)	(0.37)
Dummy 1980	-0.003	-0.006	-0.004	-0.007
	(-0.63)	(-0.46)	(-1.03)	(-0.56)
Dummy for sub-Saharan Africa			-0.017*	-0.017*
			(-3.90)	(-3.75)
Dummy for Latin America and the Caribbean			-0.018*	-0.018*
			(-5.23)	(-5.02)
No. of Observations	199	199	182	182
Adjusted R^2	0.58	0.65	0.64	0.65

Note: Seemingly Unrelated Regression estimates, t-statistics in parenthesis; * stands for significant at the 5 per cent level.

Conclusions

Applying the measures developed in this study for the quality of economic institutions and the stability and form of political institutions, the quality of economic institutions is positively and significantly related to both growth and investment rates but neither of the political variables has a significantly positive effect. This evidence suggests that as long as economic institutions are healthy, the political regime does not matter for either growth or investment rates. Compared to the simple correlations reported in the introduction, only one finding is surprising — the insignificant or even negative sign for democracy. Because the simple correlation between growth and democracy is clearly positive, this indicates that the correlation is due to common factors that drive both economic and political development. Barro (1996, 1997) has investigated this thesis in detail with his analysis of the determinants of democracy. One should not over–stress the finding, but it could confirm the thesis of Olson (1982) which states that democratic regimes, especially ones stable over long periods, fall prey to rent–seeking activities more easily. This has a caveat, however. The next chapter will show that one aspect of the institutional framework, namely the limits put on the state, is an important determinant of the quality of economic institutions. Thus, while it might appear that democracy is rather a luxury, it is a necessary safeguard for secure property rights.

Notes

1. See the debate between Baumol (1986) and De Long (1988).
2. i stands for country and t for time, a for the intercept, u_i for a country–specific error term and e_{it} for a country and time–specific shock
3. Examples are Islam (1995), Caselli *et al.* (1996) and Forbes (2000).
4. An extensive discussion of this point can be found in Roll and Talbott (2001).
5. In a different context (cross–industry regressions), this is discussed in Griliches and Mairesse (1995).

Chapter Six

The Determinants of Institutional Quality

Introduction

The quality of economic institutions, centred on the security of property rights, is a basic ingredient for economic growth. But what are the determinants of institutional quality? While good institutional quality is certainly highly desirable, the circumstances under which a good institutional environment is relatively safe from the threats of interest groups and politicians have equal interest. The next chapter will discuss Argentina, where a dramatic improvement in institutional quality occurred during the presidency of Carlos Menem but was not sustainable in the absence of important political safeguards.

These preconditions or safeguards for institutional quality rest on the capacity of the state as well as its commitment. The state's strength determines whether it is able to introduce and defend the ingredients of a good institutional setting. Only a strong state will have sufficient administrative capacity, and only a strong state will be able to fend off the demands of different interest groups. Yet the state needs to be limited and controlled as well as strong. There is no guarantee that a state with strength alone will introduce and defend a stable institutional environment on its own initiative. Rather, it will have a tendency to please its leading class — the bureaucracy, the military or some other type of elite. The state's powers must be limited, and the limiting mechanisms usually reside in democratic institutions that provide the necessary checks and balances. In the Argentine case, the state remained weak and was ultimately unable to fend off the demands of important interest groups. This led to the fiscal problems at the heart of the collapse of the currency board. As became clear later, the limits on the state's discretion remained weak. The institutional setting could not avoid the expropriation of savers and bondholders. The most arbitrary forms of government behaviour remained possible.

One can analyse these problems in a cross–country setting. Here, the aim is to determine empirically what role the strength and the binding of the government have for institutional quality. As explained in Chapter Four, this study's measure of the strength of the state builds on the size of government, measured by its revenues and grants, as well on revenues from direct taxes. Neither is an unequivocal blessing. Both big government and high direct taxes can be a drag on growth, a phenomenon discussed increasingly in Europe[1]. Bloated governments and high tax burdens are important aspects of "euro–sclerosis". Therefore, one would not expect a linear relation between development and the strength of the state. In developing countries it carries a positive sign, but in industrialised countries it might very well do the opposite.

The cross–country regressions to follow test this hypothesis, this time with institutional quality as the dependent variable. The empirical analysis of the determinants of institutional quality is just beginning, with no well–established precedents on model specification. Among the few studies are Clague *et al.* (1996), Chong and Calderón (1997), Chong and Zanforlin (1998) and La Porta *et al.* (1999). La Porta *et al.* (1999) find that countries that are poor, close to the equator, ethno–linguistically heterogeneous, use continental civil–law or socialist legal systems or have high proportions of Catholics or Muslims exhibit inferior government performance[2]. Distributional conflict on the other hand is thought to contribute to wider policy swings and to more redistributive activities of the state (Keefer and Knack, 2000). In extreme cases, these can take the form of expropriations or highly distortive regulatory policies such as price controls. Cultural factors thus have been found to play an important role for institutional quality. This is not very helpful for policy, because countries will hardly alter their legal systems or change the religions of their inhabitants just to get a better institutional environment. It is possible, however, that the factors stressed here as determinants of institutional quality, i.e. the strength and the commitment of the state, dominate these others. This would imply that a country with the right political institutions can develop a sound institutional environment regardless of the cultural factors present.

The possible influence of cultural factors on institutional quality cannot be swept aside. Because the determinants of institutional quality used here are different from those employed in the literature, it is useful to try to replicate some of the results from the literature. The next section does this. The following one adds those stressed here, namely the strength and commitment of the state, and it shows that the cultural factors then become insignificant. A final section adds a short discussion of other possible determinants of institutional quality, namely distributional conflict, openness and a free press.

Cultural Determinants of Institutional Quality

Cultural rules are informal institutions. According to cultural theories (Weber, 1980; Putnam, 1993; Fukuyama, 1995; Landes. 1998), the culture embedded in a society shapes collective action as well as state behaviour and, as a consequence, the quality of its formal institutions. For instance, Putnam (1993) finds that trust in strangers enhances the collective action essential for the provision of public goods. Its comparison of a number of social outcomes in high–trust Northern Italy and low–trust Southern Italy supports this hypothesis. In particular the Catholic Church is said to have adverse effects on trust in Italian society because it favours hierarchical relationships in lieu of horizontal relationships between equal individuals[3]. In addition to distrust, Landes (1998) follows Weber (1980) and argues that Catholic and Muslim countries, starting in the 15th century or even earlier, have acquired a culture of intolerance, xenophobia, and closed–mindedness that has been detrimental to their development.

The importance of cultural factors for the quality of institutions has been investigated before. The interest in this study lies in whether these relations still hold when its own measures are employed. To prepare this ground, one may, first, use as inputs the population shares of Protestants, Catholics and Muslims from La Porta *et al.* (1999). Significant shares of Catholics or Muslims (MUSLIM) have been singled out by Landes (1998) as predicting inferior institutional quality. A significant share of Protestants (PROTESTANT) should have the opposite effect. Second, La Porta *et al.* (1999) and Chong and Zanforlin (1998) identify the legal system as an important determinant of institutional quality. Countries with the British common law tradition are expected to do better than countries with the continental civil law tradition or countries with a socialist legal system. The four variables (ENGLISH, SOCIALIST, GERMAN, SCANDIN) stand for those legal traditions, with FRENCH as the excluded dummy variable. We also add a number of regional dummy variables to control for common regional effects unrelated to cultural factors. They are: *1)* industrialised countries, including the four East Asian Tigers; *2)* Asian nations not included in the other groups; *3)* Arab countries as well as Muslim countries to the east of the Arab World, up to Pakistan; *4)* sub–Saharan Africa; and *5)* Latin America and the Caribbean. As Table 6.1 shows, the variables for the legal system and religion all have the expected sign, both alone and when regional dummies are added. Countries with English, German and Scandinavian legal systems have better institutional environments. “French” (as the excluded dummy variable) and socialist legal systems on the other hand imply worse environments. Countries with higher population shares of Protestants have better institutional environments.

