

7 Political Stability and Economic Stagnation

Philip Keefer

THE WORLD BANK, WASHINGTON DC

and

Stephen Knack

UNIVERSITY OF MARYLAND

1 INTRODUCTION

The evolution of macroeconomic policies in Latin America since the early 1970s has been by any standard remarkable, even if in some countries observers are not entirely sanguine about the sustainability of the macroeconomic reforms. Only in a few countries, however, has growth matched the vigour with which governments have attacked macroeconomic distortions. Chile's average annual per capita growth of 10.6 per cent per year between 1985 and 1993 stands in stark comparison to Bolivia's growth rate of 0.9 per cent a year from 1989 to 1993.¹ Although both countries adopted similar macroeconomic policies over the period, growth in each has clearly followed distinct patterns. Nor is Latin America the only continent where the puzzling persistence of macroeconomic stability and slow growth still has to be understood. Ghana, for example, has generally followed sound macroeconomic policies since 1985, but its average per capita growth rate was only 2.6 per cent from 1984 to 1993. This might seem reasonable at first glance, roughly the same as industrialized countries over the period. However, the problem is precisely that at such a rate of growth, Ghanaian per capita income will not converge with income levels in industrialized countries.

Although these countries seem to have one of the necessary ingredients for growth – macroeconomic stability – others are apparently missing. We present evidence in this chapter that one of those missing ingredients is institutions that protect property and contractual rights. Without them, firms and individuals invest less, and bias their investment

decisions towards products and production processes that leave them less vulnerable to contractual renegeing or expropriation by the government. In such an environment, growth is slow, even if investors do not have to grapple with the problems of macroeconomic instability and distortion.² As North (1990, p. 54) puts it, 'the inability of societies to develop effective, low-cost enforcement of contracts is the most important source of both historical stagnation and contemporary underdevelopment in the Third World'.³

2 ESTIMATING THE ECONOMIC IMPACT OF SECURE PROPERTY RIGHTS

The theoretical connection between property rights and growth is uncontroversial. Moreover, there is evidence linking contract and property rights to narrower economic outcomes. Alston, Libecap and Schneider (1996), for example, show that giving titles to frontier land in Brazil adds value to the land and encourages investment. Libecap and Wiggins (1985) examine the issue of 'unitization', where production decisions related to oil extraction in an oil field are delegated to a single firm, thereby avoiding the overcapitalization and over-rapid extraction where an oil field is treated as a common pool. They find that government regulation in some states, reinforced by vested interests, can undermine recontracting to secure unitization. Greif (1993) has shown that medieval Maghribi traders had a comparative advantage in engaging in long distance trade because unique contract enforcement mechanisms were at their disposal.

Not surprisingly, because of measurement issues, the effect of property and contractual rights on country growth has resisted estimation. Efforts to measure the effect have relied in the past on the Freedom House (Gastil, 1987), civil liberties, and political freedom indices. These indices are evaluations of countries across many dimensions, including the freedom of workers to organize, and religious freedom, only some of which are related to the security of property rights. However, because the dimensions are aggregated into two indices, their interpretation is difficult.⁴ Others have employed measures of violent regime change, coups, and political assassinations.⁵ However, political instability measures directly neither the quality of the institutions that protect property rights nor the security of property and contractual rights. In addition, the phenomenon of insecure property rights extends far beyond the set of politically unstable countries.

We employ two measures from different sources of institutional quality and the security of property and contractual rights. Two independent international investor risk services, the *International Country Risk Guide* (ICRG) and the *Business Environment Risk Index* (BERI) separately evaluate dimensions of institutional quality such as bureaucratic quality and corruption, and of institutional outputs that bear on the security of property rights such as the rule of law, the risk of expropriation, and contract enforceability. We also provide preliminary evidence that countries with political institutions that constrain arbitrary behaviour by the executive do a better job of protecting the security of property and contractual rights.⁶

We use the first observations that ICRG and BERI have recorded for any country. For BERI, the vast majority of observations are from 1972, and for ICRG, nearly all observations are from 1982. Unlike the Freedom House indices, these two sources offer disaggregated ratings of different country characteristics that should affect the security of property rights.

