

# Sovereign Defaults and Expropriations

## Empirical Regularities

*Maya Eden*

*Aart Kraay*

*Rong Qian*

The World Bank  
Development Research Group  
Macroeconomics and Growth Team  
October 2012



## Abstract

This paper uses a large cross-country dataset to empirically examine factors associated with sovereign defaults on external private creditors and expropriation of foreign direct investments in developing countries since the 1970s. In the long run, sovereign defaults and expropriations are likely to occur in the same countries. In the short run, however, these events are uncorrelated. Defaults are more likely to occur following periods of rapid debt accumulation, when growth is low, and in countries with weak policy performance, and defaults are not strongly persistent over time. In contrast,

expropriations are not systematically related to the level of foreign direct investment, to growth, or to policy performance. Expropriations are however less likely under right-wing governments, and are strongly persistent over time. There is also little evidence that a history of recent defaults is associated with expropriations, and vice versa. The paper discusses the implications of these findings for models that emphasize retaliation as means for sustaining sovereign borrowing and foreign investment in equilibrium, as well as the implications for political risk insurance against the two types of events.

---

This paper is a product of the Macroeconomics and Growth Team, Development Research Group. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The authors may be contacted at [meden@worldbank.org](mailto:meden@worldbank.org), [akraay@worldbank.org](mailto:akraay@worldbank.org), or [rqian@worldbank.org](mailto:rqian@worldbank.org).

*The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.*

# Sovereign Defaults and Expropriations: Empirical Regularities

Maya Eden, Aart Kraay and Rong Qian  
Development Research Group, The World Bank

---

1818 H Street NW, Washington, DC, 20433, [meden@worldbank.org](mailto:meden@worldbank.org), [akraay@worldbank.org](mailto:akraay@worldbank.org), [rqian@worldbank.org](mailto:rqian@worldbank.org). This paper was prepared as a background paper for the 2012 Multilateral Investment Guarantee Agency (MIGA) Annual Report. We are grateful to Mark Wright and Mike Tomz for making their sovereign default and expropriation data available, and for helpful discussions about the data. We are also grateful to Daniel Villar and Persephone Economou for interesting discussions that motivated this work, to Manabu Nose for help with the Berne Union data, and to Christoph Trebesch and Juan Jose Cruces for kindly sharing summary statistics from their dataset of "haircuts" in sovereign default episodes. The views expressed here are the authors' and do not reflect those of the World Bank, its Executive Directors, or the countries they represent.

## 1. Introduction

Recently, several major insurance providers that have traditionally specialized in political risk insurance have expanded their coverage to include sovereign default risk. This raises two important questions regarding the relationship between expropriation events and sovereign default events. First, what is the historical correlation between the two types of events? And, second, are the likelihoods of these events likely to change in the presence of widespread sovereign default insurance?

With respect to the first question, this paper documents several empirical regularities in the relationship between sovereign default and expropriation. While both events are common in the same set of low-income countries, there seem to be different circumstances in which one type of “sovereign theft”<sup>1</sup> is more common than the other. In other words, over long periods of time, there is a correlation between countries that default and countries that expropriate. However, this is not true over shorter periods of time: within five-year periods, for example, default and expropriation events seem largely independent. And of the 118 sovereign default events and 282 expropriation events in our sample, there are only five cases where both types of theft occurred in the same year.

We document that expropriations are more common in high or normal growth periods, and are less likely to occur under right-wing governments. Expropriations are also strongly persistent over time: having had an expropriation event in the previous five years is significantly associated with a higher risk of expropriation in the current year. These patterns are quite different for sovereign defaults. Defaults are more common during low growth periods, and do not seem to be affected by the political orientation of the government. Defaults are also much more isolated events, in the sense that they are not persistent over time. These findings suggest that, from the insurer’s perspective, offering insurance against sovereign default may

---

<sup>1</sup> Tomz and Wright (2010) coin this colourful and convenient term for referring to breach of contract with foreign bondholders (i.e. defaults) and foreign direct investors (i.e. expropriation)

be “cheap” in the sense that it does not increase its exposure to the same political risk events, in the short run at least.<sup>2</sup>

The second question is naturally more difficult to answer and our discussion is necessarily speculative. The theoretical literature on sovereign default and expropriation has put a large emphasis on the role of retaliation. The idea is that one of the things that prevent countries from defaulting on sovereign debt is fear that foreign creditors will retaliate; similarly, what prevents countries from expropriating FDI is fear that foreign investors will retaliate. As pointed out by Tomz and Wright (2007), it is theoretically possible that retaliation is “shared” across debt and FDI: foreign investors may help foreign creditors retaliate against sovereign default episodes, and, in exchange, foreign creditors may help foreign investors retaliate against expropriation. This type of coordination (as well as coordination between different foreign creditors) may become more difficult in the presence of sovereign default insurance, as it may reduce the incentives of insured creditors to participate in joint retaliation against countries that either default or expropriate. This raises a worry: will insurance against sovereign default reduce the “retaliation threat” with respect to expropriation? Will it reduce the “retaliation threat” with respect to sovereign default?

To address these questions, we explore the joint behavior of debt and FDI around default and expropriation events. We do not find evidence of this type of “joint retaliation”: debt inflows do not seem to change following an expropriation event, nor do they even change very much following a default event.<sup>3</sup> From the insurer’s perspective, this finding is reassuring in that it suggests that wide-spread provision of sovereign default insurance may not to lead to large increases in the likelihoods of sovereign default or expropriation through a decline in market retaliation.

---

<sup>2</sup> Private sector political risk insurers typically offer coverage over 3-4 year periods, and the average period of coverage in MIGA's portfolio is between 4 and 7 years.

<sup>3</sup> This is consistent with the broader literature which has documented that denial of market access following sovereign defaults has typically been fairly brief. An important qualification to this view however can be found in Cruces and Trebesch (2012) who construct data on the magnitude of defaults (i.e. the size of “haircuts”) for a large sample of sovereign default events and find that larger defaults are associated with longer periods of exclusion from capital markets.

We begin with a short literature review, describing the current state of the literature on defaults, expropriation and the relationship between them. In Sections 3 and 4 we describe the expropriation and default dataset. In Section 5 we explore in more detail a number of correlates of expropriations and defaults, both in the long and short run. In Section 6 we describe in more detail the evolution of FDI and debt around expropriation and default events to investigate in more detail the joint retaliation hypothesis. Section 7 concludes.

## **2. Literature Review**

There is a large theoretical and empirical literature on sovereign default crises. On the theoretical front, questions that have been studied include: Why do sovereign debt markets exist when there is no straightforward legal mechanism to enforce repayment? (pioneered by Gersovitz (1981)); What are the punishments in case of default? (Bulow and Rogoff (1989), Fernandez and Rosenthal (1990) and Rose (2005)); What are the enforcement mechanisms for repayment? (Kletzer and Wright 2000, Cole and Kehoe 1998); and, What is the role of secondary markets in limiting sovereign default risk? (Broner et al. 2010), to mention a few. For the purpose of this paper, we focus more on the empirical literature that studies the determinants of sovereign defaults.

Default usually occurs when the country suffers a series of bad shocks, as is shown in Levy-Yeyati and Panizza (2006) and Tomz and Wright (2007). However, the empirical relationship between bad output realizations and defaults is not as tight as would be predicted by standard calibrated theoretical models of default. Other factors, such as behavior of creditors and international capital markets (as in Reinhart and Rogoff (2008)), might also influence countries' default decision. This is because when taking the sovereign debt as given, conditioning on a given level of debt, tighter international financial conditions will make borrowing in bad times more expensive, and defaulting becomes a more attractive option. Another perspective on debt crises centers around the idea that some countries over-borrow, that is, they accumulate debt that is too high from a welfare perspective. Given the high level of debt, small shocks could then trigger a default. One possible reason for excessive debt accumulation might be that parties that contract the debt do not bear the full costs of repayment or crises (Perotti (1996),

Qian (2012)). Other factors that have been found to matter empirically for debt crises include level of per capita income, real GDP growth rate, level of international reserve, trade openness and share of short-term debt (Cline 1984, McFadden et al. 1985, Berg and Sachs 1988). Finally, measures of institutional quality are also correlated with countries' default risk (Kraay and Nehru (2006), Acemoglu et al. (2003), Qian (2012)).

The literature on expropriation is not as recent as the literature on sovereign defaults, possibly reflecting the large wave of expropriations that occurred during the 1970s, but followed by relatively few afterwards. Several explanations have been offered to explain the existence of expropriation. Kobrin (1980) shows that when a country is hit by a negative economic shock (external or internal), the immediate benefit of expropriation might outweigh the long term benefit of FDI. He also finds the size of FDI and the sector concentration of FDI are important determinants of likelihood of expropriation. Firms engaged in infrastructure activities essential to national security (e.g., utility and mass communication) and in sectors directly affecting economic control (e.g. banking) are more vulnerable than others. Finally, he suggests that a change in regime that entails an ideological opposition to all private companies such as the Soviet Union 1917, Cuba in 1959, and Ethiopia 1975 could trigger a wave of expropriation.