Table 6.1. **The Cultural Determinants of Institutional Quality**

Dependent Variable	ECINST	ECINST	ECINST	ECINST
	(a)	(b)	(c)	(d)
English	0.615*	0.402*		
	(3.00)	(2.47)		
Socialist	-1.013*	-1.990*		
	(-2.37)	(-6.16)		
German	2.739*	0.835*		
	(6.90)	(2.64)		
Scandinavian	2.573*	0.675*		
	(6.68)	(2.19)		
Protestant			0.024*	0.012*
			(4.98)	(3.08)
Catholic			-0.003	0.0001
			(-0.08)	(0.03)
Muslim			-0.014*	-0.084
			(-3.42)	(-1.81)
Asia		-2.284*		-2.083*
		(-9.17)		(-7.11)
Arab and other Muslim Countries		-2.267*		-1.551*
		(-9.19)		(-3.50)
Sub-Saharan Africa		-2.604*		-2.319*
		(-12.97)		(-10.56)
Latin America and Caribbean		-2.321*		-2.307*
		(-11.14)		(-10.32)
Dummy 1970s	-0.156	-0.003	-0.138	-0.031
	(-0.67)	(-0.02)	(-0.57)	(-0.17)
Dummy 1980s	-0.386	-0.214	-0.419	-0.285
	(-1.67)	(-1.30)	(-1.76)	(-1.59)
No. of Observations	239	239	236	236
Adjusted R^2	0.29	0.63	0.24	0.57

Note: OLS Estimates, t-statistics in parenthesis; * stands for significant at the 5 per cent level.

Institutional Quality, the State's Strength and its Commitment

Adding to the regressions this study's measures of the determinants of institutional quality change the picture. First, the simple correlation between the institutional efficiency index and the variables measuring state strength and commitment are high (see also Table 6.3 below) — 0.70 for BINDING and 0.46 for STRENGTH. The next step specifies a model to investigate the relation between institutional quality and the state's strength and commitment while controlling for other factors of influence. The basic model is as follows:

$$ECON\_INST_{it} = \beta_0 STRENGTH_{it} + \beta_1 BINDING_{it} + B_2 Z_{it} + e_i \qquad (4)$$

where i denotes the observations for the *ith* country and t the time period. The dependent variable is the quality of economic institutions. In addition to state strength and commitment, the regressions control for a number of other economic, political and cultural determinants (Z_{it}). They include, first, the same dummy variables for geographic areas as in the regressions reported above, to control for effects that cannot be explained by the model but are idiosyncratic to these areas. Second come this study's measure for political stability as well as the initial level of GDP. Third are the four variables (SOCIALIST, FRENCH, GERMAN, SCANDIN) for legal traditions (as in Chong and Zanforlin, 1998 and La Porta *et al.*, 1999). Fourth, the analysis again follows La Porta *et al.* (1999) in using religion as a proxy for work ethic and tolerance[4]. The former socialist economies have been dropped from the sample, because there are no usable data available; the data on taxes are missing.

Table 6.2 reports the results. Strength and binding have the expected positive sign (Column a). This relation becomes weaker but remains significant if the area dummies are included (Column b). Column c interacts the variable for state strength with the area dummy for developed countries. It confirms the hypothesis; the coefficient on the interaction term is negative, meaning that more state strength — as defined here — gives benefits to developing countries in improved institutional quality but not to industrialised countries. This is a symptom of euro–sclerosis. Column d adds the measure for political stability as well as the initial level of GDP. Both are highly significant and have the expected sign. The coefficients for state strength and especially for binding are reduced. The last two columns add tests of the cultural theories of institutional quality, but neither the variables for the legal tradition (Column e) nor the ones for religion (Column f) have any explanatory power. This contradicts the previous literature on the subject. It means that the measures for the legal tradition and those for religion have no explanatory power once one controls for other measures of the determinants of institutional quality.

These findings so far confirm the theory that states with stronger commitment mechanisms and more strength also develop better institutions. This implies that the checks and balances typical of democratic countries tend to entail better protection of property rights and therefore lower transaction costs. Thus, while the direct relation between democracy and growth is inconclusive, democratic institutions constitute an important safeguard for the quality of economic institutions. Administrative capacity is also important. Only a state with sufficient resources will be strong enough to protect property rights against the demands of special interest groups. La Porta *et al.* (1999) also support the finding that stronger states tend to have better institutions. They find that larger governments will likely perform better, which results in better institutions. These results go hand in hand with recent interpretations of higher taxes in Britain than in France in the 18th century (Brewer, 1988; Finer, 1997) as well as some empirical evidence on the transition from socialism (Johnson *et al.*, 1997).

Table 6.2. **The Determinants of Institutional Quality**

Dependent Variable	ECINST	ECINST	ECINST	ECINST	ECINST	ECINST
	(a)	(b)	(c)	(d)	(e)	(f)
Binding	0.480*	0.302*	0.310*	0.102*	0.096*	0.094*
	(10.34)	(6.19)	(6.42)	(2.33)	(2.05)	(2.06)
Strength	0.295*	0.161*	0.251*	0.169*	0.169*	0.167*
	(3.89)	(2.36)	(3.22)	(2.39)	(2.39)	(2.30)
Strength *Industrial			-0.257*	-0.380*	-0.334*	-0.369*
			(-2.31)	(-3.32)	(2.61)	(-5.17)
Stability of Political Institutions				0.282*	0.282*	0.282*
				(3.87)	(2.92)	(2.93)
Initial Level of GDP				0.679*	0.679*	0.653*
				(5.43)	(5.43)	(5.17)
English					0.019	
					(0.13)	
German					0.298	
					(0.87)	
Scandinavian					0.120	
					(0.42)	
Protestant						0.002
						(0.52)
Catholic						0.001
						(0.32)
Muslim						-0.003
						(0.37)
Asia		-1.516*	-2.185*	-1.496*	-1.275*	-1.382*
		(-5.25)	(-5.38)	(-3.28)	(-2.40)	(-2.95)
Arab and other Muslim Countries		-1.482*	-2.192*	-2.409*	-2.190*	-2.059*
		(-4.94)	(-5.14)	(-5.43)	(-4.28)	(-3.87)
Sub-Saharan Africa		-1.639*	-2.346*	-2.317*	-2.104*	-2.253*
		(-6.56)	(-5.97)	(-5.07)	(-3.99)	(-4.85)
Latin America and Caribbean		-1.736*	-2.415*	-2.646*	-2.420*	-2.654*
		(-7.48)	(-6.49)	(-6.67)	(-5.10)	(-6.34)
Dummy 1980s	-0.447*	-0.350*	-0.350*	-0.392*	-0.378*	-0.387*
	(-2.54)	(-2.34)	(-2.38)	(-3.27)	(-3.28)	(-3.21)
No. of Observations	164	164	164	149	149	149
Adjusted R^2	0.55	0.67	0.68	0.80	0.79	0.80

Note: OLS Estimates, t-statistics in parenthesis; * stands for significant at the 5 per cent level.

Other Determinants of Institutional Quality

This section goes a step farther to investigate other factors that might play important roles in safeguarding efficient institutions. Both the commitment and the strength of the state depend on them. Inequality has received much recent attention in the literature. It can affect the quality of institutions as well as growth through a number of economic and political channels[5]. For the quality of institutions, the political channels are most important. More unequal societies will have more rent–seeking activities. First, poorer parts of the population will see rent seeking as more promising than market activities to improve their positions. Second, under the median voter model and with a larger part of the population poor, there will be more redistributive policies in a democratic society. Keefer and Knack (2000) add a third channel, based on the idea that wider swings in policy will occur in more unequal societies. This makes policies erratic and less predictable. Such divided societies will exhibit less respect among political adversaries and less patience to try piecemeal reforms. In Latin America, large policy swings and ensuing macroeconomic cycles have been seen many times over. Not surprisingly, many observers have thought that inequality and the fierce distributional struggle following from it lay behind the woes of the Latin American continent[6].