Five of the ICRG variables are of particular interest. *Expropriation risk*, measuring the risk of expropriation, and *rule of law*, measuring whether established peaceful mechanisms exist for adjudicating disputes, are interpreted here as proxies for the security of property and contract rights. If countries score low on these, they are likely to suffer a reduction in the quantity and efficiency of investment in physical and human capital. As the probability increases that investors will lose the proceeds from their investment, or the investment itself, they channel their resources to activities that are more secure from the threat of expropriation – trading rather than manufacturing, for example – although they may be less profitable.

The risk of *repudiation of contracts by government* is another indicator of contract enforcement. It is likely that if private actors cannot count on the government to respect the contracts it has with them, they will also not be able to rely on the government enforcing contracts between private parties. Without impartial enforcement of contracts by the state, only ‘self-enforcing’ exchanges between private economic actors occur – those in which the benefits of compliance exceed the gains from cheating or renegeing. This restriction on economic activity severely limits the universe of possible Pareto-improving exchanges that would otherwise be undertaken. Repudiation also measures government credibility. Regimes in which officials have the power to modify or to repudiate contractual agreements unilaterally will be likely to be unconstrained in other ways. In particular, entrepreneurs are likely

to be suspicious about the institutional or other barriers that keep state officials from pursuing policies of confiscatory taxation (directly, or through inflation), or outright expropriation.

The remaining two ICRG variables used in this analysis are *corruption in government* and *quality of bureaucracy*. They are taken as proxies for the general efficiency with which government services are provided, and for the extent and damage of rent-seeking behaviour. When countries score poorly (low), it indicates that a bureaucracy lacks procedural clarity or technical competence and is likely to introduce criteria other than efficiency into the determination of government policies or the allocation of public goods. In particular, the bureaucracy is likely to award contracts, business and trade licences, police protection and so on based on criteria other than those of allocative and technical efficiency. In addition, bureaucracies where corruption is high or competence is low are less likely to provide a strong bulwark against infringements on property rights. The resulting distortions in investment and trade may reduce the quantity and efficiency of capital investment and foreign technology introduced into the country.

Theoretically, the use of corrupt allocation schemes in the political marketplace need not produce less efficient results than other forms of political allocation. However, in those countries where ICRG records high levels of corruption, entrepreneurs are also beset by greater uncertainty regarding the credibility of government commitments. That is, the same institutions that allow public officials to demand large and arbitrary bribes, such as failed law enforcement systems, also inhibit those officials from credibly pledging not to renege on their future commitments. This discourages investment and encourages forms of economic activity that are less vulnerable to expropriation.⁷

The measures from BERI that we used are *Contract enforceability* and *infrastructure quality*, *nationalization potential* and *bureaucratic delays*. The latter two parallel, respectively, the ICRG variables *expropriation risk* and *quality of bureaucracy*. The relevance of all the BERI variables is indicated by the foregoing discussion, with the exception of *infrastructure quality*. This variable allows some approximation to be made to the efficiency with which governments allocate public goods.⁸ Because of strong correlations among these separate indicators, with the consequent risk of multicollinearity, and in order to avoid omitting any of them from the equation, the five ICRG variables and the four BERI variables have been aggregated to form an ICRG index (*ICRG82*) and a BERI index (*BERI72*) of the security of contractual and property rights. Although the aggregation is accomplished

