

## 4 *Coalition politics and economic development*

### *Mechanisms*

Credible constraints improve national economic performance. Statistical analysis of cross-national data for over 100 developing countries presented in the last chapter shows that constraints against policy change reduce the volatility of growth and increase its mean level. Thus, in the presence of such constraints, growth is both higher and more stable. And this result is robust to controlling for other factors that explain economic growth, as well as for democracy. Indeed, when we limit our investigation to those countries that have a deep experience with democratic rules for choosing leaders, the existence of coalition government still proves to be an important determinant of economic performance. But, why?

The causal mechanism implied by the theoretical framework presented in Chapter 2 is that credible constraints against policy change encourage private economic actors to engage in increased investment activity because they do not have to worry that the government will change policies arbitrarily, unilaterally, or drastically. That is, the argument posits a strong status quo bias on the part of private economic actors, an assumption supported by previous research (Aizenman and Marion 1999; Bechtel and Füss 2008; Henisz 2002; Jensen 2006). The findings presented above are consistent with the major empirical implications of the theoretical framework: if investors fear policy uncertainty, and if the dispersion of policymaking authority across multiple actors reduces such policy uncertainty, then investors should invest more in the presence of such credible constraints against policy change, and national economic performance should improve. The basic hypothesis – that credible constraints improve national economic performance – is borne out by my statistical analysis. But thus far I have offered no evidence to support the implied causal mechanism. Even if it is true that credible constraints improve national economic performance as documented above, how can we be sure that the effect is because of their effect on economic actors' propensity to save capital

rather than consume it, and to invest their savings in the economy rather than flee the state in search of better prospects?

This chapter tests the causal mechanisms of the theoretical framework. Two questions are at the center of its focus: does uncertainty reduce economic actors' proclivity for future economic activity? And do credible constraints against policy change reduce such uncertainty enough to encourage greater investment in the economy? I use two different types of data in this chapter in an effort to provide as convincing evidence as possible in favor of the argument. First, I use a new set of business enterprise surveys conducted by the EBRD and World Bank which allows me to get at firms' assessments of the business environment and the role uncertainty plays in shaping their behavior. Second, having established that firms do take policy uncertainty into consideration in deciding whether or not to increase their investment in the economy, I merge my data on credible constraints with the World Bank survey data, which allows me to show that certain credible constraint institutions reduce the type of uncertainty most damaging to investment activity. Finally, I return to the cross-national data set to demonstrate that credible constraints do in fact increase savings and investment across the developing world. Taken *in toto*, the results of the analyses presented in this chapter offer strong support for the causal mechanism posited by my theoretical framework.

### **Firm-level evidence on policy uncertainty and investment behavior**

Is policy uncertainty as great an obstacle to economic activity as political economists typically posit? Theoretically the negative link between uncertainty and economic activity is well-understood. Economist Joshua Aizenman and his colleagues have investigated in considerable detail the consequences of irreversibilities in investment. Irreversibility refers to the fact that for any given investment there is some portion that cannot be retrieved if things go sour (sometimes called "sunk costs"). The greater the irreversibility of investment, the greater the premium on policy certainty – investors are understandably risk-averse and require strong assurances from governments that policies are unlikely to change and that their investments will be protected. In the absence of such assurances, or if such assurances are deemed incredible, investors will likely forego the opportunity unless the potential

returns are so high as to make the higher risk worthwhile. What this means is that, for any given level of risk, there exist some potential investments that are not realized if the expected returns do not make the risk worth taking. For capital-scarce developing countries, such “wasted” investments can hardly be afforded.

While numerous scholars have argued thusly that policy uncertainty is bad for investment, evidence for such arguments has typically come from cross-national statistical analyses of the kind I presented in the previous chapter. The archetypical example of this type of research comes from Wharton economist Witold Hennisz. Hennisz constructs measures of policy uncertainty by taking the standard deviation over time for a series of government policy indicators. The greater the variance of a given policy over time, the higher the uncertainty of its future direction. He then correlates policy uncertainty thus measured with private investment, and finds robust support for the claim that private investors are deterred by greater policy uncertainty (Hennisz 2002).

While such evidence is very useful (and indeed I will provide similar tests later in this chapter), one would ideally want to provide some evidence a little closer to the actual actor in such theories – the firm. National-level outcomes result from the aggregation of behavior by thousands upon thousands of individual firms. Studying these firms cross-nationally in sufficient numbers to provide a systematic test of the argument is virtually impossible for the individual scholar, but, fortunately, the desire for such firm-level information has led multinational financial institutions such as the World Bank to gather it in recent years and to make those data available to researchers. In this section, I analyse the 2002 and 2005 waves of the EBRD-World Bank’s Business Enterprise Surveys to see if I can find firm-level evidence to support the causal mechanisms I have posited in my framework (EBRD-World Bank 2005).

Since 1999, the EBRD and World Bank have conducted a comprehensive survey of firms across over sixty developing countries. This endeavor built on earlier attempts in the late 1990s to survey firms in individual countries, but starting in 2002 the EBRD and World Bank made the important decision to have a common core of questions administered across countries, enabling researchers to engage in cross-national research. The countries in which such surveys are conducted are spread across all continents, though they tend to be concentrated among the larger and more important economies in their

regions. Within each country, a random sample of firms is drawn from which survey responses are solicited.<sup>1</sup> The size of the firm sample from each country varies, from a low of seventy-nine in Eritrea in 2002 to a high of 1,827 in India in the same year, though most countries have between 250 and 1,000 firms surveyed. For each firm, the goal is to have the survey completed jointly by the managing directors, accountants, and human resource managers, and respondents are guaranteed confidentiality in exchange for their participation. Finally, the stated goal of the survey is to gather data on business perceptions of the business climate in their country with the object goal of offering the government policy advice about how to make the country more business-friendly.