Jodice (1980) finds that modernization and economic development provide an understanding of the importance of foreign enterprises for economic modernization; therefore countries with higher income level are less likely to expropriate foreign investment. He also finds that there is positive relationship between state capacity, defined as the ratio of central government revenue to GDP, and the propensity to expropriate foreign investment in natural resource extraction. A recent paper by Li (2009) looks at political factors. He finds that the relationship between chief executive turnover and expropriation is positive and strong in democracy, but is not clear in autocracy; the relationship between leader tenure and expropriation is indeterminate in democracy, but it is negative and strong in autocracy; political constraints decrease expropriation likelihood in both regime types, but the level of political constraints is much higher in democracy than in autocracy. Guriev et al. (2008) focus on oil exporting countries and they find that expropriations are more likely to take place when oil price is high

and in country-years where and when political institutions are weak. In a theoretical contribution, Chang, Hevia and Loayza (2010) develop a model in which expropriations and privatizations reflect a tradeoff between more redistribution and better incentives for effort, and argue that this helps to explain why expropriations are more likely in resource-rich economies when commodity prices are high.

The only other study we are aware of that looks at sovereign default and expropriation at the same time and the interrelationship between them is by Tomz and Wright (2010). They find that, for the world as a whole, defaults and expropriations have occurred in alternating, rather than coincident waves. They suggest that one possible reason is that punishment spillover for failure to honor contracts across these two types of foreign investment is small. If -- to the contrary -- foreign investors and creditors cooperated fully in punishing countries for either form of sovereign theft, countries that defaulted would also have incentives to expropriate as well, since they have already incurred the full punishment for expropriation (and vice versa). This would imply a coincidence of default and expropriation events which is not observed in the data. We expand on their analysis by documenting in more detail the patterns of association between the two types of events, and their correlates, at the country level.

### **3. Data on Sovereign Defaults and Expropriations**

Our main dataset on sovereign defaults and expropriations is taken from Tomz and Wright (2010). This is a dataset of country-year observations spanning 191 countries since 1929, which identifies country-years in which the two types of sovereign theft occurred. In their dataset, sovereign defaults occur when a country fails to make required payments to foreign private creditors within the required period. It therefore does not include defaults against foreign official creditors, such as bilateral official lenders and multilateral aid agencies. The data records each year that a country is in default, since default episodes often last for multiple years. In fact, the typical length of a default episode in their dataset is 8 years during the 1970-2004 period that we consider in this paper, and 9 years if considering the whole sample from 1929 to 2004. In this paper, we are interested in the onset of sovereign defaults rather than



the length of time required to resolve them -- hence when we refer to "defaults" we will be referring to the first year of a given default episode.

The Tomz-Wright (2010) data on expropriation primarily refer to expropriations of US-owned direct investments abroad. We work with a dummy variable equal to one indicating country-years in which such an expropriation event occurred. Their dataset is based on primary research into reports by the US Department of Commerce and Bureau of Economic Analysis which provide regular reporting to Congress on expropriations affecting US investors. This is the largest systematic dataset on expropriation events currently available.

A drawback of this data is that it does not cover episodes of default affecting only non-US foreign direct investors. As a partial remedy for this problem, we augment their dataset using data on expropriation and breach of contract claims paid by insurers who are members of the Berne Union, an association of public sector and private sector political risk insurers. This source provides data on the total amount of the two types of claims paid, by country in which the insured event occurred, and by year in which the claim itself was paid. A shortcoming of this data is that it is not possible to identify when precisely the expropriation event occurred, since we only have information on when claims are paid. Absent better information, we assume that expropriations occurred in the year before the Berne Union reports claims were paid, and include any expropriations identified in this way in our dataset if they were not already included in the Tomz-Wright dataset.

Since most of our explanatory variables, which we describe below, are only available starting in 1970 or later, we restrict attention to the period 1970-2004. During this period, the dataset includes 118 episodes of sovereign default, and 282 episodes of expropriations. Of these, 65 episodes are identified using the Berne Union data on claims paid.

#### **4. A First Look at the Data**

**Figure 1** provides a first look at the distribution of default and expropriation events across countries. It reports the average number of defaults and expropriations per year, over the

entire sample period 1970-2004, for 172 countries, graphed against the log-level of GDP per capita in 2000. From this figure it is apparent that countries with higher income are somewhat less likely to engage in “sovereign theft”. However, this relationship is not particularly strong. In fact, a somewhat surprising feature of the data is that both types of sovereign theft have at one time or another occurred in countries of nearly all income levels. And similarly, there are countries at nearly all income levels that have not chosen to engage in either form of sovereign theft.

**Table 1** provides a basic description of the joint distribution of the two types of sovereign theft events across countries. The first panel distinguishes between countries that have never defaulted or expropriated over the entire sample period 1970-2004 and those that have defaulted or expropriated at least once over this period. On the one hand, most countries have either never committed sovereign theft of any kind, or they have both defaulted and expropriated at least once (a total of 137 out of 191 countries fall in these two categories). On the other hand, only a few countries have either only defaulted but never expropriated (20 of 191 countries), and somewhat more have expropriated but never defaulted (34 of 191 countries). A simple chi-squared test of the null hypothesis that the two events (ever expropriating, or ever defaulting) are independent strongly rejects the null with a p-value of 0.00. This basic feature of the data was first noted in Tomz and Wright (2010), Table 3.1, over the longer period since 1929 covered in their full dataset.

At higher frequencies, however, the coincidence between the two types of events diminishes. The second panel of **Table 1** reports the same information, but focusing on a pooled sample of 1050 5-year periods for the same set of countries. At this quinquennial frequency, there are only 20 cases of countries that have engaged in both forms of sovereign theft within the same 5-year period. In this case, the p-value for the null hypothesis of independence of the two types of events jumps to 0.243. And at annual frequencies, the third panel, the lack of coincidence of the two types of events is even starker. There are only 5 cases of countries that

have both defaulted and expropriated in the same year, and the p-value for the null hypothesis of independence is 0.626.<sup>4</sup>

The distribution of defaults and expropriations also varies over time. During the 1970s, expropriations were very common, with 73 countries expropriating at least once, while defaults were relatively rare with only 10 countries defaulting. In contrast, during the 1980s only 26 countries expropriated foreign direct investors, while 55 countries defaulted on their external creditors. From the 1990s onwards, both forms of sovereign theft became much less frequent relative to their highs from previous decades, and also become more symmetric, at 40 expropriations and 34 defaults during this last period. This pattern can be seen in **Figure 2**, which shows the number of countries defaulting and expropriating by year since 1970. This figure shows a clear pattern of frequent expropriations in the 1970s, frequent defaults in the 1980s, followed by a relative tranquil period from 1990 onwards when both forms of sovereign theft became less common.

This graph is an abbreviated version of Figure 3.6 in Tomz and Wright (2010), who interpret this as evidence that countries do not engage in both forms of sovereign theft at the same time. This poses a puzzle relative to the theoretical framework in their paper, which predicts that there should be "spillovers" from one form of default to the other. The idea is that once the country fails to honor one type of contract, either sovereign debt or foreign investment, it would trigger retribution by both types of investors who would refuse to invest in the country as a way of punishment. In their framework, joint retaliation would create an incentive for countries to engage in both types of sovereign theft at the same time, since the punishment is the same regardless of which type of theft they choose.

Overall, this pattern suggests that while countries that default and countries that expropriate share common long-run characteristics, there are short-term circumstances that make one form of sovereign theft more likely than the other. Moreover, the apparent waves of expropriation followed by defaults suggest that the factors making one type of event more

---

<sup>4</sup> These cases, where the beginning of a sovereign default episode and an expropriation event coincided in the same year are Argentina in 2001, Guinea in 1986, Indonesia in 1998, Nicaragua in 1979, and Ukraine in 1998.

likely may have a global component, as countries tend to “specialize” in the same form of sovereign theft at the same time. In the next section we explore a number of such potential factors more systematically.

## **5. Correlates of Sovereign Theft Episodes**

In this section we investigate in more detail a set of potential correlates of sovereign theft episodes that have been discussed in the literature on defaults and expropriations. Our starting point is the core empirical specification in Kraay and Nehru (2006), who investigate the correlates of "debt distress", defined as episodes of debt servicing difficulties marked by exceptional financing in the form of recourse to the Paris Club or the IMF, as well as arrears accumulation. In a large sample of developing countries they find that debt distress is more frequent in countries with high levels of external debt, with weak policy performance, and in countries experiencing adverse macroeconomic shocks. One immediate difference however is that Kraay and Nehru (2006) study debt servicing difficulties vis-a-vis both private and official creditors, while the dataset we study in this paper covers only defaults against private creditors.<sup>5</sup>

We begin by considering how expropriation and sovereign default events are related to the stock of external debt owed to private creditors and the stock of FDI in a country. Data on these are taken from the Sovereign Wealth of Nations dataset by Lane and Milesi-Ferretti (2007). We also measure policy performance using the World Bank's Country Policy and Institutional Assessment (CPIA) data, which covers all World Bank borrowers since 1978. Finally, we use as proxy for macroeconomic shocks real per capita GDP growth.