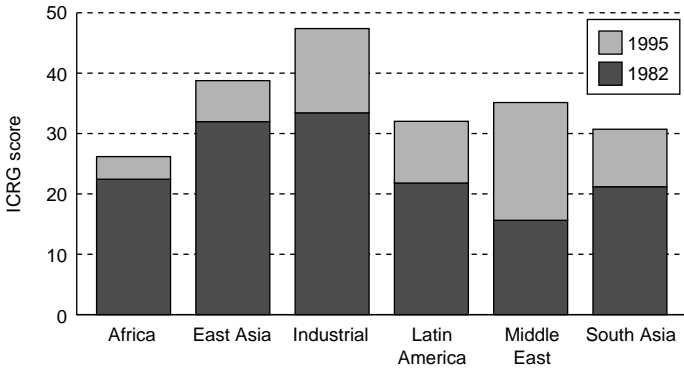
through simple addition, the results reported in Figures 7.1 to 7.3 do not change significantly when individual components of these indices are used, or when the indices are compiled with different weights.⁹ Higher values of the ICRG and BERI indices indicate better conditions for investment.

These variables convey considerably more information about the security of property rights in a country than do various measures of political instability. This can be seen by comparing Zambia, Malawi, France and Italy. Zambia scores 20 on the ICRG index and Malawi 25.6. Malawi averaged zero revolutions and coups per year over the period 1974–88, and 0.012 assassinations per million population per year. Zambia averaged 0.07 revolutions and coups over the period and zero assassinations. France and Italy have approximately the same scores for political violence as Zambia and Malawi – zero revolutions and coups and 0.006 assassinations in the case of France, and 0.07 revolutions and coups and 0.043 assassinations in the case of Italy. However, France, and Italy score 46.5 and 38.2, respectively, on the ICRG index, demonstrating more precisely the possibility of breakdowns in the relationship between instability and the inadequate protection of property rights.

3 A FIRST COMPARISON OF COUNTRIES

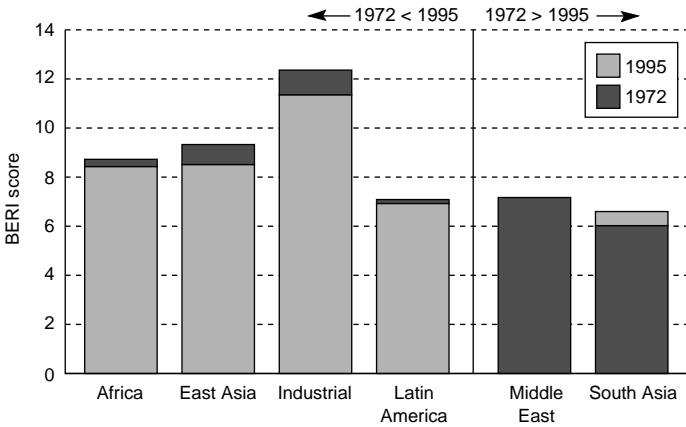
Figures 7.1 and 7.2 display averages of these variables across groups of countries and over time. Latin American countries in both indices exhibit significantly lower scores than the faster-growing East Asian and the richer industrialized countries. They compare, instead, much more closely with South Asian countries. African countries in the ICRG sample receive lower scores than the others. In the BERI sample, the African country group average is relatively high. However, there are only three Sub-Saharan African countries in the group: Kenya, Nigeria and South Africa, which are not representative of the other countries on the continent. Hence the relatively high scores for the African country group in the BERI sample.

The rankings of country groups have remained essentially unchanged over time, despite the apparent secular trend of ICRG evaluators to increase country scores. Only the sample of Middle Eastern countries appears to shift its position in an upward direction. This confirms the intuition that political, economic and legal institutions that determine whether a country protects the security of contractual and property