My first goal is to use the surveys to shed light on how policy uncertainty affects business plans to increase their economic activity. The core questionnaire contains two questions about different types of policy uncertainty that are “investment climate constraints to the establishment.” The first asks firms whether “economic and regulatory policy uncertainty” is an obstacle for the “operation and growth” of the respondent’s business. The second asks firms if “macroeconomic instability (inflation, exchange rate)” is a problem.<sup>2</sup> Distinguishing between types of uncertainty is important for my purposes because it allows me to separate the types of uncertainty over which governments are more directly influential (economic and regulatory policy uncertainty) from macroeconomic uncertainty, which while governments can certainly affect is also a function of broader economic conditions at home and abroad. On both questions, about one-third of firms respond that uncertainty is a major or severe obstacle to their operations and growth

<sup>1</sup> Mostly the EBRD and World Bank draws a simple random sample of registered firms within each country, though they also use stratified random samples in some countries to ensure representativeness of the overall sample. There is a slight over-sample of large firms since most countries have many more small and medium-sized establishments. However, since the costs of uncertainty should be most keenly felt by smaller firms, this slight sampling bias should militate against my hypothesis, if anything. For more details on the conduct of these surveys, see the Bank’s online FAQ page ([www.enterprisesurveys.org/Methodology/](http://www.enterprisesurveys.org/Methodology/)) or the EBRD website ([www.ebrd.com/country/sector/econo/surveys/beeps.htm](http://www.ebrd.com/country/sector/econo/surveys/beeps.htm)).

<sup>2</sup> The exact question wording is: “Please tell us if any of the following issues are a problem for the operation and growth of your business. If an issue poses a problem, please judge its severity as an obstacle on a four-point scale where: 0 = No obstacle; 1 = Minor obstacle; 2 = Moderate obstacle; 3 = Major obstacle; 4 = Very Severe Obstacle.”

prospects, while a two-thirds majority characterize such uncertainty as either not a problem at all or as a moderate problem at worst.

Armed with these two questions to tap perceptions of uncertainty, I turn to the data, which I've pooled across multiple years of the survey, to construct a measure of firm decisions to investment in new capacity. In particular, I seek a question that captures business plans to grow their firms in the near future. Unfortunately, options are limited in this regard since the survey asks very few prospective questions, but there is a question about whether the firm has opened a new establishment within the past three years. Unfortunately even this question is not asked of all countries, but it is asked to over 5,000 firms across twelve countries, making it quite sufficient for an initial test of the claim that uncertainty reduces business incentives to take potentially productive risks.

Table 4.1 presents the results from a logit analysis in which the dependent variable is whether the firm opened a new establishment in the past one to three years. The main independent variables capture the two main types of uncertainty. I add to the model controls for the size of the firm in terms of its number of employees and also the share of the national market for its main product that it claims to control, whether it is an exporter (since such firms typically enjoy a privileged position in the economy and might be suspected to be insulated from policy uncertainty), the overall level of economic development in the country as measured by its GDP per capita, and its level of democracy as proxied by its Polity score. I include the country's democracy score not because of any *ex ante* expectation that democracies are more or less likely to encourage new business activity, but to ensure that the uncertainty variables do not spuriously pick up a "regime type" effect. Lastly, since this is a fairly sparse model, I include also a set of country fixed effects to capture any unobserved and unmeasured heterogeneity across countries.

The logit results support the contention that policy uncertainty makes firms less likely to invest in new capacity, even after controlling for the firm's size and performance and for the country's level of economic development and democracy. Interestingly only policy uncertainty appears to matter for new business activity; macroeconomic uncertainty is not statistically significant in spite of the large sample size. As expected, larger firms are more likely to expand their capacity, as are exporters, which reflects the increased participation in the world

Table 4.1 *Uncertainty reduces future economic activity*

DV: plan to open a new establishment in next three years			
	$\beta$	Std. Err	p-value
Regulatory uncertainty	-0.55	0.23	0.02
Macroeconomic uncertainty	0.12	0.19	0.53
Firm size	0.41	0.12	0.00
Firm national market share	-0.001	0.003	0.66
Firm is an exporter	0.30	0.14	0.03
Country GDP per capita (Log)	-0.21	0.04	0.00
Country polity score	-0.08	0.01	0.00
Country fixed effects		Yes	
No. of observations		3454	
No. of countries		12	
% Correctly predicted		95	

*Note:* Logit model of intention to open a new establishment within next three years. Standard errors are corrected for clustering by country. Countries in estimation sample are Cambodia, Ecuador, El Salvador, Guatemala, Honduras, Mali, Nicaragua, Philippines, Syria, Tanzania, South Africa, and Zambia.

economy by developing countries over the past decade. Firms located in richer countries are less likely to have opened a new establishment recently, which likely attests to the fact that barriers to entry in more developed economies are going to be higher. Finally, firms in democracies are also less likely to have expanded capacity, though this effect is very small.