In addition, we consider two characteristics of the political system, both taken from the Database of Political Institutions by Beck et al. (2001). The first is the ideology of the government of in power, measured with a dummy variable taking the value one if the

---

<sup>5</sup> Rescheduling of debts owed to official creditors (via the Paris Club in the case of bilateral creditors, and the Heavily-Indebted Poor Countries (HIPC) initiative in the case of multilateral creditors) may to some extent reflect a voluntary decision on the part of creditors to provide a resource transfer to debtors, and so are different from defaults against private creditors. Nevertheless, as we shall see the correlates of defaults against private creditors are broadly similar to those identified in Kraay and Nehru (2006).

government in power is right-wing (with left/center/uncoded as the complementary category). This is to capture the idea that right-wing governments may be more business-friendly and less willing to expropriate private foreign (or domestic) investors or bondholders. We also use constraints on the executive, to capture the idea that arbitrary seizures of property may be more difficult in a polity with greater checks on executive power.

**Table 2** begins by reporting the pure cross-sectional relationship between these variables and sovereign default and expropriation events, i.e. using cross-sectional averages over the entire sample period of all variables.<sup>6</sup> The sample consists of 126 developing countries where data on all variables are available, and is held fixed across specifications. The first 12 columns report the simple univariate relationship between each of the six explanatory variables and the two types of sovereign theft. Across countries in the long run, there is no significant relationship between the levels of debt and FDI outstanding and the likelihood that either will be expropriated. As we shall see shortly, this long-run relationship is quite different from the short-run relationship, where high levels of debt are strongly correlated with subsequent default. Columns (5) and (6) reveal that both types of sovereign theft are statistically-significantly less likely in countries with good policy. Both types of sovereign theft are also significantly more likely to occur in slow-growing countries, as shown in Columns (7) and (8). Turning to the political variables, there is some evidence that right-wing governments are significantly less likely to expropriate. However, government ideology is not significantly related to defaults in the cross-section of countries, nor is there evidence that executive constraints are significantly correlated with either type of sovereign theft.

Finally, columns (13) and (14) consider all the variables at once. Although the cross-country association between policy performance and expropriations now becomes statistically insignificant, the remaining findings are broadly similar to those in the bivariate regressions.

---

<sup>6</sup> As noted above, sovereign default events last for multiple years in the Tomz and Wright (2010) dataset. Our focus is on the onset of default episodes. Accordingly, in the regressions in **Table 2** and **Table 3**, we construct a dummy variable that is equal to one for the first year of each default event, and is zero for all non-default-event years in the dataset (i.e. we drop observations corresponding to the second and subsequent years of the default event). In **Table 2**, the dependent variable is the average over time of this dummy variable, while in **Table 3** we explore the annual variation in this variable.

Most notably, defaults are significantly less likely in fast-growing countries, and expropriations are significantly less likely under right-wing governments.

We began our data description with the observation that expropriation and default events are correlated across countries in the long run: over the period 1970-2004, countries that expropriate at least once are likely to also default at least once. In fact, the simple cross-country correlation between the average number of default events and the average number of expropriation events per year is 0.30. This raises the following question: To what extent are the reasons for the coincidence of these two forms of sovereign theft well-captured by the parsimonious set of explanatory variables we have considered so far? One way to answer this question is to compute the correlation across countries of the residuals of the specifications in the last two columns of **Table 2**. Naturally, this correlation is lower, at 0.25, than the correlation of average expropriations and average defaults, at 0.30. However, this correlation is still far from zero, suggesting that there are other country characteristics that account for the high coincidence of default and expropriation across countries in the long run that remain to be identified.

A drawback of these cross-sectional results is that they can tell us little about the dynamics over time of the two types of events, which we have seen in the previous section to be potentially very interesting. We remedy this deficiency in **Table 3**, which reports a similar set of regressions using the full panel of 1,560 country-year observations covering the same set of 126 developing countries. In this table, the dependent variables are dummies taking the value one for the onset of default events and expropriation events, and zero otherwise for non-default and non-expropriation country-years. We report results using simple linear probability models, i.e. OLS regressions of these dummies on various explanatory variables.<sup>7</sup>

One further difference with the results from the previous table is that we lag the FDI and debt stock measures, as well as the CPIA and growth variables, by one year to avoid capturing any

---

<sup>7</sup> Conceptually more appropriate probit regressions deliver similar results. However, as discussed in more detail below, the interpretation of within-country results is more straightforward using the linear probability model.

immediate response of these two variables to the sovereign theft event itself. Finally, we also create two variables counting the number of years the country was in default, and the number of years expropriations occurred, in the previous five years. We use these to investigate persistence in the two types of events over time, as well as the possibility for spillovers from one type of event to the other.

The first 14 columns of **Table 3** report the simple univariate relationship between each of these variables and the two types of outcomes, pooling all country-year observations. A first striking difference from the cross-sectional results is that the level of debt in the previous year is significantly correlated with subsequent default in the next period. However this is not the case for FDI, nor is it the case for expropriation events. Worse policy performance (as captured by the CPIA) is associated with a greater risk of both defaults and expropriations, although the correlation is significant only for default events. While in **Table 2** we saw that both types of sovereign theft are significantly more likely in slow-growing countries in the long run, at annual frequencies, lower growth in a given year is significantly associated with a higher risk of default in the following year, but not a higher risk of expropriations. The political variables are negatively correlated with default and expropriation events, i.e. both types of sovereign theft are less likely to occur when executive constraints are high, or when a right-wing government is in power. However, this association is only marginally statistically significant for the executive constraints variable in the case of default events.

Finally, another striking difference between default and expropriation events is that the latter are strong positively correlated over time, while the former are not. Having had an expropriation in the previous five years significantly raises the risk of expropriation in the current year. In contrast, having been in a default event at some point during the previous five years is not statistically significantly correlated with the risk of a new default event beginning.

Columns (15) and (16) of **Table 3** consider all of these variables simultaneously, and in addition in Columns (17) and (18) we control for country and year effects. The country fixed effects are intended to pick up a variety of unobserved country-specific factors that might be correlated both with sovereign theft and some of the explanatory variables. Year effects in turn can pick

up the effect of common shocks driving the two types of theft across countries, for example, the role of commodity prices in driving expropriations.

For the most part, the results from the multivariate specifications are similar to the univariate ones. We continue to find that defaults are significantly more likely to occur when debt in the previous year is high, and when growth in the previous year is low. This is not however true for expropriation events, which are not preceded by particularly high debt or FDI stocks or by particularly adverse macroeconomic shocks. One interpretation of this is that countries are "pushed" into sovereign defaults by a combination of rapid debt accumulation and adverse shocks, while expropriations are more likely to represent a discretionary policy choice on the part of the expropriating government.

In Column (15) we see that sovereign default events are statistically significantly less likely to occur in countries with good policy performance. In this respect, the findings are quite consistent with those in Kraay and Nehru (2006), who document the importance of debt, policy, and shocks to growth in explaining episodes of debt servicing difficulties in developing countries. However, this variable loses significance in Column (17) where we control for country fixed effects, likely reflecting the difficulty of isolating the separate effect of slowly-changing policy performance from other unobserved time-invariant country characteristics captured by the country fixed effect.

In the multivariate specification in Column (16), we continue to find that expropriation events are significantly positively correlated over time. This partial correlation remains positive but is no longer statistically significant in the specification including country fixed effects in Column (18). In contrast, defaults tend to be more isolated events. In fact, in Column (17) we even find evidence of a significant negative relationship between the history of default in the previous five years and the onset of a new default event. One possible explanation for this finding is that sovereign default events tend to be more comprehensive, in the sense that they affect a large portion of the debt outstanding at the time of the default. This implies limited scope for default in subsequent years, since there is less debt to default on relative to before the default event. In contrast, expropriations of FDI typically are on a smaller scale, in the



sense of affecting a smaller fraction of the stock of FDI. This could in turn reflect the fact that the "technology" for the two types of sovereign theft differ. Sovereign defaults require little more than a decision on the part of the government not to repay its foreign creditors. On the other hand, expropriation requires the government to take over responsibility for the operation of the expropriated firm. Since this is costly, it limits the amount of expropriation that can be done during a given episode. As long as there is some persistence in the motivation to expropriate, this implies that expropriations will be spread out over several years.