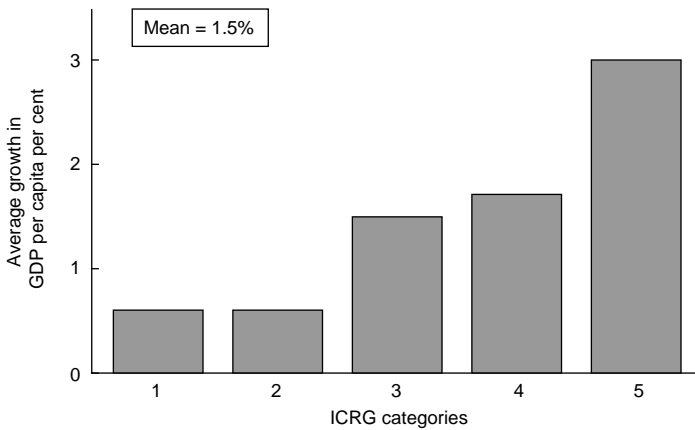
Source: authors' computation.

Figure 7.1 Comparing the security of contract and property rights: ICRG sample



Source: authors' computation.

Figure 7.2 Comparing the security of contract and property rights: BERI sample

*Note:*

In order to derive the ICRG categories, countries were divided into quintiles according to their ICRG index scores. 1st quintile/category 1: 0–15; 2nd quintile/category 2: 15–22.5; 3rd quintile/category 3: 22.5–27; 4th quintile/category 4: 27–42; 5th quintile/category 5: 42–50.

Figure 7.3 Average growth in GDP per capita, 1969–90

rights or not change only slowly over time. Moreover, they do not necessarily rise with improvements in macroeconomic policy, as the relative stability of the scores of the Latin-American country groups in the two samples demonstrates.

Figure 7.3 groups countries according to their 1982 scores on the ICRG index, and indicates the average growth in GDP per capita of the different groups from 1969–90. The average growth of countries in the sample was 1.5 per cent per year. However, those with the highest institutional scores grew twice as fast as this, while those with the lowest scores grew less than half as fast, on average. The question, of course, is whether other country characteristics, such as a country's level of education and income per capita, are responsible both for high levels of growth and secure property rights. The analysis in the sections following rejects this hypothesis.

4 ESTIMATING THE GROWTH EFFECTS OF PROPERTY AND CONTRACT RIGHTS

We use the following growth equation, following Barro (1991) and many others, to estimate the contribution of the ICRG and BERI variables to country growth:

$$GR7489 = \alpha + \beta_1 GDP60 + \beta_2 SEC70 + \beta_3 PRIM70 + \beta_4 GOVCONS + \beta_5 Institutions + \beta_6 PPI60DEV + \varepsilon_i \quad (1)$$

Here, growth is a function of initial income,¹⁰ secondary and primary school enrolment in 1960, the percentage of government consumption in GDP, one or other of the measures of the institutional environment, and the magnitude of the deviation of the Summers and Heston investment deflator (USA = 100) from the sample mean.¹¹ A country's initial income enters the equation for several reasons: first, to control for the possibility that richer countries can afford better security for property and contractual rights; second, because poorer countries, with less capital and lower levels of technological advancement, should exhibit higher rates of return on capital and lower-cost access to technology than wealthier countries – the sources of the 'convergence' effect. The presence of education variables requires little explanation. Government consumption is a proxy for the extent of government intervention in the economy, which Barro (1991) and others have suggested might represent a drag on growth. Finally, the investment deflator accounts for the possibility that countries facing higher prices for investment goods may grow more slowly.

In this model, the ICRG or BERI indices replace revolutions and coups, or assassinations, used by Barro and others. Many of the country characteristics expected to affect growth, such as education and the institutional environment, should do so both directly and through their influence on rates of factor accumulation. Since it is the gross effect of institutions that interests us, we omit factor accumulation (capital and labour) variables here, as in Barro.

It is possible that richer governments offer greater institutional guarantees to property and contract rights, leading to an element of reverse causation – growth improving property rights, and not only property rights improving growth. To mitigate this issue, we not only control for initial income, we also choose a later period of growth – 1974–89; the BERI index is observed at the beginning of this period, although the first observation on the ICRG is not made until the middle of the period.