How large is the effect of uncertainty on the probability a firm will open a new establishment? To find out, I hold the other variables in the model at either their mean or modal values, but allow the regulatory uncertainty variable to take different values. When economic and regulatory policy uncertainty is low, the probability of a firm opening a new establishment is approximately 19%, but this drops to 12% when uncertainty is high, a decline of over 40%. Given how rare it is for firms in developing countries to consider even the possibility of opening new establishments (of the almost 3,500 firms in the estimation sample, only 169 had opened a new establishment in the past three years), reducing the probability that they would do so by almost half is a heavy price to pay for higher policy uncertainty!

**Table 4.2 Credible constraints reduce firm uncertainty**

Sample: all developing countries				
Constraint	Regulatory uncertainty		Macroeconomic uncertainty	
	<i>Absent</i>	<i>Present</i>	<i>Absent</i>	<i>Present</i>
Coalition govt.	34.35%	29.57%	36.27%	25.62%
Divided govt.	33.94%	32.54%	35.47%	26.98%
Judicial indep.	32.38%	39.09%	34.77%	36.95%
CBI	40.69%	30.20%	45.44%	32.78%

  

Sample: democratic developing countries				
Constraint	Regulatory uncertainty		Macroeconomic uncertainty	
	<i>Absent</i>	<i>Present</i>	<i>Absent</i>	<i>Present</i>
Coalition govt.	50.44%	30.31%	49.76%	26.34%
Divided govt.	45.08%	32.69%	43.66%	27.43%
Judicial indep.	49.94%	37.89%	50.52%	33.61%
CBI	48.57%	38.16%	46.45%	41.93%

The firm-survey evidence thus supports the first part of the causal mechanism: higher uncertainty does act as a deterrent to potential investors. What about the second part of the argument? Is policy uncertainty lower when there exist credible constraints against policy change? Table 4.2 suggests that it is.

Across a much broader set of countries than was available for the first analysis (a list of countries is provided in Appendix C), the dispersal of policymaking authority to multiple actors results in a reduction in uncertainty in both the economic/regulatory policy and macroeconomic realms. The effect of such credible constraints is markedly stronger when we limit the sample only to democratic countries. For instance, among democracies, only one-third of firms in countries governed by coalition and minority parliamentary governments claim policy uncertainty to be a major obstacle while half of their counterparts in countries with other forms of governments say it is a problem. The same holds for divided presidential government, judicial independence, and central bank independence: in all these situations, the

Table 4.3 *Credible constraints reduce firm uncertainty*

DV: is regulatory uncertainty an obstacle?			
	$\beta$	Std. Err	p-value
Macroeconomic uncertainty	2.70	0.14	0.00
Firm size	0.06	0.04	0.14
Firm national market share	-0.002	0.001	0.16
Firm is an exporter	-0.03	0.07	0.68
Country GDP per capita (Log)	0.57	0.02	0.00
Country polity score	0.004	0.001	0.00
Minority/coalition govt	-1.99	0.02	0.00
Divided govt.	-0.27	0.04	0.00
Judicial independence	-0.01	0.03	0.61
Country fixed effects		Yes	
Year fixed effects		Yes	
No. of observations		11433	
No. of countries		38	
% Correctly predicted		81	

Note: Standard errors are corrected for clustering by country.

constraint against policy change succeeds in reducing the perceived risk of policy uncertainty.

Of course, these institutions are not mutually exclusive (other than minority/coalition parliamentary governments and divided presidential governments of course). That is, parliamentary governments, whether unified or coalition, could also benefit from having independent judiciaries or central banks that reduce policy uncertainty. To separate these effects, I include the credible constraints indicators together in a logit model where the dependent variable is whether the firm perceived policy uncertainty to be a major obstacle to its operations. Once more, I control for the firm's size and performance and for the country's overall level of economic development and democracy, as well as for the firm's response to the macroeconomic uncertainty question since the two types of uncertainty are likely to be heavily correlated. The full results from this model are reported in Table 4.3, but I focus my discussion on the effects of the credible constraint institutions on policy uncertainty.

Since I would expect non-exporting small firms in poor countries with hybrid regimes to be most prone to uncertainty (Kenyon and Naoi 2006), I give the other variables in the models values to generate such a country profile. Holding these constant, changing only the value of the credible constraint institutions is instructive. For instance, if such a country has a unified government and an independent judiciary, the probability of perceiving regulatory uncertainty to be a problem is 0.94. If we switch the profile so that the country is a divided presidential government instead, this predicted probability declines marginally to 0.92. But, when this hypothetical country is set to have a coalition or minority parliamentary government, the probability of perceived policy uncertainty drops to 0.68, a decline of twenty-six points. This provides clear support – at the firm-level across forty-three developing countries – for the main causal mechanism in my framework: credible constraints that prevent arbitrary policy change and encourage policy moderation instead reduce policy uncertainty for businesses, which in turn encourages them to engage in new economic activities that help grow the economy.

### **Credible constraints and domestic savings and investment behavior**

The World Bank firm-level surveys provide micro-level evidence that credible constraints encourage entrepreneurial behavior by reducing expectations of regulatory policy uncertainty. In this section of the chapter, I analyze country-level data to see if macroeconomic indicators tell a corresponding story. Two indicators are of particular interest: the level of domestic savings in the economy and the extent of capital flight out of the economy. Together, domestic savings and capital flight tell us why some countries engender confidence in citizens to save and invest their income in the economy while others encourage them to hedge against risk by locating their funds abroad beyond the reach of their governments.