In this study's framework, distributional conflict can affect both the design of democratic institutions — the commitment mechanisms — and the strength of the state. A divided society will find it much harder to obtain the necessary consensus that lies at the heart of a democratic system. People will disagree not only about the ends they would like to obtain, but also about the rules of the game. The former is a necessary part of democratic decision making, but the latter can be very damaging. Without rules, there can be no orderly game, but only chaos. The general empirical findings are negative relationships between inequality and both growth[7] and institutional quality[8]. Forbes (2000), however, employs a fixed–effects setting and finds a positive relation between inequality and growth. She argues that this is a short–run to medium–run relationship that does not necessarily contradict the previous findings based on cross–section data with a long–run interpretation. It could be due, for example, to the need to compensate high achievers.

Societal openness also can contribute to a better institutional environment. Karl Popper's dictum on the "Open Society" has become justly famous and is mirrored by Hirschman's (1970) three ways of conflict resolution: exit, voice and loyalty. Both exit and voice help to put restrictions on government behaviour. Important aspects of voice are the possibility to vote as well as obtaining relevant information through the press. Correspondingly, a measure for voice, such as press freedom, should be positively related to institutional quality[9]. So should the opportunity to migrate[10]. A free press usually will exist only in a democratic environment. It is one of the checks and balances a democracy will tend to have. For this reason, the press is often also called the fourth power in the state, after the executive, legislative and judicial powers. One can expect a close correlation between democracy, this study's measure of binding and a free press. Something similar will occur when inhabitants are free to migrate (openness). To check these propositions, Table 6.3 provides the simple correlation coefficients. The expected close relation between binding, openness (to migrate) and a free press appears, and the correlation with the quality of economic institutions is similarly strong. Inequality, as measured by the Gini coefficient, has the expected negative relation to both the commitment and the strength of the state.

A next step includes these variables in a regression on the measure of the quality of economic institutions. Owing to the high correlation with the measures for binding and strength, they are omitted from the equations. Intuitively, a free press and openness are additional dimensions of a democratic society. Therefore, it would make little

Table 6.3. **Correlation Coefficients of Determinants of Institutional Quality**

	Econ Inst	Strength	Binding	Openness	Free Press
Strength	0.46				
	(0.000)				
Binding	0.70	0.43			
	(0.000)	(0.000)			
Openness	0.49	0.10	0.48		
	(0.000)	(0.23)	(0.000)		
Free Press	0.50	0.15	0.60	0.57	
	(0.000)	(0.07)	(0.000)	(0.000)	
Gini	-0.49	-0.30	-0.27	0.01	0.17
	(0.000)	(0.000)	(0.000)	(0.93)	(0.02)

Note: Pearson coefficients, level of significance (probability of a Type I error) in parenthesis.

sense to add the measure of the state's commitment as well. The regression has the same control variables as before, i.e. the area dummies, the measure for political stability and the initial level of GDP.

Table 6.4 (Column a, where the institutional measures are included alone) confirms that inequality leads to a worse institutional environment, while a free press and openness to migrate improve it. Once the area dummies are included, however, the coefficient for inequality (GINI) becomes positive (Column b). The negative sign in Column a came completely from the variation between the regions. Within regions, the relation between inequality and institutional quality is positive. This is similar to the finding in Forbes (2000). Column c adds the measure for political stability and the initial level of GDP. The first is insignificant, but the second has the expected positive sign and is highly significant. Its effect is so strong that the three determinants of interest — openness, a free press and inequality — all become insignificant. This remains so for the first two even when the area dummies are dropped, while the coefficient on the GINI switches back to its initial negative sign (Column d). One may interpret this as saying that while a free press and other measures of openness are important by themselves, they have no independent effect on the quality of institutions once other determinants are accounted for. The role of inequality, on the other hand, is not clear. It seems to proxy for regional differences in institutional quality that might have other roots.

Table 6.4. **The Determinants of Institutional Quality, II**

Dependent Variable	ECINST	ECINST	ECINST	ECINST
	(a)	(b)	(c)	(d)
Openness	0.249*	0.193*	-0.054	-0.069
	(2.95)	(2.83)	(-0.79)	(-0.90)
Free Press	0.373*	0.304*	-0.005	0.0002
	(5.20)	(5.27)	(-0.09)	(0.00)
Gini	-0.065*	0.045*	0.017	-0.033*
	(-5.81)	(3.70)	(1.57)	(-3.39)
Stability of Political Institutions			-0.178	-0.226
			(-1.27)	(-1.36)
Initial Level of GDP			0.941*	1.347*
			(6.32)	(10.49)
Asia		-2.029*	-0.699*	
		(-7.95)	(-2.25)	
Arab and other Muslim Countries		-2.169*	-1.714*	
		(-6.93)	(-5.53)	
Sub-Saharan Africa		-2.493*	-1.622*	
		(-7.80)	(-4.67)	
Latin America and Caribbean		-2.899*	-1.830*	
		(-11.00)	(-6.60)	
Dummy 1980s	-0.114	-0.099	-0.474*	-0.685*
	(-0.58)	(-0.67)	(-3.41)	(-4.43)
No. of Observations	140	140	121	121
Adjusted R^2	0.46	0.71	0.80	0.70

Note: OLS Estimates, t-statistics in parenthesis; * stands for significant at the 5 per cent level.

Conclusions

This chapter has investigated the determinants of institutional quality. It has confirmed that both a committed state and a strong state contribute to a better institutional environment. There is evidence that the strength of the state is a positive factor in developing countries but a negative one in industrialised nations. Tests for the importance of other institutional measures — the openness to migrate, a free press and inequality — show that, while they have the expected correlations with institutional quality, none has any explanatory power once the other control variables are included. The same is true of the cultural variables that have received much attention in the literature, namely religion and the legal system. This last finding is fairly important. It means that cultural factors do not play a role in the quality of institutions when two other key factors are in place — first, a strong state as reflected in its administrative capacity to raise taxes and, second, a committed state as reflected in limits on the state's behaviour. This is reasonably optimistic news for countries with cultural variables thought to be less favourable. It will be hard if not impossible for a country to change these cultural attributes, while it is possible to improve the strength and the commitment of the state.

Notes

1. On the size of the government, see e.g. Mueller (1989). On the effect of other related institutional features on growth rates in European economies, see Eichengreen and Vazquez (1995).
2. Note that they analyse government performance (using measures of government intervention, public sector efficiency, public good provision, size of government and political freedom) which covers something different from the quality of property and contract rights of interest here.
3. See also the discussion of the relation between social norms and the functioning of the legal system in Weber (1997).
4. The ethnic fractionalisation variable already used in Chapter Five was also added, following Easterly and Levine (1997), but it was insignificant. Also insignificant was the openness of the economy to trade, which Brunetti and Weder (2001) found to be an important determinant of institutional quality.
5. For a discussion of different possible mechanisms of how inequality affects the quality of institutions, see Alesina and Perotti (1994), Keefer and Knack (2000) or Winiker (1998). See also Weede (1997) for a critical review.
6. For a closer description of this reasoning, see e.g. Dornbusch and Edwards (1991) or Sachs (1989).
7. There is a large number of contributions to this literature. An overview can be found in Alesina and Perotti (1994) or Perotti (1996).
8. See Keefer and Knack (2000) or Chong and Calderón (1997, 2000).
9. Brunetti and Weder (2002) have investigated the related hypotheses that a free press reduces corruption and found positive evidence for it. Scully (1992) provides a more general discussion of the role of freedom for economic growth.
10. Pelda (1998) has investigated this hypothesis in some detail and found positive evidence for it.

Chapter Seven

Argentina under Menem: A Case Study[1]

The Argentine Case in Historical Perspective

At the start of the 20th century Argentina had a GNP per capita among the world's top ten. In the 1930s and 1940s, however, its resource–based, export–oriented growth ran into problems as export prices plummeted and World War II disrupted the world economy almost totally. Argentina then changed course and followed the advice of its towering economist, Raoul Prebisch. It switched to import–substituting industrialisation. This new strategy had spectacular success for some time. Domestic industry blossomed, foreign currency constraints disappeared and growth performance was better than anywhere else in the Western market system. "Any observer looking around the world during those years (1945–52) could find few areas where the future looked more promising, both economically and politically, than in Latin America." (Diaz–Alejandro in Tommasi and Velasco, 1996, p. 192).