Finally, the results in **Table 3** suggest a lack of positive spillovers between the two types of events. Having had an expropriation event in the previous five years is not a significant predictor of subsequent defaults, and having had a history of being in default in the previous five years is actually negatively and significantly correlated with subsequent expropriation events. As discussed in more detail in Tomz and Wright (2010), theoretically, there might be an equilibrium in which both foreign direct investors and foreign creditors punish countries for defaulting not only on their own claims but on each other's claims. This in turn would create an incentive for countries to engage in both types of sovereign theft at the same time. We do not see this in the data at annual frequencies, which suggests that this equilibrium is not implemented – in other words, the ability to borrow from foreign creditors or to attract FDI is not sustained by threat of joint retaliation. It could still be the case that the ability to borrow and to attract FDI are separately sustained by separate threats to retaliate (e.g., foreign creditors retaliate when there is a default, and foreign investors retaliate when there is an expropriation of FDI). Alternatively, there may be other mechanisms that are not driven by the threat of retaliation of any kind that make contracting with foreigners possible, where the implicit contracts associated with debt and FDI are associated with different contingencies.

**Figure 3, Figure 4, and Figure 5** provide a more detailed look at the dynamics of the univariate relationships between these variables and default and expropriation events over time. Each graph shows the evolution of the indicated variable in the period around default events (in the left column) and around expropriation events (in the right column). Year 0 represents the year of the event; the years -1, -2, -3, -4, and -5 represent the five years prior to the event, and the

years 1, 2, 3, 4, and 5 represent the 5 years following the event. The averages are computed controlling for year and country effects, and the vertical black bars represent the standard errors of the averages.

The first row of **Figure 3** shows the evolution of the debt stock as percent of GDP around default and expropriation events. Consistent with the panel regression evidence, the debt stock increases sharply in the year before a default, but then declines dramatically afterwards. In contrast, the debt stock remains quite stable as a share of GDP around expropriation events. The reason for the decline after default in principle reflects a combination of haircuts in the rescheduling package the country offers to its bondholders, as well a reduction in the country's ability to place new debt immediately following a default. As we shall see in the following section, however, it appears mostly to reflect the former and not the latter. In contrast, the FDI stock does not seem to be affected by default, since it continues to its pre-default growth trend. The FDI stock declines only slightly after expropriation, but it recovers fairly quickly to its previous level. And there is little evidence of any significant change in the stock of external debt following an expropriation event. This behavior of debt and FDI stocks around episodes of default and expropriation suggest that there is no “punishment spillover” from one type of theft to the other, in the sense of bondholders punishing countries that expropriate, and foreign direct investors punishing countries that default on their foreign bondholders.

The third row of **Figure 3** presents the evolution of the CPIA, our measure of policy and institutional quality, around default and expropriation events. Surprisingly, CPIA ratings are not negatively affected by either kind of theft and, if anything, they improve slightly (although not significantly) following both types of theft. In the case of defaults, one possible explanation is that defaults are the culmination of a series of political failures that lead to a new government coming into power. If this new government embarks on sounder policies (perhaps under the supervision of the IMF), this could be reflected in an improvement in the CPIA measure. To investigate this possibility, row 4 of **Figure 3** presents the likelihood of switching government (from one ideology to another) around the events. It shows that the year after the default, the likelihood of switching government is higher, which is consistent with improving CPIA the year

after default. In the case of expropriation, the likelihood of government switching is actually higher the year before the event, in line with improving CPIA the year before as well. However, these changes in switching probabilities are small relative to the estimated standard errors and are far from being statistically significant.

On average, sovereign defaults occur after a sharp and persistent drop in growth, as shown in the last row of **Figure 3**. The default event does not seem to break the downward growth trend, and countries typically experience a drop in growth in the subsequent year as well. However, after that point the economy quickly recovers to its previous growth level. The reversal may be a result of various structural reforms implemented after the default (perhaps under pressure from the IMF or from private creditors). One example would be currency devaluation, which makes the country export more competitive in the international market, and that contributes to faster recovery. However, notice that the recovery is not fast in the sense that the country merely returns to its growth trend, implying a permanent level output loss from the event.

Consistent with the panel regression results in **Table 3**, the macroeconomic dynamics associated with expropriation are far less dramatic. There is a small decline in growth rate at the year of the event, and it starts to recover right away maintaining at a higher average growth rate than before the expropriation event. Moreover these growth fluctuations around expropriation events are small relative to the estimated standard errors and are far from statistical significance. The picture that emerges broadly confirms the findings of Tomz and Wright (2007), who show that default episodes happen in bad times, although not as strongly as would be predicted by standard calibrated models. In contrast, the evolution of GDP growth rates around expropriation events is much less dramatic. Expropriation episodes seem to be preceded by periods of (weakly) below-average growth, and this growth pattern does not change much following the event.

Consistent with the panel regression results, **Figure 4** shows that neither defaults nor expropriations are particularly less likely to occur when a right-wing government is in power. Interestingly however, there is a weak pattern suggesting that the likelihood of having a right-wing government increases following both types of sovereign theft. There is also some

evidence of a decline in constraints on the executive following both types of sovereign theft, although this pattern is also far from statistical significance.

Finally, **Figure 5** documents persistence in -- and spillovers between -- the two types of events, showing the likelihood of default (expropriation) after an episode of expropriation (default). Consistent with the panel regression evidence, the first row shows that there is no strong pattern of prior incidence of one form of sovereign theft making the other form of theft more likely. There is at most a weak, but not statistically significant, pattern in which the likelihood of expropriations increases slightly following defaults, and vice versa. The bottom row of **Figure 5** clearly illustrates our findings on the persistence over time of the two sorts of events. For defaults, the probability of another default in each of the five years before, and after, the default event in question is very low, and very close to the unconditional probability of observing a default event in the entire sample. In contrast, the probability of having an expropriation in any of the five years before, or after, the expropriation event in question is quite high. At between 20 and 30 percent, this is much higher than the unconditional probability of observing a default event, which is  $288/5360=5.2$  percent.

## **6. A Closer Look at the Dynamics of Debt and FDI around Sovereign Theft Events**

In this section, we take a closer look at the dynamics of debt and FDI around sovereign theft events. The purpose of this examination is twofold. First, we want to understand whether there is an empirical backing for the “joint retaliation” hypothesis proposed by Tomz and Wright (2010): Does debt decline following an expropriation event? Does FDI decline following a default episode? Second, we want to examine whether the relative supply of debt and FDI plays a role in determining whether a country decides to default or expropriate.

A priori, the relative abundance of debt and FDI may affect the country’s preferred form of theft in either direction. On the one hand, countries in which one form of foreign funding is more abundant may value it less at the margin, and may find it easier to steal from (for example, countries in which FDI is abundant may find it easier to expropriate FDI at the

margin). On the other hand, the relative abundance of debt and FDI may reflect the country's needs. For example, countries that rely more heavily on FDI might be more likely to opt for sovereign default when they are in urgent need for revenue; similarly, countries that rely more on foreign lending are likely to associate more value with keeping their relationships with creditors intact.

We measure the relative abundance of debt and FDI as  $\text{Debt}/(\text{Debt}+\text{FDI})$ , so that a higher value of this measure indicates that debt is relatively more abundant than FDI. The distributions of this measure around default and expropriation episodes are given in the first row of **Figure 6**. The first thing to notice about these graphs is the different levels of the two series. Compared to expropriation events, default events are associated with a much higher relative abundance of debt. This suggests that the more-abundant form of foreign funding is easier to expropriate at the margin.

The second thing to notice is the dynamics. The relative abundance of debt is at its peak at the time of default, whereas the relative abundance of FDI is at its peak two years following the expropriation. It is useful to refer back to **Figure 3**. The figure illustrates that, following a default event, the stock of debt drops, and the stock of FDI remains largely unchanged. Following an expropriation event, the stock of FDI drops, but the stock of debt remains largely unchanged. These patterns seem inconsistent with the “joint retaliation” hypothesis, as foreign investors do not seem to punish countries for default, and foreign creditors do not seem to punish countries for expropriation.

The fact that the stock of debt drops following a default episode and the stock of FDI drops following expropriation is not, in itself, evidence of a retaliation mechanism: by construction, a country announcing that it will not repay its debt has lower debt, and a country that expropriates foreign companies has a lower stock of FDI (as the expropriated companies are no longer owned by foreigners). To check whether there is retaliation within debt and within FDI, it is useful to look at the behavior of debt inflows and FDI inflows, in the 2<sup>nd</sup> and 3<sup>rd</sup> rows of **Figure 6**. In these graphs we show inflows of new FDI, and disbursements on loans from private creditors, over the same 10-year window around default and expropriation events. These

figures also are not very supportive of the retaliation hypothesis: FDI inflows if anything seem to weakly increase following an expropriation event, and debt inflows seem to weakly increase following a default episode, although in both cases the pattern is far from being statistically significant.