Table 7.1 Economic growth, 1974–89, institutions

	<i>Equation 1</i>	<i>Equation 2</i>
ICRG 1982	0.092 <i>3.4</i>	
BERI 1972		0.38 <i>2.11</i>
GDP 1970	-0.69 <i>-4.1</i>	-0.69 <i>-3.52</i>
Secondary enrolment 1970	5.05 <i>3.3</i>	4.05 <i>2.08</i>
Primary enrolment, 1970	-0.53 <i>-0.62</i>	0.6 <i>0.35</i>
Government consumption, 1974–89	-4.29 <i>-1.05</i>	-2.97 <i>-0.49</i>
Investment prices	-0.9 <i>-2.3</i>	-0.71 <i>-1.49</i>
Intercept	0.25 <i>0.24</i>	-0.98 <i>-0.55</i>
R ²	0.29	0.35
N	97	46

Note: Numbers in italics are t-statistics.

Source: Knack and Keefer (1995) tables 2 and 3.

5 EMPIRICAL RESULTS – THE EFFECT OF SECURE PROPERTY RIGHTS ON GROWTH

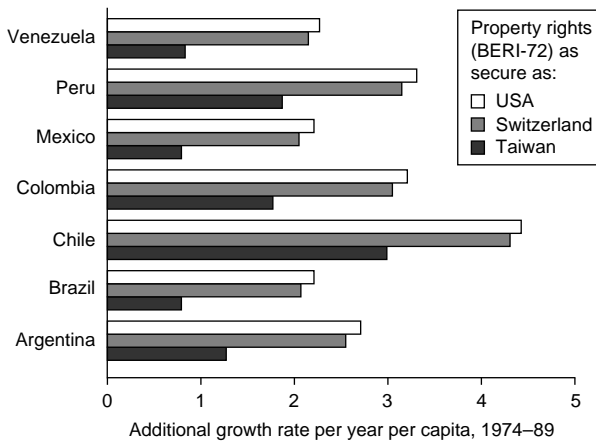
The two regressions in Table 7.1 illustrate the growth effects of the indices constructed from the ICRG and BERI country evaluations, after controlling for other country conditions. The coefficients on the two indices are statistically significant, and, more important, their magnitude is economically meaningful. An increase of one standard deviation in the ICRG index, approximately 12 points on the 40-point scale, or the difference between the scores of Honduras (15) and Costa Rica (27), or between Argentina (25) and Italy (38) increases growth rates by more than 1.2 percentage points. This influence is as great as that of secondary school enrolment. The effect of the BERI index on growth is about half as significant, economically, as the ICRG index, an amount that is still notable.

Another important indication of the importance of institutions is their

impact on the coefficient on initial income. As Keefer and Knack (1995) argue, the natural advantages that poor countries have in growing faster than wealthier countries – higher returns to capital and lower cost access to technological advances already developed in more developed countries – are less likely to be realized when institutions are poor. The inclusion of the institutional variables raise both the magnitude and statistical significance of the coefficient on *GDP70*. The absolute value of the coefficient on *GDP70* rises from -0.4 without the institutional variables, to -0.692 with *ICRG82*. In the equations in which *BERI72* is inserted, the coefficient on *GDP70* rises from -0.5 to -0.694 . These results support the hypothesis that the convergence of incomes per capita among countries depends on institutions (a point developed at much greater length in Keefer and Knack, 1995).

These results are robust to a number of alternative specifications. The institutional variables are statistically and economically significant in growth regressions that included rates of factor accumulation (investment and labour force growth); that delete OPEC members from the 1974–89 period regressions; and that employ the log of initial income.¹² In addition, the two indices remain significant even after controlling for such policy-related variables as the black-market premium on foreign exchange, and trade intensity (Keefer and Knack, 1995). This suggests that the institutional indices employed here are not simply proxies for the quality of economic policy management in countries. This is a notable finding, which explicitly supports the notion that management of macroeconomic policy instruments is a necessary but not sufficient condition for economic growth, a point that, although it is usually not disputed, is often neglected.