Not all that begins well ends well. When the promised future arrived in the late 1970s and early 1980s, the star country in the star league was in terrible shape. Import substitution had deteriorated product quality. Licensing and quotas had rendered rent seeking and outright corruption endemic and thrown the balance of payments into large deficits. A nasty political history of Peronist populism and non–constitutional, *de facto* military governments in rather swift succession paralleled the economic disaster (see Table 7.1). In the early 1980s, the crisis triggered by Mexico's default on its foreign debt hit Argentina and cut the country off from foreign credit. The *coup de grâce* came when Argentina started an absurd war with the United Kingdom over the Malvinas. From then on, the National Bank's printing press remained the only economic mechanism running well oiled; it drove Argentina into an inflationary spiral. Eventually, hyperinflation brought down everything, the economy as well as the political system. Fears sprang up of yet another outburst of violence and/or another *coup d'état* by the military.

Table 7.1. **Argentine Political Leaders, 1966–1999**

Name	Years in Power	Entry			Exit mode	Military
		Year	Mode	Age		
Ongania	4	1966	1	52	3	1
Levingston	0	1970	1	50	3	1
Lanusse	2	1971	1	53	1	1
Campora	0	1973	0	57	1	0
Peron, Juan	0	1973	0	78	2	0
Peron, Isabel	2	1974	0	43	3	0
Videla	4	1976	1	51	1	1
Viola	1	1980	0	55	1	1
Galtieri	0	1981	0	54	1	1
Bignone	1	1982	0	54	1	0
Alfonsin	6	1983	0	58	1	0
Menem	10	1989	0	54	0	0

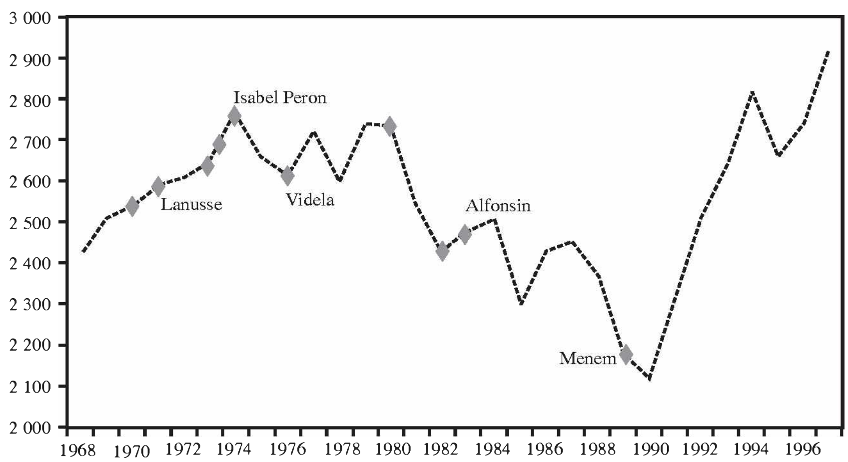
Notes: Years in power: The number of completed years in power; Entry mode: 0 = Constitutional, 1 = Nonconstitutional;
Exit mode: 0 = Still in power, 1 = Constitutional exit, 2 = Death, natural causes, 3 = Nonconstitutional exit; Military:
0 = Civilian leader, 1 = Military leader.

Source: Bienen and van der Walle (1991, p. 129).

By the end of the 1980s, real GDP had dropped and real GDP per capita was 20 per cent below that in 1974 (Figure 7.1). "But there was one chance left. Presidential elections were to be held at the end of the year (1988). An obscure politician with a left–of–centre background was able to put together a ramshackle coalition, eking out a close victory.... On the day of his inauguration, he surprised everyone ... by announcing a drastic plan of deregulation, trade liberalization, and fiscal reform" (Tommasi and Velasco, 1996, p. 189). Between 1990 and 1998 growth reached Asian proportions and real GDP increased by more than 30 per cent (Figure 7.1). This unexpected and truly stupendous turnaround has been well documented. What the Menem government did and undid has been widely publicised and need not be reiterated here[2].

Two big questions remain. First, why and how did Menem and his crew do it? Second, and more tricky, how safe were the reforms and the resulting economic successes from reversals in the near or far future? Both Argentina's own history and recent experiences in Asia and Brazil must lead one to ask whether this country will not repeat its past mistakes. This chapter tries to answer both questions, making use of the analytical concepts developed earlier[3]. There is strong evidence that a remarkable improvement in the "strength" dimension led to higher institutional quality. Deficiencies in commitment mechanisms, however, threatened the economic reforms.

Figure 7.1. **Real GDP per capita and Political Leadership in Argentina (1969-99)**



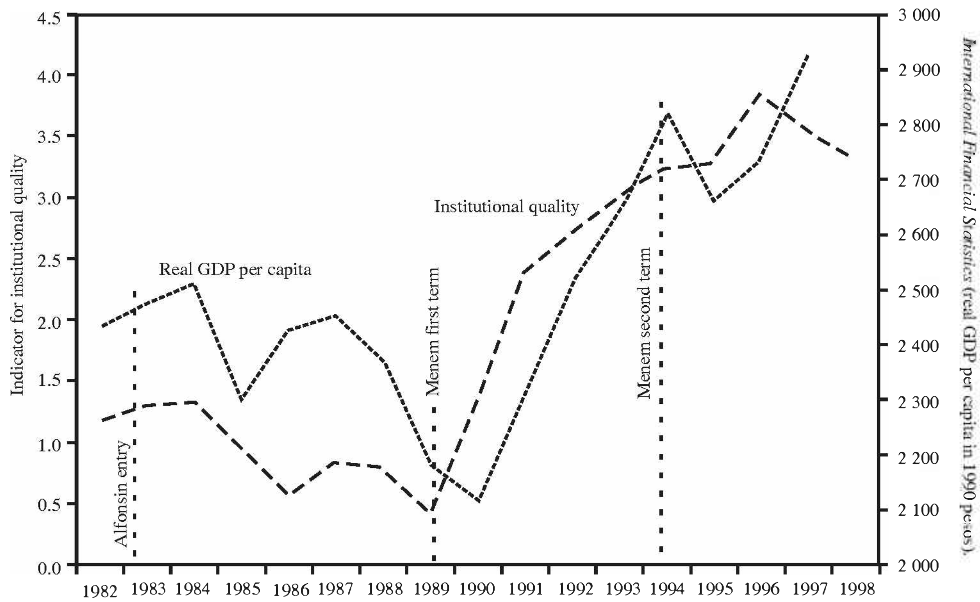
Sources: International Financial Statistics real GDP per capita (in pesos); Table 7.1 (entry of political leaders).

Institutional Quality and its Determinants in Argentina

There are some superficial and contradictory explanations for the radical institutional change in Argentina. The most popular explanation for the stunning success of the Menem government has to do with the argument of "urgency" or, more precisely, the lack of alternatives. This argument is not very convincing. There are always alternatives such as chaos or short–term, non–sustainable populist strategies (Tommasi and Velasco, 1996). Another explanation stresses the purely charismatic leadership of a president who staged an heroic effort to turn the tide and to stand up against all odds (Margheritis, 1998). Both approaches are rather unsatisfactorily *ad hoc*, and both face the common objection that the dramatic crescendo leading to the crisis could have been anticipated long before Menem appeared on the scene. Why wait and pay such a high price? One has to assume either irrationality or pure chance, neither of which is appropriate or adequate as an explanation. In fact, institutional quality in Argentina improved remarkably in the 1990s. An analysis of the determinants of the state's strength shows how it evolved, but state commitment, the other determinant of institutional quality, was not so solid.