To summarize, our findings do not support the view that retaliation plays an important role in sustaining debt and FDI. Even within each category, retaliation is modest. There is also no evidence of the cross-retaliation suggested by Tomz and Wright (2010): sovereign default does not lead to lower FDI, nor does expropriation lead to lower debt inflows. A qualification of this finding is that we are looking only at the incidence, and not the magnitude of the two forms of theft. As shown by Cruces and Trebesch (2012) for sovereign defaults, there is evidence that the extent of "punishment" in the form of exclusion from capital markets is more protracted following defaults involving larger haircuts. Absent reliable systematic data on the magnitude of theft associated with expropriation events, it is difficult to investigate the same hypothesis that this affects the size of punishment following expropriation events.<sup>8</sup>

## **7. Conclusions**

In this paper, we have documented several empirical regularities of the relationship between sovereign default and expropriation. In the long run, default and expropriation events are correlated across countries, in the sense that a similar set of countries never engage in either type of sovereign theft, while another set of countries at some point over the past 40 years have engaged in both types of sovereign theft. We document some evidence that countries

---

<sup>8</sup> The only data we have that might shed light on the magnitude theft associated with expropriation events consists of country-year aggregate information on the dollar value insurance claims paid by Berne Union members for expropriation and breach of contract events. In a sample of 88 country-year observations where such claims were paid, the median observation corresponds to a loss to foreign investors of just 0.008% of GDP of the destination country, and the 90th percentile is 0.3 percent of GDP. In contrast, in a sample of 166 sovereign default episodes in developing countries studied by Cruces and Trebesch (2012), the median "haircut" or decline in the present value of debt due to default was 2.1% of the GDP of the defaulting country, and the 90th percentile is 14.7% of GDP. An important qualification however is that insurance coverage is unlikely to be complete, in the sense that (a) firms that purchased insurance may not have covered the full value of their assets, and (b) many uninsured firms may also be expropriated. As a result, this estimate of the value of theft during expropriation events is likely to be substantially downwards-biased.

with slower average long-run growth are more likely to expropriate. However, in the long run, the two types of sovereign theft are unrelated to the amounts of FDI and debt outstanding.

In the short run, things look quite different. First, the synchronization of the two types of theft is far lower as we consider successively higher frequencies. For example, of the 118 sovereign default events and 282 expropriation events in our sample, there are only five cases where both types of theft occurred in the same year. Moreover, in the short run there is a much stronger relationship between the level of debt and subsequent default, with defaults preceded by a period of rapid debt accumulation. Defaults also tend to be preceded by periods of slow growth, and default events are not very persistent over time. The findings are very different though for expropriation events, which do not depend on the amount of FDI outstanding, nor are they preceded by periods of slow growth. On the other hand, the best predictor of expropriation events is whether an expropriation event occurred in the previous five years, reflecting strong persistence over time in this form of sovereign theft.

This paper suggests that there is a natural role for political risk insurers in providing coverage against sovereign default. While, over longer time horizons, the same set of countries is likely to engage in both sovereign default and expropriation, these events are largely uncorrelated in the short run. This suggests that, from the insurer's perspective, offering insurance against sovereign default is "cheap" in the sense that it does not increase its exposure to the same political risk events in the short run. At the same time, the fact that over longer time horizons the same countries engage in both default and expropriation implies that the same country-level expertise that is useful for providing political risk insurance may also be relevant for providing default insurance. In addition, there is little evidence suggesting that retaliation of foreign creditors plays a role in the prevention of expropriation events. Thus, the presence of wide-spread insurance against sovereign default may therefore not increase the likelihood of expropriation, and thus is consistent with the insurer's broader objectives.

## References

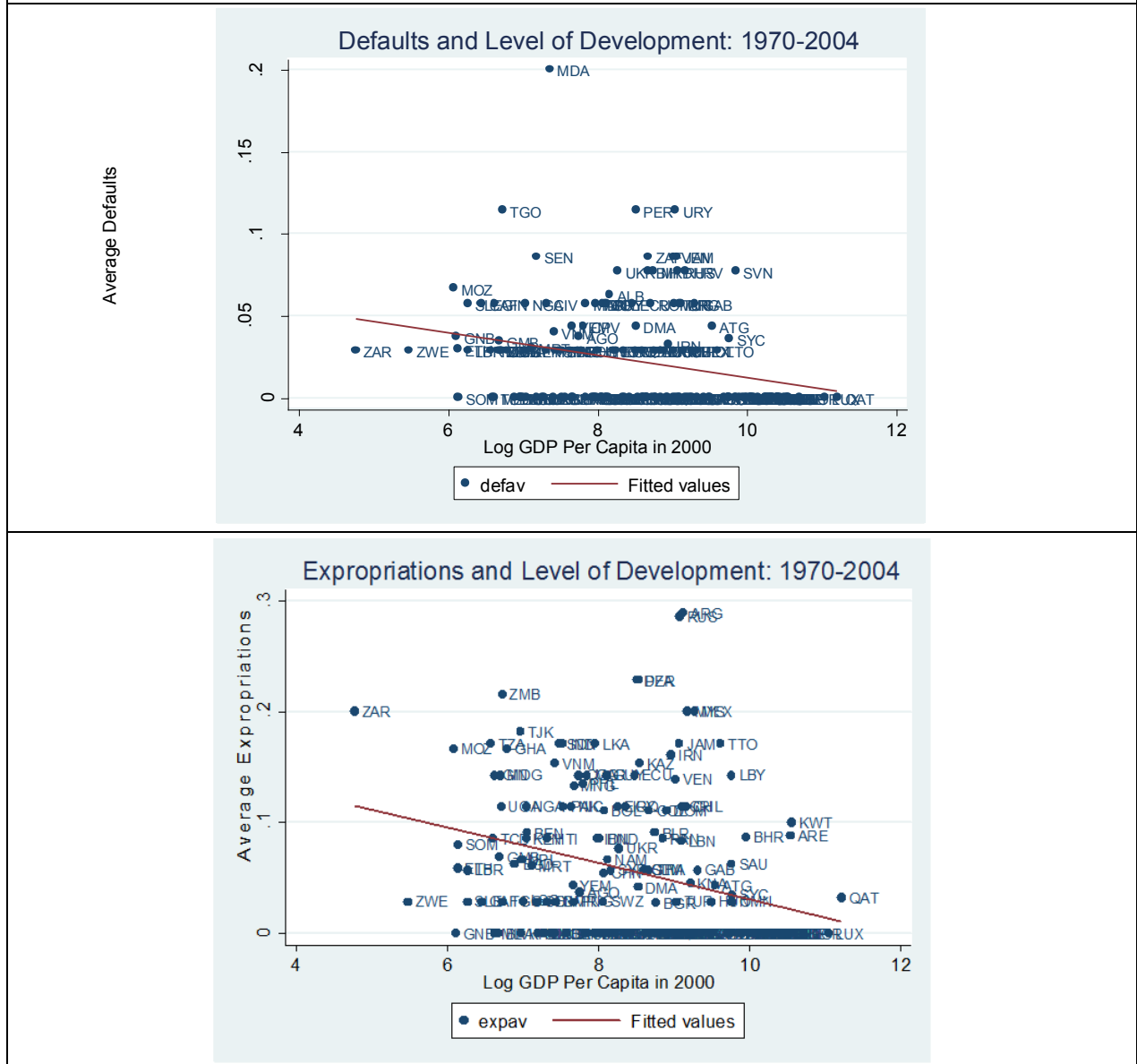
- Acemoglu, Daron, Simon Johnson, James A. Robinson, and Yunyong Thaicharoen. "Institutional causes, macroeconomic symptoms: volatility, crises and growth." *Journal of Monetary Economics* 50 (2003): 49-123.
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh (2001). "New Tools in Comparative Political Economy: The Database of Political Institutions." *World Bank Economic Review* 15:1, 165-176 (September).
- Berg, Andrew and Jeffrey Sachs (1988). "The Debt Crisis: Structural Explanations of Country Performance". *Journal of Development Economics*. 29(3):271-306.
- Broner, Fernando, Alberto Martin, and Jaume Ventura. 2006. "Sovereign risk and secondary markets." *American Economic Review*. 100 (4), 2010, 1523-1555 .
- Bulow, Jeremy, and Kenneth S. Rogoff. 1989 "Sovereign debt: is to forgive or forget?" *American Economic Review*, 79(1): 43-50.
- Chang, Roberto, Constantino Hevia, and Norman Loayza (2010). "Privatization and Nationalization Cycles". NBER Working Paper No. 16126.
- Cline, William R. 1984. *International Debt: Systemic Risk and Policy Response*. Washington, D.C.: Institute for International Economics.
- Cole, Harold L., and Timothy J. Kehoe. 1998. "Models of sovereign debt: partial versus general reputations." *International Economic Review*, 39(1): 55-70.
- Cruces, Juan and Christoph Trebesch (2012). "Sovereign Defaults: The Price of Haircuts". Manuscript, Universidad Torcuato di Tella and University of Munich.
- Eaton, Johnathan, mark Gersovitz. 1981. "Debt with potential repudiation: theoretical and empirical analysis." *Review of Economic Studies*, 48(2): 289-309.
- Fernandez, Raquel, and Robert W. Rosenthal. 1990. "Strategic models of sovereign-debt renegotiation." *Review of Economic Studies*. 75(3): 331-49.
- Guriev, S., Kolotilin, A. and Sonin, K. 2008. 'Determinants of Expropriation in the Oil Sector: A Theory and Evidence from Panel Data'. CEPR Discussion Paper no. 6755. London, Centre for Economic Policy Research.
- Jodice David A. 1980. "Sources of Change in Third World Regimes for Foreign Direct Investment, 1968-1976." *International Organization* , Vol. 34, No. 2, pp. 177-206.
- Kletzer, Kenneth M., and Brian D. Wright. 2000. "Sovereign debt as intertemporal barter." *American Economic Review*, 90(3): 621-39.