#### *Domestic savings*

The importance of a government's ability to attract capital that can be used for investment purposes is well-recognized in the growth literature (Barro and Sala-i-Martin 1995). This recognition motivates the

considerable attention political scientists have paid to country's abilities to attract foreign direct investment (Ahlquist 2006, Biglaiser and DeRouen 2006, Jensen 2003, 2006, Li and Resnick 2003). The leading political science scholar of FDI, Nathan Jensen, demonstrates quite persuasively that democratic governments hold a definite advantage over their autocratic counterparts when it comes to attracting FDI. Jensen's explanation for this anticipates mine: he argues that democratic governments have more veto players in their structure, which allows them to commit more credibly to long-term policy stability and therefore to attract more foreign investment. His analysis thus supports my argument and I'll provide my own analysis of FDI data below, but first I focus on a comparatively neglected factor in capital generation for economic growth: domestic savings.

That political scientists have ignored domestic savings as an outcome-of-interest is perplexing given the prominent role it has played in theories of economic growth. For W.W. Rostow, the key determinants of a country's successful transition to the "take-off" stage of development was savings and investment's share of national income crossing the 10 percent threshold. More mature economies, he argued, were characterized by savings rates of 10–20 percent. Importantly, these savings should occur in the formal sector, via banks, so that the capital can be used for further productive endeavors. Thus, to borrow Rostow's evocative phrase, "Compound interest becomes built, as it were, into [a society's] habits and institutional structure" (Rostow 1971: 7).

Rostow's insight is conventional wisdom today; the World Bank, for instance, states that high domestic savings are "critical for economic growth and economic development." And the size of these savings in most developing societies dwarfs the size of FDI inflows. The median country in my data set saved 14.8% of its GDP, while the median level of FDI inflows was a mere 1.04% of GDP. The disparity is even greater at the high end: the 90th percentile for savings is 33.41% of GDP, while it is 5.89% for FDI. These facts are offered not to suggest that FDI is unimportant for developing country growth, but rather to make the point that domestic savings are at least equally, if not considerably more, so. Besides, to the extent that we are interested in identifying how domestic political institutions shape growth outcomes, one would expect that domestic savings should be relatively more responsive to local political considerations than are foreign capital investors.

To examine why some countries save a greater share of their national income than others, I examine two different indicators. The first is a measure of gross domestic saving compiled by the World Bank, which is the difference between total GDP and government and private consumption (World Bank 2006). The second is a measure developed by economists Mancur Olson, Philip Keefer, Steven Knack, and Christopher Clague, which they call contract-intensive money (Clague *et al.* 1999). The idea behind contract-intensive money is to see how much of the money in a country is held in the formal sector where it can be used for productive purposes. The original purpose of the measure was as an indicator for the strength of property rights, as Olson and his colleagues argued that states in which property rights were more secure would encourage citizens to put their money in the formal sector rather than hide it from public view. That purpose is consistent with the basic argument made here, but I use the contract-intensive money indicator as a signal of citizens' general confidence in the government, both in terms of property rights protections but also in terms of their confidence that future policy will not deviate dramatically from the present path.

I use the measures of gross domestic saving and contract-intensive money as dependent variables in regression models in which the primary independent variables are the credible constraint indicators described above. As in the analyses reported in the previous chapter, I estimate two versions of each model. In the first, I include all countries for which data are available and control for the country's overall level of democracy to ensure that the credible constraint indicators are not simply picking up a "democracy" effect. In the second version, I limit the sample only to those countries that were democratic for at least half the time period under investigation. The democracy variable itself has different expectations depending on the dependent variable being analyzed. Since forced savings and austerity programs are politically unpopular, one expects autocratic states to be more likely to "encourage" higher domestic savings rates, which is borne out by the high savings rates enjoyed by the less-than-democratic East Asian Newly Industrializing Countries in the 1960s and 1970s. Therefore, one expects a negative effect of democracy on domestic savings. In the contract-intensive money model, by contrast, democracy is expected to have a positive slope. Placing one's resources in the public sphere requires citizens to be confident that their money will be protected,

an expectation that tends to be higher in democratic societies (Clague *et al.* 1996, 1999).

In addition to the credible constraint and democracy indicators, all the models discussed in this section include a set of control variables identified in the relevant literatures. First, to distinguish between the effects of policy versus political instability, I include Banks's political instability index, which measures the frequency of destabilizing events such as riots, anti-government demonstrations, coups, and the like. Second, I account for the state of the economy by controlling for the country's overall level of development (GDP per capita), as well as the growth rate and inflation rate of the economy. The expectations here are that richer developing countries have higher rates of saving and contract-intensive money as do faster-growing economies as there is more surplus capital to be accumulated. Higher inflation on the other hand should encourage consumption as citizens fear their savings will be devalued. Third, I control for the level of fixed capital formation in the economy, as a proxy for the economy's level of industrial development. I expect this variable to be more relevant for the FDI and capital flight models to be discussed later in the chapter. Fourth, one might expect citizens to be more willing to save their money and locate it in contract-intensive activities if they do not have to worry about getting the money out of the economy should conditions change or worsen. Therefore, I include two indicators of a country's openness to the international economy, both of which I expect will encourage saving. The first is the Chinn and Ito (2006) index of capital account openness; the second is the country's overall level of trade openness. Fifth, I include two indicators of the country's overall creditworthiness. These are the level of financial liquidity in the economy, which I expect to be positively correlated with savings rates, and the level of debt service paid by the country, for which a similar expectation is held. Finally, the model includes a time trend to avoid any spurious correlations in the data. Table 4.4 reports the results of these regression models:

The results support the credible constraints argument, though the evidence is stronger with respect to the domestic savings models than it is in the contract-intensive money models. Consider the first two columns of Table 4.4 – the savings models – first. In both models, the effect of having a minority or coalition parliamentary government is large, positive, and statistically significant. Countries in which such

Table 4.4 Regression results: credible constraints and domestic savings

Dependent Variable	Gross domestic savings		Contract-intensive money	
	All LDCs	Democracies	All LDCs	Democracies
Minority/coalition govts	12.02 (4.29) <sup>0.01</sup>	7.50 (2.82) <sup>0.01</sup>	3.85 (2.76) <sup>0.17</sup>	1.27 (3.54) <sup>0.72</sup>
Divided presidential govts	0.77 (3.07) <sup>0.80</sup>	3.87 (2.33) <sup>0.11</sup>	-0.94 (2.38) <sup>0.69</sup>	0.33 (2.07) <sup>0.87</sup>
Independent judiciaries	1.22 (2.57) <sup>0.64</sup>	2.42 (2.07) <sup>0.25</sup>	5.39 (1.67) <sup>0.00</sup>	3.71 (1.63) <sup>0.03</sup>
Federalism	3.02 (4.59) <sup>0.51</sup>	5.57 (3.07) <sup>0.08</sup>	0.56 (2.79) <sup>0.84</sup>	1.69 (2.93) <sup>0.57</sup>
Central bank indep.	-1.25 (1.90) <sup>0.51</sup>	0.23 (1.83) <sup>0.89</sup>	2.84 (1.61) <sup>0.08</sup>	-1.56 (1.38) <sup>0.27</sup>
Democracy	-5.92 (2.56) <sup>0.02</sup>		4.36 (1.54) <sup>0.01</sup>	
Political instability	0.01 (0.23) <sup>0.95</sup>	0.13 (0.30) <sup>0.66</sup>	0.47 (0.22) <sup>0.04</sup>	0.21 (0.24) <sup>0.40</sup>
GDP per capita (Log)	8.28 (2.73) <sup>0.00</sup>	4.43 (1.22) <sup>0.00</sup>	3.85 (1.02) <sup>0.00</sup>	3.79 (0.83) <sup>0.00</sup>
Growth in GDP per capita	0.21 (0.27) <sup>0.44</sup>	0.36 (0.28) <sup>0.19</sup>	0.45 (0.21) <sup>0.04</sup>	0.42 (0.25) <sup>0.11</sup>
Inflation (Log)	-1.55 (1.01) <sup>0.13</sup>	-0.30 (0.86) <sup>0.73</sup>	0.10 (0.84) <sup>0.90</sup>	-0.61 (0.79) <sup>0.45</sup>
Fixed capital formation	0.27 (0.39) <sup>0.49</sup>	-0.45 (0.46) <sup>0.33</sup>	0.10 (0.18) <sup>0.57</sup>	0.11 (0.14) <sup>0.44</sup>
Capital account openness	0.32 (0.77) <sup>0.68</sup>	0.10 (0.77) <sup>0.89</sup>	1.03 (0.79) <sup>0.19</sup>	0.15 (0.69) <sup>0.83</sup>
Trade openness (% GDP)	-0.09 (0.07) <sup>0.17</sup>	-0.02 (0.05) <sup>0.71</sup>	.09 (0.05) <sup>0.06</sup>	0.05 (0.04) <sup>0.25</sup>
Financial liquidity (M2)	-0.08 (0.10) <sup>0.47</sup>	0.17 (0.12) <sup>0.18</sup>	0.02 (0.07) <sup>0.84</sup>	0.16 (0.09) <sup>0.09</sup>
Debt service (% exports)	0.07 (0.08) <sup>0.35</sup>	0.01 (0.07) <sup>0.86</sup>	0.09 (0.08) <sup>0.32</sup>	0.06 (0.06) <sup>0.40</sup>
Time trend	0.24 (0.43) <sup>0.58</sup>	-1.38 (0.63) <sup>0.03</sup>	0.30 (0.46) <sup>0.52</sup>	0.32 (0.57) <sup>0.59</sup>
Constant	-34.89 (8.77) <sup>0.00</sup>	-6.58 (8.06) <sup>0.42</sup>	32.29 (8.83) <sup>0.00</sup>	40.56 (7.55) <sup>0.00</sup>

Table 4.4 (cont.)

Dependent Variable	Gross domestic savings		Contract-intensive money	
	All LDCs	Democracies	All LDCs	Democracies
No. of countries	73	41	72	40
No. of observations	341	119	329	116
Root mean square error	12.29	8.01	10.04	0.06
R-squared	0.36	0.51	0.45	0.61

Note: Cell entries are OLS coefficients with standard errors corrected for clustering by country reported in parentheses and two-sided p-values superscripted

governments are more common have greater expectations of long-term policy stability and therefore citizens have greater confidence to save their money for the future rather than consume it in the present. This effect holds regardless of whether we control for whether the country is a democracy, or limit the sample only to democracies. Indeed, as expected, the democracy variable is negatively-signed and statistically significant. Overall, non-democracies are better able to encourage high rates of domestic savings, but the exception to this rule lies in coalition parliamentary governments! None of the other credible constraint indicators is found to have a statistically significant effect on domestic savings, and, of the control variables, just the level of GDP per capita matters.