A principal components analysis of the same five variables as in Chapter Four provides a measure of institutional quality. Figure 7.2 plots the evolution of both institutional quality and real GDP per capita in Argentina since 1982 (the higher the value the better the quality of economic institutions). The indicator shows a rather dramatic decline during Raul Alfonsin's term, followed by a spectacular rise after Menem's entry in 1989. After 1996, however, institutional quality started to erode again. Its correlation with the real GDP per capita (a coefficient of 0.69) is even more convincing.

Figure 7.2. **Institutional Quality and Real GDP per capita (1982-1998)**



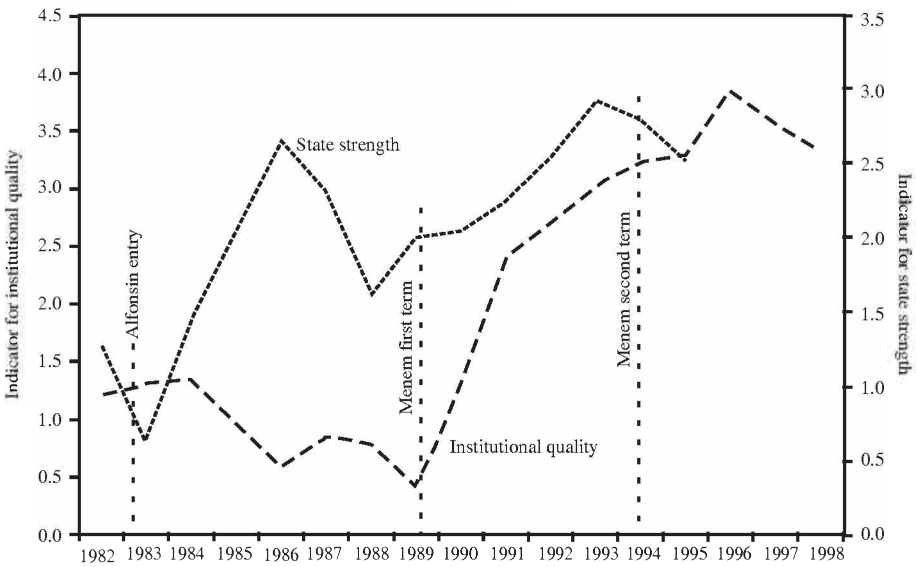
Sources: Indicator for institutional quality (left axis) as a weighted average of the principal components of black market premium (*PICK currency yearbook*), depreciation rate, contract-intensive money (both *International Financial Statistics*), International country risk indicator (International Country Risk Guide) and country debt default risk (Institutional Investor); *International Financial Statistics* (real GDP per capita (in pesos) (right axis).

Signs of Strong Government

State Strength in Argentina

Figure 7.3 plots the evolution of the indicators for state strength and institutional quality since 1982. It shows an increase in state strength during the first three years of Alfonsin's term that was not reflected in an improvement of institutional quality, followed by a strong decline for the rest of his term. A huge recovery occurred during Menem's first term, followed by another decline preceding the deterioration of institutional quality during his second term. State strength and institutional quality are positively and significantly correlated (correlation coefficient 0.51), but the two indicators sometimes moved in opposite directions.

Figure 7.3 **State Strength and Institutional Quality (1982-1998)**



Sources: Indicator for state strength (right axis) as a weighted average of the principal components of total revenues and grants, revenues from taxes on income, profits and capital gains, and central government budget surplus (all variables as ratios to GDP, *Government Finance Statistics*); Indicator for institutional quality (left axis) see Figure 7.1.

In conventional wisdom, Menem was the wrong man from the wrong party and the wrong province[4]. His vague election platform was populist rather than neo–liberal. His credibility was next to nil because the Peronists had blocked almost all reform initiatives by the previous and first democratic government under Alfonsin — when necessary by general strikes[5]. When Alfonsin handed over power five months ahead of schedule, Menem faced a hyperinflationary macroeconomic and fiscal crisis on the one hand and a severe political problem of credibility on the other. He had intact, however, his accumulated political capital as a leader. His personal strength had three related sources: his proven capability as a political organiser, the weakness of opponents within his own party and the opposition and the acute economic emergencies that had discredited prevailing policies and institutions.

"In brief, the socio–political landscape we have just outlined — the effects of hyperinflation upon public tolerance for hardship, the general discredit in which existing institutions were held, and Menem's leadership in the Peronist movement — opened a window of opportunity for policy changes that would otherwise have been politically unfeasible" (Gerchunoff and Torre, 1998, p. 121).

To defend his political capital as a leader, the only asset amidst imminent chaos, it was thus rational for Menem to act forcefully. Anything short of a truly radical turnaround would have lacked any credibility. Furthermore, the deep–seated fear that democracy would once more give way to some form of dictatorship as well as the traumatic history of repeated bouts of hyperinflation weakened opposition to the bitter medicine, both within the Peronist party and in the population at large.

The Presidency's Institutional Dominance of the Legislature and the Judiciary

A long Latin American tradition prefers strong presidential systems to more moderate ones (as in the United States) or even parliamentary government. Given institutional weaknesses and the external and internal challenges to state authority in the last century, most Latin American constitutions stipulate strong presidencies, with heads of state and prime ministers in "personal union" and a large measure of executive discretion. This form of government has aptly been termed "hyper–presidentialism", a system based not on checks and balances but on the superiority of the executive branch (Nino, 1996). Even democratically elected presidents behave more often than not like (elected) dictators.

In Argentina this clearly played a major role, with a positive effect during Menem's first term and, owing to the lack of commitment discussed later, an increasingly negative one after he entered office for the second time. At the very beginning, Menem initiated his institutional reforms under two laws passed by the legislative bodies under very special circumstances. Not only did parliament have no right to amend the Menem proposals, but it also had to pass them within a pre–emptory term. Moreover, parliament delegated to the executive branch the power to legislate the details by presidential decree. To block off any potential veto of the legislation by the Supreme Court, Menem made Congress expand executive privilege by passing yet another law increasing the number of chief justices from five to nine. The president wasted no time in filling the four new positions with justices sympathetic to his cause. "Soon he accumulated all the institutional means necessary to concentrate decision–making power in the executive and set the stage for sweeping economic reforms" (Gerchunoff and Torre, 1998, p. 119).

The reforms were indeed sweeping. The "Economic Emergency Law" simply stopped all subsidies for industrial and export promotion with a stroke of the pen. It also allowed dismissal of public employees and alteration of the salary system in the state sector. The "State Reform Law" tore down the second pillar of traditional Argentine rent seeking by providing legal authority to privatise practically everything — telephone services, railroads, airlines, shipping, highways, television, radio and petrochemical enterprises. All this was completed or at least irreversibly scheduled within less than a year. The third pillar of the old system, protection of domestic industries and services, was also weakened the moment Menem took office. He announced across–the–board tariff cuts to 20 per cent and the elimination within four years of all non–tariff barriers such as quotas, licences and import bans. Within about a year all quantitative restrictions had been lifted and about two years later the average tariff had fallen to about 10 per cent (Gerchunoff and Torre, 1998, p. 123). Together, these reforms smothered the institutional structure of the previous economic system.

Those negatively affected gave little resistance. One explanation for this unusual "loser" behaviour centres on the rational expectation that any other alternative would have been even worse — not only in the long run but in the intermediate term as well. There is reason not to accept this account. As Tommasi and Velasco (1996) have pointed out, if it were true the reforms would have come much earlier. A better, alternative explanation is quite different. A strong government used all its executive strengths for a radical, irreversible, top–down and therefore quasi–authoritarian revolution. It certainly had no electoral mandate to choose this road. The Congress in very large measure conceded its power to the President over both legislation and jurisdiction. The circumstances had opened a window of opportunity, but the concentrated strength of the President, acting quickly and forcefully, dominated. He concentrated all political power in his hands to go ahead with fundamental reforms on all fronts. Still, very important questions remain unanswered. Why was there no or not more resistance, especially by the formerly protected and subsidised business community? Why was there no resistance from the formerly "privileged", such as organised labour or state employees? Why was the whole exercise credible in the first place? Most of the answers to these questions will emerge under the rubric "commitment", in a look at the forces counterbalancing highly personal and concentrated presidential power.