The coefficients on the institutional variables were somewhat lower when investment was included. This is to be expected; one way that insecure property rights hinder growth is by deterring investment, an effect that is captured by investment itself when it enters the regression. Keefer and Knack demonstrate that both the *BERI* and the *ICRG* indices have a strong effect on investment, which is significant both statistically and economically. However, it is noteworthy that the institutional variables were still significant, even in the presence of an investment term. This suggests that institutions measured by the *BERI* and *ICRG* indices matter not only because secure property rights encourage fixed investments, but also because they encourage the efficient allocation of factor inputs. In response to expropriatory threats of one kind or another, entrepreneurs not only reduce investment, they also invest in less specialized capital (human and physical), which can be



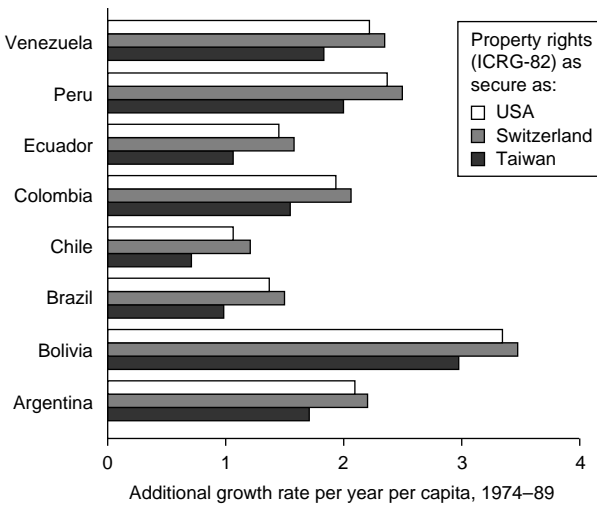
Source: Authors' computation.

Figure 7.4 Latin American growth with different institutions (BERI)

moved more easily from one activity to another. This has static efficiency effects, but also discourages dynamic gains from innovation, since innovation is most likely to thrive when specialization is encouraged.

6 LATIN AMERICAN EFFECTS

Figures 7.1 and 7.2 demonstrated that Latin American group averages for the security of property rights were significantly worse than those of the industrialized and East Asian countries, and approximately the same as those in South Asia. Figures 7.4 and 7.5 indicate how important these differences are for the growth of different individual Latin American countries. The question answered by the figures is: how much faster would these countries have grown if their state institutions had provided the same protection to property and contractual rights as the USA, Switzerland or Taiwan, while holding constant levels of initial income, education, and investment prices? The 1972 values of the BERI index are substituted in Figure 7.4. The figures show that Peru, Colombia and Argentina would have grown by nearly 3 percentage points a year faster than 1974-89. Chile is somewhat anomalous, since 1972 was just before the Pinochet overthrow of the Allende regime.



Source: Authors' computation.

Figure 7.5 Latin American growth with different institutions (ICRG)

The 1974 ratings for Chile were already much higher, however, indicating the rapidity with which the Pinochet regime consolidated authority. Figure 7.5, using ICRG data, again shows institutions to have a big impact on growth. Since these data are taken from 1982, among the countries in the sample Chile is, as one would expect, closest to Taiwan or the USA in the security it offers property and contractual rights. They show that Peru, Colombia and Argentina would have grown nearly 3 percentage points a year faster from 1974–89. Figure 7.5 makes the same point with the ICRG index. Although the magnitude of the effects is somewhat less, the relative performance of countries changes little.

Keefer and Knack demonstrate that these results are not driven by different levels of political instability. When political assassinations and coups are controlled for in the growth regressions, the ICRG and BERI coefficients retain their statistical and economic significance. Instead, there is an underlying level of protection of property rights that varies across these countries, independently of the explicit levels of political instability that they confront.