- Kobrin, Stephen J. 1980. "Foreign Enterprise and Forced Divestment in LDCs." *International Organization*, Vol. 34, No. 1, pp. 65-88
- Kraay, Aart, Nehru, Vikram, 2006. When is external debt sustainable? *World Bank Econ Rev* (2006) 20 (3): 341-365.
- Lane, Philip and Gian Maria Milesi-Ferretti (2007). "The external wealth of nations mark II: Revised and extended estimates of foreign assets and liabilities, 1970–2004", *Journal of International Economics* 73, November, 223-250. (*updated and extended 2011 version*)
- Levy-Yeyati, Eduardo Levy and Panizza, Ugo G., 2006. "The Elusive Costs of Sovereign Defaults." CIF Working Paper No. 11/2006.
- Li, Quan 2009, "Democracy, Autocracy, and Expropriation of Foreign Direct Investment." *Comparative Political Studies*. vol. 42 no. 8.
- McFadden, Daniel, Richard Eckaus, Gershon Feder, Vassilis A. Hajivassiliou, and Stephen O'Connell. 1985. "Is There Life after Debt? An Econometric Analysis of the Creditworthiness of Developing Countries." In *International Debt and the Developing Countries*, ed. Gordon W. Smith and John J. Cuddington, 179–209. Washington, D.C.: World Bank.
- Perotti, Roberto. 1996. "Redistribution and non-consumption smoothing in an open economy." *Review of Economic Studies*, 63(3): 411-33.
- Qian, Rong, 2012. "Why do some countries default more often than others? The role of institutions," *Policy Research Working Paper Series 5993*, The World Bank.
- Reinhart, Carmen M., and Kenneth S. Rogoff. 2008. "This time is different: a panoramic view of eight centuries of financial crises." *National Bureau of Economic Research Working Paper 13882*.
- Rose, Andrew K. 2005. "One reason countries pay their debts: renegotiation and international trade." *Journal of Development Economics*, 77(1): 189-206.
- Tomz, Michael, and Mark L. J. Wright. 2007. "Do Countries Default in 'Bad Times'?" *Journal of the European Economic Association*, 5(2–3): 352–60.
- Tomz, Michael and Mark L. J. Wright (2010). "Sovereign Theft: Theory and Evidence About Sovereign Default and Expropriation", in William Hogan and Federico Sturzenegger, eds. "The Natural Resources Trap: Private Investment Without Public Commitment". Cambridge, MIT Press.

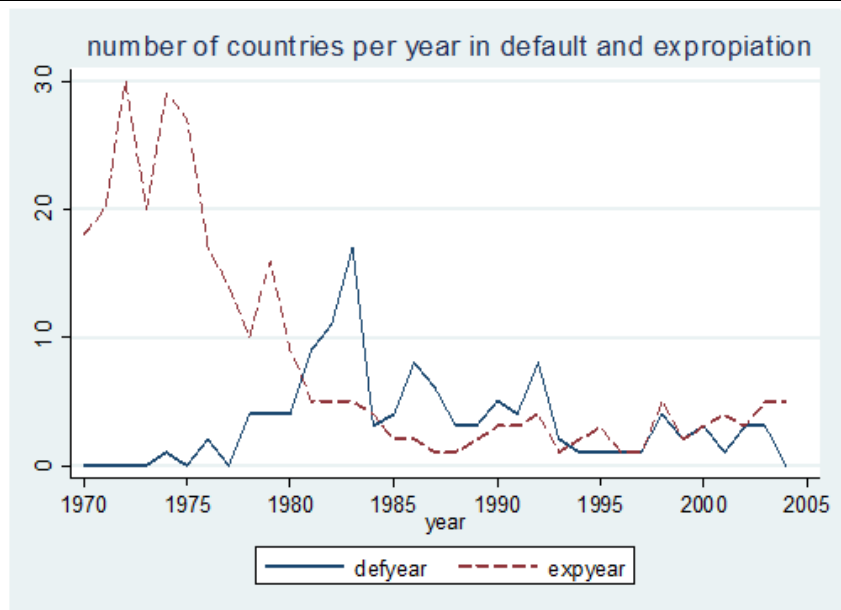


**Figure 1: Sovereign Defaults and Expropriations Across Countries**



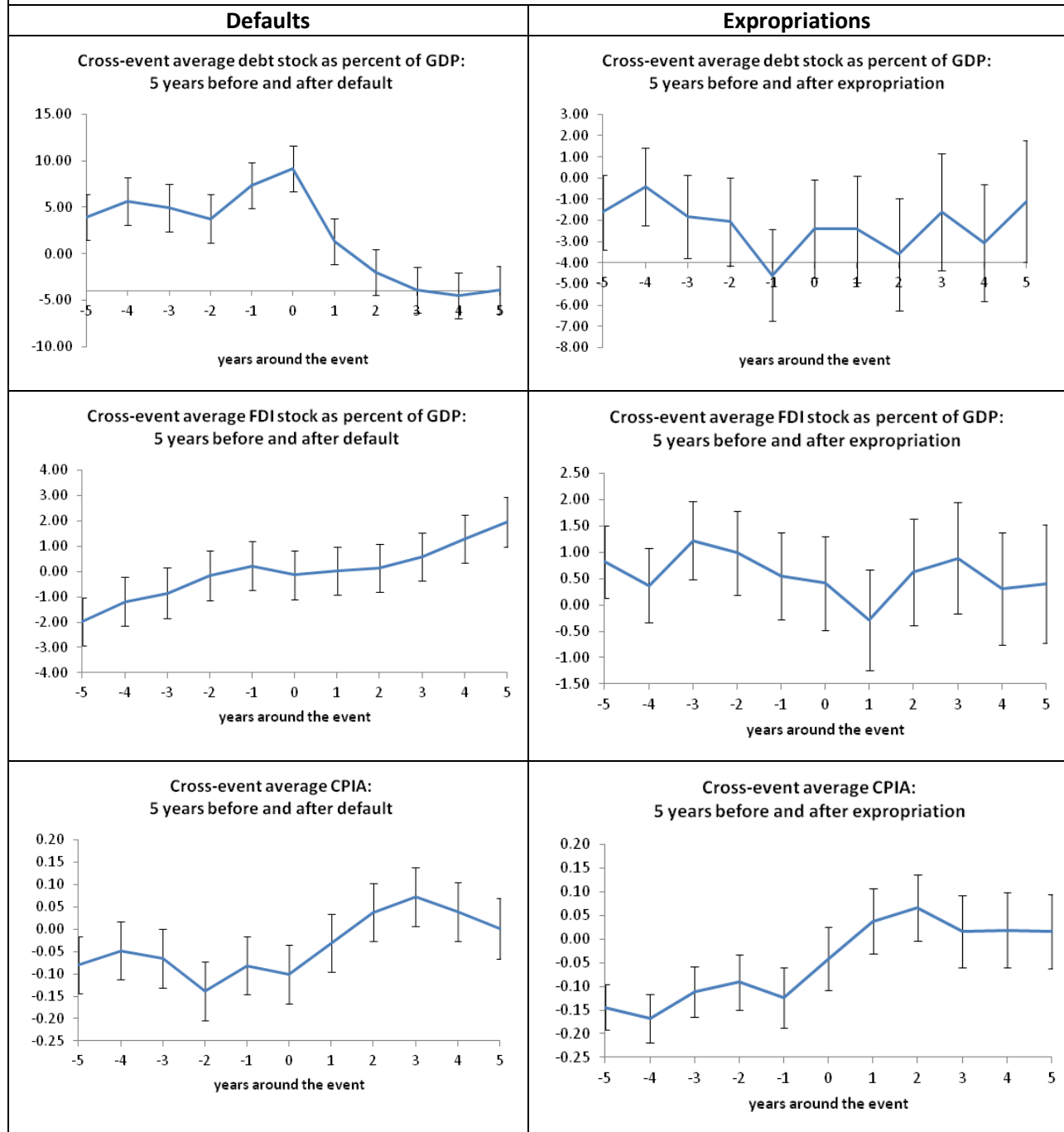
Notes: This graph shows the relationship between the period-average number of defaults (top panel) and expropriations (bottom panel) over 1970-2004 with the log-level of GDP per capita measured in 2000.