The Restoration of the State

Canitrot and Sigal (1994, p. 107) point out straightforwardly one largely neglected aspect of state strength. " ... [T]he most pressing problem of the decade (1980s) was less the democratisation of the political regime than the reconstruction of a devastated state." At the low point after the lost war over the Malvinas in 1982, the state lacked not only legitimacy amidst a "far reaching distrust of state capacities" (p. 109) but also autonomy *vis–à–vis* rent–seeking pressure groups such as the military, labour unions or certain business groups. In the final analysis, lack of autonomy puts into question state sovereignty itself. Independently of the qualification or the power of the government (president), the state had lost the ability to act as a state, its monopoly of coercive power. Argentina really was a very weak state under the Alfonsin government. In contrast with earlier inflationary episodes, it ran into hyperinflation and bankruptcy. They necessitated reconstructing the state itself on new foundations (pp. 114–115).

Menem did this first by his strong personal will and second by concentrating government power in the executive. By regaining control over the currency through the Convertibility Plan and the relative autonomy of monetary policy under Domingo Cavallo and other modern technocrats, he also restored state authority. Alfonsin may well have started with more democratic legitimacy and certainly more political credibility by founding his mandate on democratic principles and human rights, but

Menem campaigned on a leadership slogan ("follow me"). His government rapidly increased the state's capacity to tax its population more systematically and at the same time to control the military.

Thus the personality of a leader, the credibility of his government and the restoration of the state gave Menem the strength – among others – both to specify and to enforce sound economic institutions. Institutional inefficiency was significantly reduced during the first half of the 1990s. Yet Menem's second term saw some of the state restoration reversed and his personal credibility weakened as he bought the support of the private sector with ethically highly questionable procedures to privatise without a strong regulatory framework (Gerchunoff and Torre, 1998). Similarly, he traded fiscal favours for political support from provinces. These were important seeds for widespread corruption, which became a negative hallmark of Menem's government. As a consequence, administrative capacity weakened, and institutional quality started to erode again.

Mechanisms of Commitment

Commitment and Democracy

Argentina during the first half of the 1990s, very much like Chile some years earlier, seemed to have found a political consensus for the new socio–economic model. Yet here lies a paradox. The more political conditions approach those of constitutional and representative democracies and the more a social consensus takes hold in the population at large, the less legitimate appears the concentration of power at the top and the strong role of personal leadership. Once the life–and–death emergency is over, the state's authority is reconstructed and a new consensus on policy goals and instruments has been forged, the strength of the state will have to rely more on democratic participation and focus more on proportional representation instead of executive discretion. Canitrot and Sigal (1994, p. 139) say this very aptly and carefully:

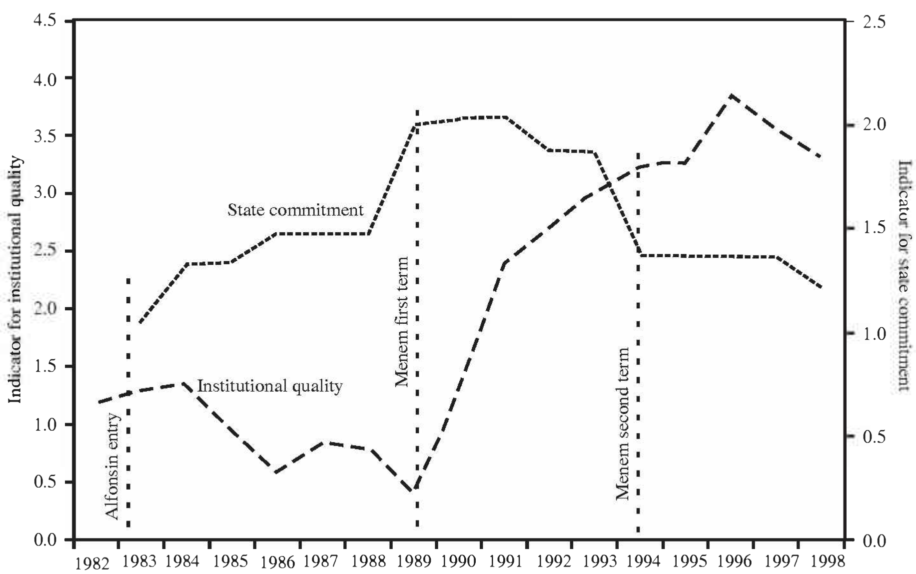
"Relationships between democracy and economic reform are highly undetermined and, when considered as a dynamic process, may follow different phases. Undoubtedly, certain situations demand the transfer of decisions to the government, and in particular to the executive branch, but the excess concentration of decision–making power on that branch does not create ideal conditions for the working of democracy."

State Commitment in Argentina

The commitment indicator used here is the weighted average of the principal components of nine different variables. It includes, first, six different indicators of control over political authority from the widely used Polity III data set (Jaggers and Gurr, 1996). They are the regulation and competitiveness of executive recruitment, the degree of monocracy, the constraints on the chief executive and the regulation and competitiveness of political participation. Second, it employs two Freedom House indicators measuring the quality of political rights and civil liberties, *i.e.* the degree to which people can participate in the political process and the freedoms to develop views, institutions and personal autonomy apart from the state. Third, a dummy variable controls for the possibility of the incumbent being re–elected.

Figure 7.4 plots the development of state commitment and institutional quality. The former remained quite stable during the Alfonsin government, then improved remarkably when Menem started his first term in 1989. This rise is mainly due to the (hidden) aim to serve a second term as well as a further improvement of individual political rights and civil liberties. The picture changed drastically once Menem saw his prospects for a third term greatly diminished. In consequence, government discretion, the extortion of political leaders, gross indifference to official corruption, the "packing" of the Argentine senate by the ruling party and a public campaign by Menem against independent public prosecutors all helped to deteriorate the degree of commitment and institutional quality.

Figure 7.4. **State Commitment and Institutional Quality in Argentina (1982-98)**



Sources: Indicator for state commitment (right axis) as a weighted average of the principal components of the regulation and competitiveness of executive recruitment, the degree of monocratism, the constraints on chief executive and the regulation and competitiveness of political participation (all variables provided by Jaggers and Gurr (1996), the quality of political rights and civil liberties (*Freedom House*), and a dummy variable to control for the possibility of the incumbent of being re-elected.; Indicator for institutional quality (left axis) see Figure 7.2

Self–Commitment by Elimination of Discretion over Monetary Policy

The Convertibility Plan of 1990 did not pursue only the goal of eliminating inflation and cannot be interpreted as merely yet another stabilisation programme. It was an institutional revolution, like privatisation, trade reform or deregulation. "The plan, established by congressional statute, eliminated government discretion over monetary and exchange–rate policy. The effect was similar to placing Argentina on a gold standard and limiting the Central Bank's role to that of a currency board" (Gerchunoff and Torre, 1998, p. 127). History had come full circle. Sixty years earlier, Prebisch had engineered an escape from self–commitment to the gold standard in a deflationary scenario and thus introduced discretionary monetary expansion. The hyperinflation episodes of 1989 and 1990, coming after a long history of recurrent inflationary spells, brought back a complete self–commitment. Faced with the "Caipirinha" crisis, the Argentine government went one final and crucial step farther by floating the idea of fully dollarising the economy. The credibility of a currency board has limits that were severely tested after the Brazilian devaluation. The price of this credibility gap appeared in interest–rate differentials between US dollar and Argentine peso deposits. To counter these doubts, the government emitted a "signal" that it would rather go in the opposite direction, devaluation. Against this background, the currency–board idea made much sense, although the proposal had many other, purely economic, costs.