The contract-intensive money model provides weaker support for a fine-grained version of the credible constraints story. As expected based on the prior research of Clague *et al.* (1999), the democracy variable is positively signed and statistically significant, which is consistent with the broader claim that democracies are in a stronger position to offer credible commitments to risk-averse agents. Of the other credible constraint indicators, only judicial independence emerges as a consistent and strong predictor of the level of contract-intensive money in the economy. Certainly this is consistent with my argument, since judicial independence does provide some check on arbitrary and radical policy change by governments, but it is also consistent with the Clague *et al.* argument that contract-intensive money responds to protections of property rights and the rule of law.

The basic argument made in this book is that certain political institutional configurations, by limiting governments' ability to make arbitrary and dramatic policy changes, bolster investors' confidence, leading to higher levels of savings and investment, and therefore to more stable and higher levels of economic growth. In this chapter, I have provided evidence that these institutions do affect the willingness of firms to undertake new productive endeavors and the overall savings rates in the society. Below I add the final piece of evidence to the picture.

*Easy come, easy go? capital flight and FDI inflows*

Attracting capital that can be reinvested in the economy can occur from within the economy by encouraging higher savings domestically. But in capital-scarce economies it is little wonder that governments often devote a greater share of their effort to attracting foreign capital in the form of foreign direct investment. Such FDI has an additional advantage beyond providing capital; it can also provide technology as domestic firms initially learn from and later mimic their foreign competitors. Such growth-enhancing technology diffusion can happen through multiple channels, of which foreign direct investment by multinational corporations (MNCs) is one of the most important. Due to the high costs of doing business abroad, "MNCs are among the most technologically advanced firms, accounting for a substantial portion of the world's research and development (R and D) investment" (Borensztein *et al.* 1998: 116). Foreign direct investment thus increases the prospect for growth in the host country by enabling technological diffusion through imitation on the part of domestic firms of the MNCs' technology and management practices and by providing an infusion of capital into the economy (Findlay 1978; Jensen 2003, 2006).

The obvious benefits of FDI have made it an attractive topic of study for political economists in recent years. But it is only one half of the capital flows story, for while we are accustomed to thinking of developing countries as simply recipients of developed country capital, the facts are that many developing countries are in fact net exporters of capital (Boyce and Ndikumana 2000; Cerra *et al.* 2008; Ndikumana and Boyce 2003). Capital flight, a process by which developing country capital is moved abroad in ways that cannot be tracked easily, denies

the originating country valuable productive capital for investment and economic growth. First, as has been long documented in numerous studies extolling the virtues of capital accumulation and productive investment for economic growth, high flight represents a “diversion of scarce resources away from domestic investment and other productive activities” (Boyce and Ndikumana 2000: 7). Second, capital flight has “pronounced regressive effects on the distribution of wealth” since political and economic elites are typically more able to acquire and stash monies abroad. However, “the negative effects of the resulting shortages of revenue and foreign exchange fall disproportionately on the shoulders of the less wealthy members of the society,” a situation which is exacerbated when the result of the financial imbalances is devaluation, as in such cases, the rich are protected by their external assets whilst the poor are extremely vulnerable (Boyce and Ndikumana 2000: 7–8). Given the speed at which capital can move, this has potentially devastating consequences for economies as was evidenced by the East Asian financial crisis of the late 1990s (MacIntyre 2003). Yet relatively little work, especially compared to the now voluminous literature on FDI inflows, has been done to this point to understand why some countries are more prone to such detrimental capital flight than others.

FDI inflows and capital flight are thus two sides of the same coin – money flows in and out of economies, and whether these resources produce economic growth depends on whether more money stays in than leaves. Yet scholars of these topics have tended to treat each by itself, rather than seeking a common framework to understand both FDI inflows and capital flight. From the perspective of this book, the key factor common to the literatures explaining capital flight and foreign direct investment is the role of policy uncertainty in shaping the decisions of private economic actors. Writing about capital flight, (Hermes and Lensink 2002: 3) state: “Capital flight is motivated by the fear of losing wealth due to, for example, expropriation of wealth by the government, sudden exchange rate depreciation, non-repayment of government debts, (changes in) capital controls and financial market regulations, and (changes in) tax policies.” And, (Schineller 1997: 11) writes, “the *credibility and perceived sustainability of government policy* underpin the motive to engage in capital flight” (emphasis mine). Where future policy is unpredictable risk-averse investors hedge their bets by choosing less irreversible forms of investment or by investing

abroad in more stable environments. Similar arguments are made by scholars of foreign direct investment. Thus, Jensen (2003) documents a positive relationship between democracy and foreign direct investment specifically, and argues that the relationship is linked to the ability of democratic governments to make credible promises to maintain *ex post* policy stability of market-friendly policies. Jensen argues that democracies enjoy this “credibility advantage” because of their increased transparency, accountability to the masses who benefit from higher growth due to foreign direct investment (audience costs), and higher numbers of potential veto points. Henisz (2000) and Stasavage (2002) similarly argue that political institutions that serve as checks and balances on each other increase the credibility of pro-business policies and of future policy stability and therefore increase the level of foreign direct investment entering the country and levels of private investment in the country respectively.

The argument developed in this book has much in common with the recent work on foreign direct investment done by Jensen, Henisz, and Stasavage. Like them, I argue that the configuration of a state’s political institutions enhances the credibility of future policy stability, which should make foreign investors more likely to invest there, *ceteris paribus*. Further, like these scholars, I argue that such credibility-enhancing institutions are more likely to be found in democratic states than in non-democratic states because of the potential for more checks and balances against arbitrary and unilateral policy change in such states. Unlike them, however, my argument also sheds light on why some countries experience less capital flight than others. Specifically, my framework suggests that credible constraints against policy change should reduce perceived risks for capital-holders and therefore lower capital flight.