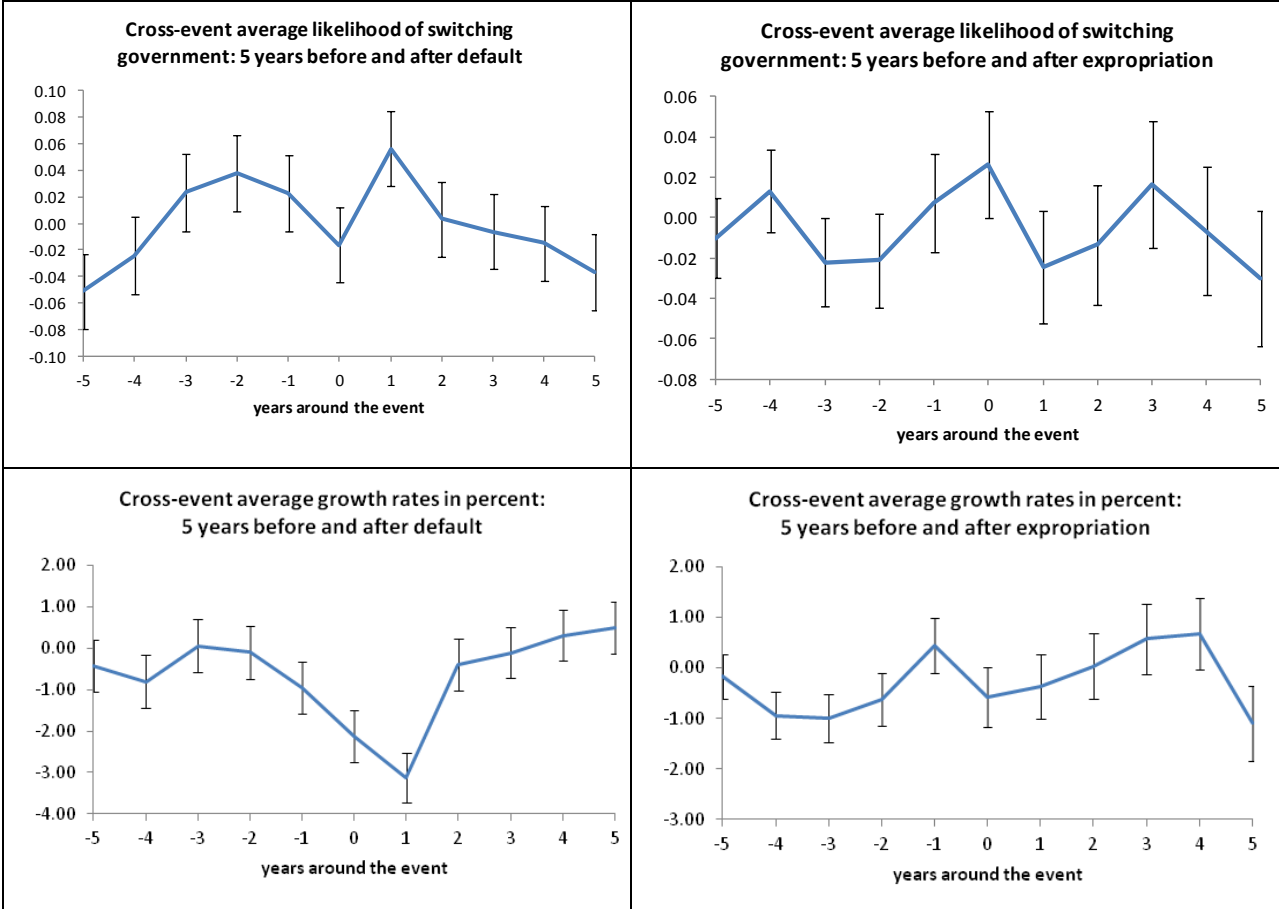
**Figure 2: Sovereign Defaults and Expropriations Over Time**



Notes: This graph shows the number of default and expropriation events per year over the period 1970-2004.

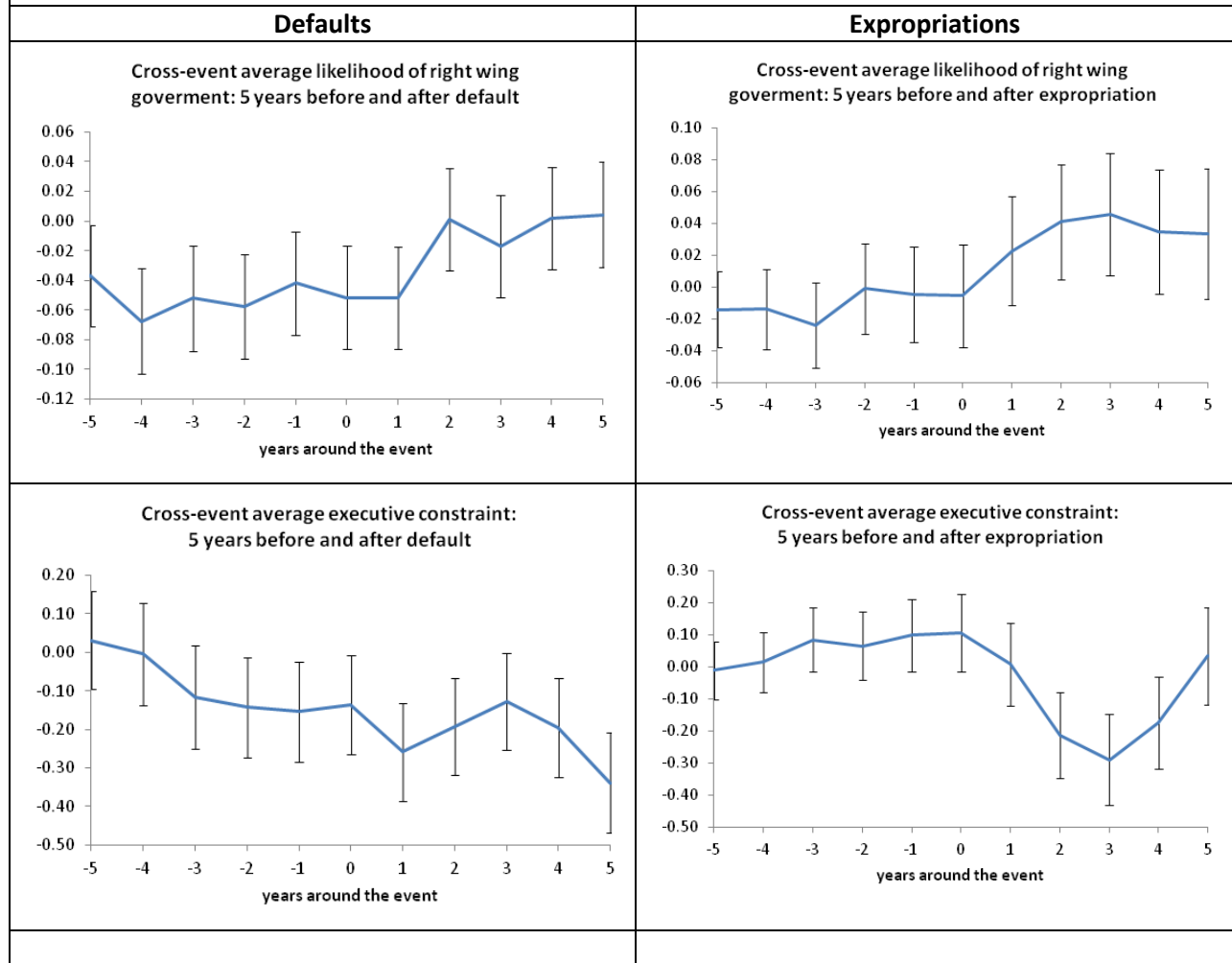
**Figure 3: Macro Correlates of Defaults and Expropriations**