Transparency and Information

This study has already mentioned in passing the crucial role of information for accountability of the government to its citizens. They must be informed about the state's behaviour before being able to sanction an eventual violation of individual property and contract rights by way of "exit" or "voice". Because citizens are often not able directly to observe their property and contract rights (e.g. when bureaucratic corruption violates their property rights to the state's assets) the mass media play an important role in transmitting this kind of information. In a world where the acquisition of information is costly, citizens might rationally choose to be imperfectly informed about the state's actions. The state can now influence the degree of information asymmetry between itself and its citizens; it may restrict the media's freedom to inform, through censorship. This increases citizens' information costs, reduces their information demand, increases the state's discretion, weakens the commitment of the state to the creation and enforcement of efficient institutions and therefore worsens institutional quality.

Compared with the period of military rule, when press censorship was almost total, the situation improved remarkably then worsened again. Journalists were harassed, threatened, censored, detained and sacked in attempts to stifle freedom of expression. According to Freedom House (1999, p. 10), print and broadcasting media are considered only partly free in Argentina, slightly better than in Paraguay, but clearly worse than in the other neighbouring countries, Bolivia, Brazil, Chile and Uruguay.

Establishing a currency board also introduced transparency. The quasi–dollarisation of the monetary system can easily be monitored. The central bank was required not only to exchange freely all pesos into dollars at a rate of 1:1 but also to keep enough dollars in reserve to redeem all outstanding pesos at any moment. The size of these reserves had to be published daily. There was no way to cheat. Convertibility was there to be seen and tested at all times. Usually only tiny countries such as Hong Kong or some Baltic States envisage such an extreme solution to the credibility problem. Taking into account Argentina's dismal historical record and the threat of hyperinflation even under Menem, this bold movement was appropriate for political credibility. Yet to give away monetary policy led to new risks, such as external shocks like the "Tequila" crisis or the "Caipirinha" drama. Despite its obvious disadvantages in the form of deflationary pressures on the price and wage structure, convertibility remained popular in Argentina. The slightest relaxation of its rules would have signalled the beginnings of credibility erosion. Besides establishing transparency, convertibility also indirectly disciplines fiscal policy and constrains balance of payments deficits.

Privatisation

Privatisation can be pursued for efficiency as well as to raise cash for the government. In a political economy perspective, it played a more fundamental role. On the one hand it drained the swamp in which rent seeking had flourished. On the other, it bought off resistance by private business against deregulation and liberalisation. The government offered business interests a deal — to support the bitter market–oriented strategy, sweetened with favourable conditions in privatisation programmes. Privatising the highways was one bad example of quasi–corrupt actions often cited in private. Some argue that corruption in privatisation is basically a one–off affair, but this is only half true. Weak government regulations can lead to renegotiations of privatisation contracts with sometimes dubious outcomes. Perhaps Argentina had no choice other than to privatise in an extremely quick and rather dirty fashion, but the counterpart, a strong state regulatory framework, was not established. Nevertheless, privatisation helped considerably to establish the new ways of thinking firmly in Argentina. Public service in the nationalised sector had been so dismal with regard to honesty and quality that, despite an inadequate regulatory system, service quality went up significantly and in some areas even spectacularly. The telephone may well have served as an icebreaker. Privatisation changes incentives and the balance of power. This in turn changes mentalities. Private property and competition best guarantee public service. To serve the customer is a relatively new attitude in Argentina but seems to have surpassed the typical Western European standards.

Conclusions

In Argentina, a combination of constitutional hyper–presidentialism with personal leadership clearly enabled a newly strong state to push through radical reforms of both the economy and the state. The depth and speed of these reforms marked a historical experiment without precedent. The weakness of actual and potential opposition groups reinforced the government's strength. The radical party had been totally discredited by hyperinflation, the lost election and the "capitulation" of Alfonsin five months before the end of his presidential term. The labour unions' affiliation with Peronism greatly diminished their opposition. The population at large was willing to bear high adjustment costs and to forgo the kinds of short–term palliatives that had proven non–sustainable so many times before.

The commitment of the state was another matter. At the start it hardly existed and this led to damaging arbitrariness, such as the confiscation of all private US deposits against dollar–denominated government bonds in 1991. The Cavallo Convertibility Plan eliminated all discretion in monetary policy by a stroke of the pen, and it greatly reduced discretion in fiscal matters as well. By opening the current and capital accounts, it put the Argentine economy on automatic pilot. Discarding the inflation tax and privatising the ineffective public services were quite popular, although microeconomic adjustment took place under quasi–deflationary conditions and caused hardships for the middle class.

The political system of Argentina remained prone to surprising turns as it faced the ongoing risk of hyper–presidentialism overpowering the rule of law on the one hand and checks and balances on the other. The government's strength was highly focused on Menem personally; he is not free from corruption and violence in his inner circle. His son died in an accident widely believed to have been something else. Argentine–style corruption goes beyond the "transaction tax" genre. It is rather a mega–corruption, located at the top of the political apex. Incredible arms sales by generals or huge gifts during privatisation remained commonplace and "close" to the strong man himself. It remained to be seen how the new president, Fernando de la Rua from the opposition party, could eradicate this top–down corruption as promised in his election campaign.

Argentine economic institutions in the late 1990s were clearly in better shape than ten years before, although their quality had worsened in the final years under Menem, principally because political institutions still displayed important shortcomings. The medium–term risk resided less in the old spectre of Peronist populism interrupted by military coups and *de facto* governments, but rather more in the gradual political decay of the Menem system driven by deflationary pressure, re–emergent social tensions and lack of truly participatory democracy. One can confidently say that the Menem government made great strides towards strengthening the state — but more so in establishing the rules and less so in enforcing them; corruption still led to substantial arbitrariness. The main peril thus concerned government commitment, especially constructive constraint on government behaviour. The purely economic constraints were quite strong, given the monetary and trade regimes. Less safe were the state's commitments to constitutional constraints and to democratic participation.

A Postscript: Two Years Later

This chapter was essentially completed at about the time when the government passed from Menem to de la Rua. Its conclusions preserve their overall validity, but its *ex–ante* view of possible future developments, considered as overly grim and pessimistic at the time of writing, proved to be overly optimistic. The main causes of very unfortunate developments from the not so good to the very bad were foreseen. On the one hand, commitment was more apparent than real. On the other, the monetary system with a currency board lacked a foundation in the economic fundamentals and an exit strategy in the case of exogenous shocks. Such shocks were inevitable. They came when the dollar started climbing and Brazil devalued by 40 per cent. This set the stage for a deflationary phase with a sharp decline of the real economy. It could not be sustained politically, and not even the architect of the wonder of the early 1990s, Domingo Cavallo, could deal with it. The political preconditions were completely different from those ten years before and proved decisive. The Argentina of 2002 was again in economic turmoil.

Notes

1. This chapter is a shortened version of Borner and Kobler (2002). We thank Kluwer Academic Publishers for the permission to reprint.
2. See Gerchunoff and Torre (1998) for an especially complete summary in English. Palermo and Novaro (1996) present the case of "Menemismo" in a broad historical and political science perspective (in Spanish).
3. See also Borner *et al.* (1997) and Kobler (2000).
4. As stated by Sturzenegger and Tommasi (1998: 1): "Peronism has been virtually synonymous with populism and protectionism".
5. Thirteen such strikes were launched against Alfonsin.

Chapter Eight

Conclusions

The development strategies of the last 50 years have had rather limited success, as Easterly (2001) argues in his impressive policy review. Neither capital transfers nor macroeconomic policies could do the trick by themselves. Easterly argues as the basic reason that people — politicians as well as market participants — react to incentives. Giving them money alone is not enough when they have no reason to use it productively. Economic stabilisation is important but not sufficient to provide incentives for investment and trade. Rather, the key requirements are stable institutions, which safeguard property rights and impede both the misuse of power and irresponsible policy shifts.