To assess these arguments, I use data on FDI inflows from the World Bank, and construct a measure of capital flight. The latter requires some discussion since capital flight is notoriously difficult to measure, or even to define. The term has classically been used to describe widespread currency speculation that leads to cross-border movements of private funds of a large enough magnitude to affect national financial markets. More recently, scholars have argued that “capital flight should be distinguished from normal capital outflows” (Hermes and Lensink 2002: 3), but, because of the obvious difficulties involved in measuring furtive and sometimes illegal capital outflows,

have devised the so-called “residual” method to measure capital flight.<sup>3</sup>

The residual method is an attempt to measure capital flight indirectly by comparing the sources of capital inflows with the documented uses of these inflows. The sources typically considered are (1) the net increases in external debt and (2) the net inflow of foreign investment. The uses considered are (1) the current account deficit and (2) additions to foreign reserves. If the sum of these sources exceeds the documented uses of the capital inflows, the difference is termed capital flight. Capital flight can thus be calculated as:

$$KF_{i,t} = (\Delta ED_{i,t} + FDI_{i,t}) - (CAD_{i,t} + \Delta FR_{i,t}) \quad (4.1)$$

where, for country  $i$  in period  $t$ , KF is capital flight,  $\Delta$  represents period-to-period change, ED is the stock of external debt, FDI is the stock of foreign investment inflows, CAD is the current account deficit, and FR is the stock of official foreign reserves.<sup>4</sup>

Armed with these measures of capital flight and foreign direct investment inflows, I proceed to specify regression models similar to those used above. As in the savings and contract-intensive money models, the main covariates are the credible constraint and democracy indicators, and I control for political instability, economic performance and macroeconomic instability, capital account and trade openness, financial liquidity and debt service burdens, the level of fixed capital formation in the economy, and a time trend. The first models for each dependent variable utilize data from all countries; the second models utilize data only from those countries that were democratic for more than half of the five-year period that forms the basic unit of observation. Table 4.5 reports the results of the analysis.

The results reported in Table 4.5 strongly support the credible constraints argument. Democracy is positively signed and statistically

<sup>3</sup> See Hermes and Lensink (2002) for a detailed survey of the measurement of capital flight.

<sup>4</sup> There are some alternative specifications of the residual method. For instance, the Morgan Guaranty method counts the change in the short-term foreign assets of the domestic banking system as an additional use of capital inflows. (Boyce and Ndikumana 2000:17–18) utilize another variation to account for (1) “the impact of exchange rate fluctuations on the U.S. dollar value of the stock of long-term debt” and (2) “trade misinvoicing.” Lack of cross-national time-series data makes it impossible for me to calculate these variants.

Table 4.5 Regression results: credible constraints and international capital movements

DV:	Capital flight		Net FDI inflows	
	All LDCs	Democracies	All LDCs	Democracies
Minority/coalition govts	-3.59 (1.45) <sup>0.02</sup>	-4.46 (1.99) <sup>0.03</sup>	-0.84 (0.84) <sup>0.32</sup>	-0.31 (0.96) <sup>0.75</sup>
Divided presidential govts	-1.65 (3.25) <sup>0.61</sup>	0.53 (4.27) <sup>0.90</sup>	-0.51 (0.44) <sup>0.24</sup>	-0.66 (0.49) <sup>0.19</sup>
Independent judiciaries	-3.47 (1.93) <sup>0.08</sup>	-0.26 (1.61) <sup>0.87</sup>	0.58 (0.38) <sup>0.13</sup>	0.94 (0.58) <sup>0.11</sup>
Federalism	-4.34 (2.39) <sup>0.07</sup>	-8.58 (3.43) <sup>0.02</sup>	-0.21 (0.44) <sup>0.63</sup>	-0.67 (0.73) <sup>0.36</sup>
Central bank indep.	-0.86 (1.17) <sup>0.46</sup>	-1.42 (2.20) <sup>0.52</sup>	0.08 (0.22) <sup>0.73</sup>	0.11 (0.36) <sup>0.77</sup>
Democracy	2.63 (1.55) <sup>0.09</sup>		0.76 (0.44) <sup>0.09</sup>	
Political instability	-0.32 (0.15) <sup>0.04</sup>	0.17 (0.35) <sup>0.64</sup>	0.04 (0.04) <sup>0.23</sup>	0.03 (0.08) <sup>0.74</sup>
GDP per capita (Log)	-2.71 (0.74) <sup>0.00</sup>	-2.42 (1.10) <sup>0.03</sup>	-0.04 (0.18) <sup>0.81</sup>	0.08 (0.23) <sup>0.73</sup>
Growth in GDP per capita	-0.85 (0.24) <sup>0.00</sup>	-1.19 (0.47) <sup>0.02</sup>	0.05 (0.05) <sup>0.28</sup>	0.02 (0.07) <sup>0.78</sup>
Inflation (Log)	2.26 (2.53) <sup>0.38</sup>	4.17 (3.34) <sup>0.22</sup>	-0.04 (0.13) <sup>0.75</sup>	-0.23 (0.15) <sup>0.13</sup>
Fixed capital formation	0.32 (0.11) <sup>0.01</sup>	0.35 (0.18) <sup>0.06</sup>	0.07 (0.05) <sup>0.17</sup>	0.15 (0.07) <sup>0.03</sup>
Capital account openness	-0.04 (0.51) <sup>0.93</sup>	-1.37 (0.91) <sup>0.14</sup>	0.14 (0.13) <sup>0.29</sup>	0.12 (0.22) <sup>0.60</sup>
Trade openness (% GDP)	0.03 (0.02) <sup>0.03</sup>	0.02 (0.03) <sup>0.54</sup>	0.02 (0.004) <sup>0.00</sup>	0.03 (0.01) <sup>0.01</sup>
Financial liquidity (M2)	0.05 (0.06) <sup>0.45</sup>	0.20 (0.16) <sup>0.21</sup>	-0.01 (0.01) <sup>0.43</sup>	-0.05 (0.03) <sup>0.08</sup>
Debt service (% exports)	0.14 (0.06) <sup>0.02</sup>	0.09 (0.09) <sup>0.34</sup>	-0.001 (0.01) <sup>0.94</sup>	0.02 (0.02) <sup>0.24</sup>
Time trend	-1.11 (0.38) <sup>0.01</sup>	-0.36 (0.55) <sup>0.51</sup>	0.22 (0.11) <sup>0.04</sup>	0.51 (0.19) <sup>0.01</sup>
Constant	15.95 (7.35) <sup>0.03</sup>	-1.94 (9.86) <sup>0.85</sup>	-2.34 (0.99) <sup>0.02</sup>	-4.74 (1.99) <sup>0.02</sup>