This is not meant, however, to argue that political instability is irrelevant. Nevertheless, two circumstances are likely to be important in

determining whether political instability is damaging to economic growth. One of these is that new leaders face few restraints on their efforts to reap the rewards of office. The second is that the likelihood of lasting many years in office is low. Under these circumstances, there may indeed be large amounts of explicit and implicit expropriation associated with political instability.¹³

7 WHAT ARE THE INSTITUTIONS THAT PROTECT PROPERTY AND CONTRACT RIGHTS?

The BERI and ICRG indices capture those features of countries that directly affect the security of property and contractual rights: expropriation obviously threatens these rights directly, and low bureaucratic quality or corruption indicate greater discretion on the part of officials to devalue privately-owned assets. The findings reported in the foregoing sections, that the characteristics of countries matter greatly for growth, lead to a second and more difficult question, the origin of secure property rights. Clague *et al.* (1996) investigate the role of political structure and regime duration. Here, a related theme is pursued briefly: that institutions that restrain the executive branch of a country also serve to protect property rights.¹⁴

The institutions that lead to secure rights can be both formal and informal. In the American political tradition, formal checks and balances arise from the existence of independent legislative, executive and judicial branches. Political parties working within appropriately structured electoral systems can also impose checks on leaders, generally when the cost of deposing unsuccessful party leaders is not too high. Less formal institutions can also constrain executives. These could include business–government consultative groups, as observed in some East Asian countries (World Bank, 1993), which create a mechanism of repeated interaction that make implicit agreements between private owners of assets and government officials self-enforcing.

The available cross-country evidence on institutional limitations of executive discretion captures only some of the possible constraints, and in particular it is insensitive to variations across countries in the degree to which hard-to-observe informal institutions are present. We used data from the Polity II data set on executive constraints (Gurr, Jagers and Moore 1989). This variable, ranging from 1 to 7, is lowest when executives have unlimited authority – there are no formal and regular limitations on the executive’s actions and rule by decree is

Table 7.2 Executive constraints and property rights

	<i>BERI</i> 1986–94	<i>BERI</i> 1986–94	<i>ICRG</i> 1986–95	<i>ICRG</i> 1986–95
Executive constraints 1974–86	0.22 <i>2.4</i>	0.14 <i>1.5</i>	1.8 <i>5.2</i>	1.5 <i>4.6</i>
Income per capita 1980		0.0003 <i>5.78</i>		0.002 <i>8.9</i>
Log income per capita 1980	1.3 <i>5.2</i>		6.16 <i>8.3</i>	
Intercept	-5.2 <i>-2.7</i>	4.4 <i>10.7</i>	-20.7 <i>-3.9</i>	21.6 <i>1.2</i>
Adjusted R-square	0.56	0.6	0.68	0.7
N	47	47	107	106

Note: *t*-statistics in italics.

Source: Authors' computation.

repeatedly used. The variable is highest when a legislature (for example) initiates most important legislation.

In this very preliminary investigation of the determinants of property rights, we examine the effect of executive constraints on the two measures of the security of property rights from BERI and ICRG, controlling for two different specifications of income, as shown in Table 7.2. In all but one of the four specifications, the average value of executive constraints from 1974–86 was a statistically significant determinant of the property rights variables. However, executive constraints, as measured by this variable, are clearly not the entire explanation for the security of property rights. For example, a one-point increase in the executive constraints variable would increase the value of the ICRG index by only 5 per cent of the Latin American country average.

Although the economic impact of the executive constraints variable is modest, these results are nevertheless encouraging. This variable does not take into account constraints imposed on the executive branch by powerful and well-trained bureaucracies: for example, those in East Asian countries. These same countries tend not to score well on the executive constraints variable, which suggests that the omitted institutional variables would bias the empirical results towards a rejection of the hypothesis. Moreover, formal executive constraints are useful only to the extent that some of the potential checks on the executive would oppose expropriatory actions. Depending on the method by which

legislators are chosen, and the preferences of their electorates, formal checks need not constrain the actions by the executive branch that threaten the security of property rights. These country characteristics are also omitted from the executive constraints variable.