This study has tried to identify good economic institutions and how they can be put in place and maintained. It began with a review of the property–rights literature, which has long argued that secure property rights are a basic precondition for economic development. It confirmed this argument in a series of growth regressions that found a variety of proxies for property rights — such as the absence of the threat of expropriation, low government default risk or a small black–market premium — to be positively related to growth rates. It then went a step farther to identify the determinants of institutional quality, using the theory of political liberalism as the starting point. In (British) liberal thinking, the importance of limits on the power of the state — i.e. on politicians and the bureaucracy — has long been recognised in stress on "The Rule of Law". Suggested checks on the misuse of power include control through democratic decision processes, separation of the executive, legislative and judicial powers, a free press (in the role of a fourth power) and the regional separation of powers as in a federal state.

Nevertheless, a limited state is not sufficient to protect property rights and to foster development. Certain government activities are essential. The state must provide infrastructure, health care, education and so on. It must also protect property rights and political institutions against the demands of special interest groups. To these ends it requires resources, raised in the least distortive manner possible. It further needs an able civil service dedicated to the common good and not the pursuit of its own private ends. Therefore, the state must be not only bounded but also strong.

To validate these points, the study constructed indicators for the quality of economic institutions, the limits on the state (the "binding of the state") and state strength. It confirmed the expected effects in cross–country regressions. First, better economic institutions do lead to higher growth rates, even when other institutional variables are included in the regressions, such as measures for democratic control mechanisms and for political stability. Second, the democratic control mechanisms are important determinants of the quality of economic institutions. Therefore, a bounded state — limited by democratic control mechanisms — can better protect property rights. This crucial result also helps to resolve an old dispute about the role of democracy for development. Democracy does not influence growth rates directly, but property rights are better protected in democratic states. Note, however, that democracy does not mean simply holding periodic elections; it also embraces the checks and balances envisioned by classical liberalism. Successful economic development certainly has occurred under authoritarian regimes lacking the control mechanisms found to be important here. Chile comes to mind, along with China and some of the East Asian Tigers. Secure property rights exist under authoritarian regimes, but such regimes are on average less probable or prone to protect them consistently. They embody no protections other than the often–ephemeral commitments of their leaders. They are more prone to arbitrariness, not to mention other errors such as the violation of human rights.

The study discussed in some detail Argentina during the 1990s under the leadership of Carlos Menem, a case that reveals strong improvement in property rights under a formally democratic regime with strong leadership. Through his personal commitment and with the help of a strong team of advisors, he was able to produce a dramatic turn–around after many years of economic crisis. Giving up an autonomous monetary policy through the adoption of a currency board helped this turn–around, but there were no similar controls on the fiscal side. Moreover, the personal enrichment of its members and other forms of corruption increasingly discredited the regime. Aside from damaging its credibility, this made it harder and harder to keep limits on state spending by arguing that sacrifices were necessary. The rift between completely unaccommodative monetary policy and loose fiscal policy led finally to dramatic political and economic disaster.

The Argentine case suggests two conclusions. First, macroeconomic policies, monetary and fiscal, were certainly incompatible. As many times before, belief in rational behaviour of policy makers — taking account of the limits on the monetary side — was a misbelief. The state retained too much discretion to do the wrong things. Second, a parallel failure did not give Argentina strong political institutions — as opposed to strong political leadership — that could survive changes in leadership or in political outlook. The concentration of power that Carlos Menem used so masterfully in his first presidential term led to a quasi–dictatorial situation and political stalemate in the second term, culminating in the chaos of the post–Menem period.

The most visible evidence that property rights in Argentina were not secure came to light only after the end of the Menem presidency. The impossibility of withdrawals from savings accounts above a certain limit and the devaluation of debt due to the abandoning of the dollar parity corresponded to a partial expropriation of savers and bondholders. That this was possible for the government in power shows how weak the limits on government actions really were. Thus, the initial and dramatic improvement in economic institutions could be — and later was — cancelled arbitrarily. One could hardly construct a more dramatic case for the need to limit the power of government.

This example also shows that reliance solely on policies for the quality of economic institutions can be misguided. While clearly they represent an important precondition for economic growth, they are not enough. The institutions themselves need protection by a strong and limited state. Therefore, the appropriate political institutions are key, to guard achievements on the economic side from misuse and mistakes by new or incumbent rulers. Reliance on a strong leader is not the same as strong institutions and seldom enough to protect short–run achievements from erosion. Rather, it poses the risk of falling back into the *caudillismo* that has bedevilled Latin America throughout its 200 years of independence.

The hope that economic success will breed the conditions for secure property rights and stable political institutions is not new. In the late 19th century, people thought that increasing trade links between the main powers would make any new war too costly and therefore impossible. World Wars I and II arrived nevertheless, shattering these hopes. In Argentina the new stability and success were not really rooted in safer political institutions and therefore not sufficient to mend the bad old ways of politicians. Are there other possible cases? China certainly comes to mind, with spectacular economic success only weakly grounded in the national political institutions. One can only hope that China will follow the example of the other East Asian Tigers rather than that of Argentina. Among them, political liberalisation and a strengthening of democratic institutions followed economic liberalisation. As long as the same does not happen in China, its economic achievements remain fragile. Political institutions to limit decisively the power of politicians and the bureaucracy must be put in place.

The strength of the state remains a bit harder to conceptualise and transform into policy recommendations. A state needs the capability to raise — in the least distortive manner — the revenue necessary to finance infrastructure, health and education services, all of which are beneficial to development and growth. The public finance literature teaches us that taxes administratively easy to raise are not necessarily less distorting. Tariffs and the even easier, favourite tax of weak governments, the inflation tax, come to mind. Printing money has always been the easiest way out of a budget impasse, but also the most damaging in terms of economic costs. Therefore, having a civil service not only honest but also with the capacity to perform complicated tasks such as raising enough revenue from direct taxes is of major importance. A capable and well–trained civil service also is less vulnerable to the temptations of office.

This study concludes — like others before it — that development policy needs to pay more attention to the institutional conditions for growth rather than to its pure mechanics. It has identified what the authors think are the key institutional factors for economic success. It has developed a number of indicators useful to monitor a country's actual development. The authors hope that both aspects are of some use in actual policy work.

Appendix: Data Sources

Data for GDP, initial GDP, investment, budget surpluses, the growth of neighbouring countries and ethnic fractionalisation, all come from Easterly and Levine (1997). Various sources originally.

Economic Institutions: Data for the black market premium come from *Picks Currency Yearbook*. Data for currency depreciation and for contract–intensive money (the share of M_2 in money holdings) are the authors' own calculations, based on the IMF's *International Financial Statistics*. The data for the state's creation and enforcement of institutions are from Knack and Keefer (1995) (originally from the *International Country Risk Guide*). The data for the default risk are from the *Institutional Investor*.

Political Stability: The data cover *1)* the number of assassinations per thousand population, *2)* the major cabinet changes, *3)* the major constitutional changes, *4)* the major government crises, *5)* the number of extra–constitutional or forced changes in the government elite and/or its effective control of the nation's power structure ("coups"), *6)* any illegal or forced change in the governmental elite, any attempt at such a change, or any successful or unsuccessful armed rebellion whose aim is independence from central government ("revolutions"), *7)* any systematic elimination by jailing or execution of political opposition within the ranks of the regime or the opposition ("purges"), as well as dummies for countries *8)* with genocidal incidents involving political victims or mixed communal and political victims, *9)* with war and *10)* with civil wars on national territories. All the data come from Easterly and Levine (1997) and are originally from Arthur Banks' Data Archive.

Democracy: Index from Jaggers and Gurr (1996).

Strength: Data for government revenues and direct taxes, both as share of GDP, come from Easterly and Rebelo (1993), originally from IMF, *Government Finance Statistics* (lines l81 and l81a).

Binding: Data cover the regulation, competitiveness and openness of executive recruitment, the degree of monocracy, the constraints on the chief executive and the regulation and competitiveness of political participation. Source: Jaggers and Gurr (1996).

Freedom of the Press: Principal components of six indicators provided by Humana (1986).

Openness: Data for openness to migrate from Humana (1986).

Gini: Data for Income distribution from Deininger and Squire (1996).

Legal Tradition and Religion: Data from La Porta *et al.* (1997, 1999).

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