Table 4.5 (cont.)

DV:	Capital flight		Net FDI inflows	
	All LDCs	Democracies	All LDCs	Democracies
No. of countries	73	41	73	41
No. of observations	332	119	341	119
Root mean square error	9.48	9.66	1.85	2.23
R-squared	0.25	0.42	0.34	0.43

Note: Cell entries are OLS coefficients with standard errors corrected for clustering by country reported in parentheses and two-sided p-values superscripted.

significant at the 0.10 level (2-sided test), which is consistent with previous research on capital flight and foreign investment (Cerra *et al.* 2008). But, strikingly, coalition parliamentary democracies experience much less capital flight than other political-institutional configurations. This result holds up even with the matching techniques discussed in the previous chapter. In a sample of developing country parliamentary systems, after matching, capital flight in the treatment group of coalition governments is 4.85 percent, while it is 7.47 percent in the control group. The opposite is true for the presidential systems where, after matching, divided governments have higher capital flight than unified governments. The key result thus holds in a series of models using different dependent variables and even sources of data: coalition governments in parliamentary democracies provide a credible constraint against policy change, leading to lower capital flight, higher domestic savings, and therefore better national economic performance.

Two other institutional indicators emerge as potentially relevant in the capital flight model, though with lower levels of statistical significance. Judicial independence and federalism are both statistically significant at the 0.10 level, and both are negatively signed. When we limit the sample only to democracies, the federalism effect increases and is more precisely estimated too. Clearly federal structures appear to reduce the risk perceived by citizens, thereby reducing the desire to diversify their portfolios by engaging in capital flight.

As mentioned above, the democracy indicator is weakly significant in the FDI model, which is consistent with previous research by Nathan Jensen and Witold Henisz, among others. Their interpretation of this effect is typically that democracies are better able to commit credibly

to long-term policy stability, which I obviously think is quite plausible. But none of the other credible constraint indicators are statistically significant in the FDI model, which suggests either that the “credibility advantage” of democracies more likely resides in the electoral accountability mechanism, or that the democracy effect is spurious to the fact that these societies are likely to be wealthier and faster-growing in the developing world (Przeworski *et al.* 2000). At the very least, this analysis does suggest that the question of whether foreign direct investors are attracted by democracy is yet to be answered conclusively.

### Conclusion

The goal of this chapter was to provide evidence for the causal mechanisms implied by the theoretical framework developed in this book. I argued earlier that poor national economic performance – characterized by low and volatile growth – is the result of governments’ inability to make credible commitments to future policy stability. This inability has two main effects. First, it makes investors nervous and more likely to flee with their capital, especially in times of trouble or increased uncertainty. Second, because investors fear *ex post* policy change, they are less likely to choose longer-term investment projects, as typified by foreign direct investment. Together these two effects can deprive a developing economy of much needed capital, increasing growth-rate volatility and hurting long-term economic growth.

The core argument that diffusion of policymaking authority to multiple actors accountable to different societal constituencies increases economic growth while reducing growth-rate volatility received robust statistical support in Chapter 3. This chapter therefore delved deeper to see if the alleged causal mechanisms had any merit. Using World Bank firm-level business environment surveys, I showed that economic and regulatory policy uncertainty affects business decisions to engage in new investment projects, and, further, that credible constraints against policy change can assuage such uncertainty significantly. Further, using World Bank macroeconomic data, I presented statistical tests of the effect of such diffusion of authority on gross domestic savings, levels of contract-intensive money, capital flight and foreign direct investment, finding support for my argument across these indicators: the presence of coalition governments has a robust positive effect on domestic

savings and a strong negative effect on capital flight while judicial independence increases levels of contract-intensive money in the economy, even controlling for whether the country is a democracy, political instability, and a host of economic control variables drawn from the relevant literatures on each dependent variable.

This chapter, together with Chapter 3, offers consistent statistical support for the argument using cross-national data. The next two chapters turn to country case studies to bolster confidence in these findings. In the next chapter, I apply the theoretical framework to India, a country that has grown rapidly in recent years, to see if the cross-national finding that coalition governments bolster economic performance can explain cross-state variation in that country.