8 CONCLUSIONS

Among Latin American countries, only Chile has managed to ignite sustained and rapid growth with significant macroeconomic reform. Other countries of the region – Bolivia perhaps most strikingly – have seen their growth objectives largely frustrated, even after correcting significant macroeconomic distortions. The evidence in this chapter suggests that Chile has been remarkable in another respect – that is, in the significant protection it has conferred on property and contractual rights. Evidence from two different samples of countries and two different measures of the extent of protection of these rights suggests that they have a large impact on growth. From these regressions, using the 1982 ICRG index of the security of these rights, it appears that because Chile had more secure property and contractual rights, its economy grew at least 1 per cent per year faster than those of Peru, Argentina, Bolivia, and Venezuela from 1974 to 1989.

The sources of secure property and contractual rights are less clear. Early evidence presented here shows that formal institutions that constrain the executive have a statistically significant and positive impact on property rights. However, the variable measuring executive constraints offers only a very partial explanation of the extent to which property rights are protected. Richer information on formal institutional constraints on the executive, as well as more data on the nature of informal constraints, will be crucial components of future research in this area.

Notes

1. Immediately after its macroeconomic reforms, Bolivia grew at more than 15 per cent per year from 1968–88. However, this did little more than allow the country's per capita income to recover from five consecutive years of negative growth. Chilean growth was closer to 12 per cent over the shorter period of 1989–93.
2. The case made in the sections below relies heavily on Keefer and Knack

(1995), with some reliance as well on Keefer (1994). Others, particularly Borner, Brunetti and Weder (1995), have reached similar conclusions, using a 1990–1 variable on the credibility of the government.

3. See also Olson (1982) and Weingast (1993).
4. For example, Kormendi and Meguire (1985), Grier and Tullock (1989), and Scully (1992). The Freedom House (Gastil, 1987) indices are also used more broadly as democracy indicators.
5. Barro (1991) and DeLong and Summers (1991) are among those who use measures of violent regime change (revolutions and coups) and political assassinations as partial determinants of a country's steady-state level of income. Keefer and Knack compare these measures to two of the measures used in this chapter.
6. In other work, Clague, Keefer, Knack and Olson (1995) demonstrate that 'contract-intensive money', the ratio of the non-currency component of M_2 to total M_2 is also a significant predictor of investment.
7. The predominance of trading as the object of most new entrepreneurial effort in Russia during the transition is likely to be caused by not only the high returns to trading, but also by the low returns to other forms of economic activity that are driven down by riskiness of investments and the difficulty of making credible deals with corrupt government officials.
8. Poorer countries are likely to score lower on this measure. The correlation coefficient for 1972 values of the infrastructure variable and income per capita in 1970 is 0.87.
9. For example, weighting by factor scores generated from factor analysis yields scales correlated at 0.99 with the simple additive indices for ICRG and BERI.
10. Other research has employed the log of initial GDP. The regressions reported below, employing initial GDP, were also run with the log of this variable. In nearly all cases the qualitative findings, that the institutional variables add significant additional information that explains growth, remain unchanged.
11. These regressions were also run using the original Barro (1991) period of 1960–85. The results were similar in all respects. The institutional variables performed better, in terms of both statistical significance and economic impact, than the political violence variables. Moreover, the coefficients on initial income (*GDP60*) exhibited the expected increase in statistical significance and magnitude when the institutional variables were added, suggesting once again that the institutions that protect property rights are key determinants of the steady state of income that conditions rates of convergence.
12. Clague, *et al.* (1996) find that dictators do a poorer job than democracies in protecting property rights, but that the difference is most marked for dictators who survive in office only a short time.
13. Much of this discussion is taken from Keefer and Knack (1995).

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