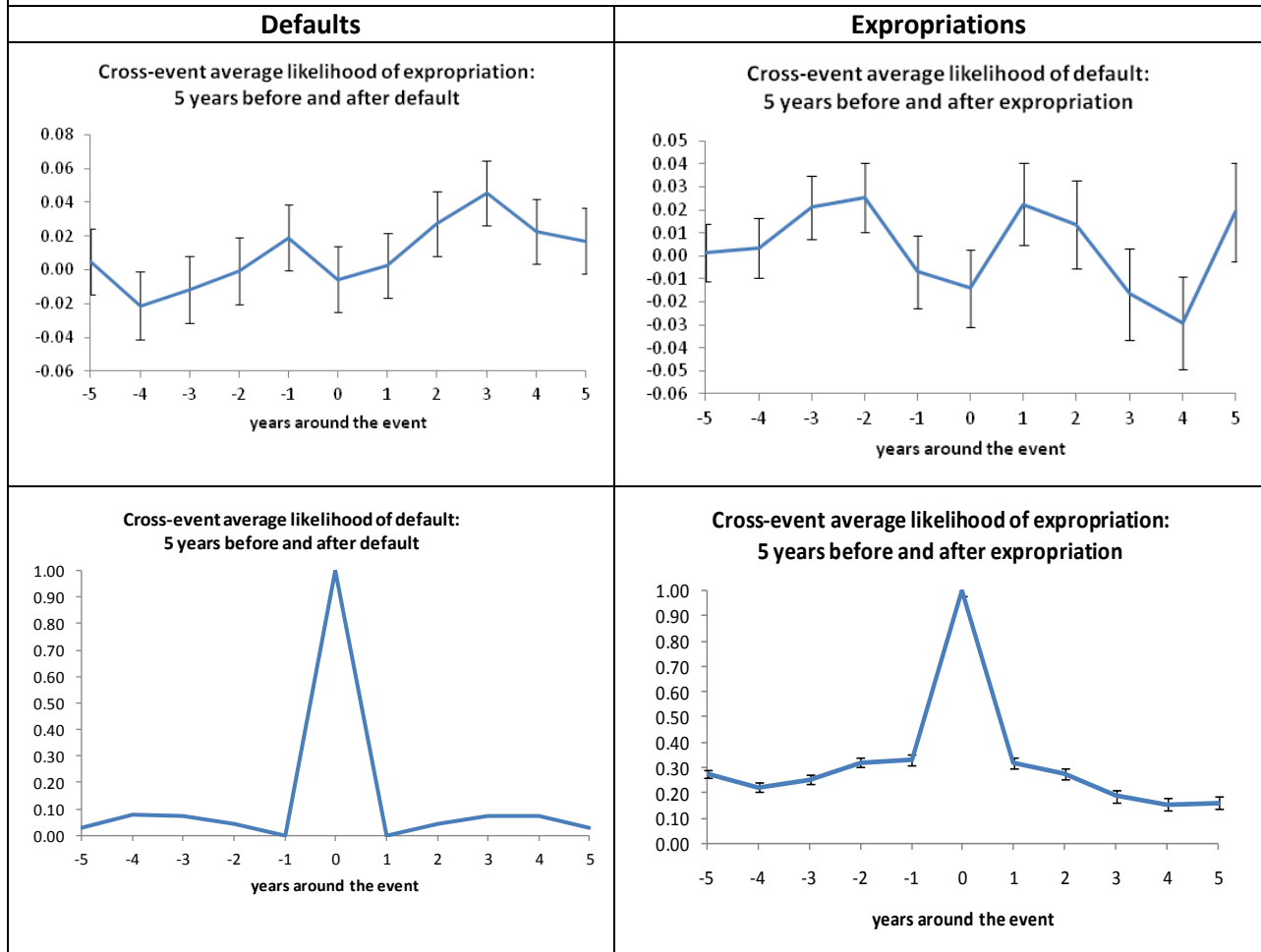
Notes: This graph shows the mean value of the indicated variable in the 10-year window around default events (left column) and expropriation events (right column). Country- and year-averages have been removed from all variables before calculating averages. The vertical bars represent a one-standard-deviation range around the average.

**Figure 4: Political Correlates of Defaults and Expropriations**



Notes: This graph shows the mean value of the indicated variable in the 10-year window around default events (left column) and expropriation events (right column). Country- and year-averages have been removed from all variables before calculating averages. The vertical bars represent a one-standard-deviation range around the average.

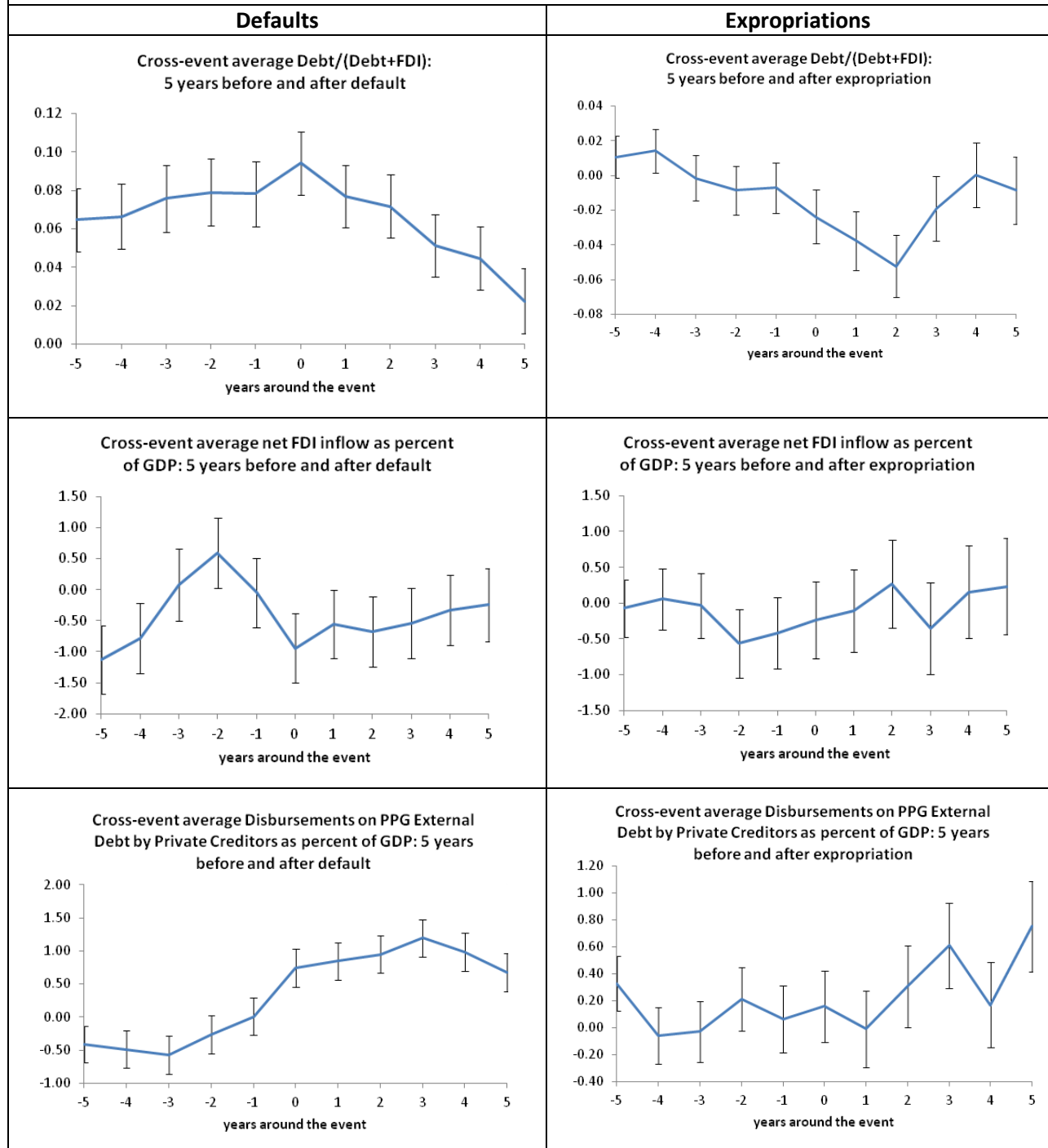
**Figure 5: Persistence and Spillovers**



Notes: This graph shows the mean value of the indicated variable in the 10-year window around default events (left column) and expropriation events (right column). Country- and year-averages have been removed from all variables before calculating averages. The vertical bars represent a one-standard-deviation range around the average.



**Figure 6: Debt and FDI Around Default and Expropriation Events**



Notes: This graph shows the mean value of the indicated variable in the 10-year window around default events (left column) and expropriation events (right column). Country- and year-averages have been removed from all variables before calculating averages. The vertical bars represent a one-standard-deviation range around the average.

**Table 1: Joint Distribution of Sovereign Default and Expropriation Events**

<b>Full Period 1970-2004</b>			
	Expropriation		
Default	0	1	Total
0	75	34	109
1	20	62	82
Total	95	96	191

<b>Quinquennial frequency</b>			
	Expropriation		
Default	0	1	Total
0	804	144	948
1	82	20	102
Total	886	164	1,050

<b>Annual frequency</b>			
	Expropriation		
Default	0	1	Total
0	4,967	275	5,242
1	113	5	118
Total	5,080	280	5,360

Notes: This table reports contingency tables showing the bivariate relationship between sovereign default and expropriation events. "0" indicates that the event never occurred over the indicated horizon while "1" indicates that the event occurred at least once. The top panel considers 191 countries over the entire 1970-2004 period. The middle panel considers 1050 pooled country-quinquennial observations, while the third panel considers 5350 pooled country-year observations.

**Table 2: Cross-Sectional Correlates of Sovereign Theft**

<i>Dependent Variable is</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<i>Period Average of Dummy for:</i>	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop
Debt Stock/GDP	0.0102 (0.0158)	-0.0157 (0.0213)											0.0223 (0.0172)	0.00212 (0.0206)
FDI Stock/GDP			-0.0150 (0.0249)	-0.00970 (0.0507)									-0.0159 (0.0234)	0.00398 (0.0510)
CPIA					-0.0138** (0.00660)	-0.0222** (0.00914)							-0.00374 (0.00817)	-0.0131 (0.0130)
Real GDP Growth							-1.098*** (0.187)	-0.838** (0.338)					-1.111*** (0.226)	-0.646 (0.392)
Dummy for Right-Wing Government									0.00414 (0.0171)	-0.0444** (0.0215)			-0.00108 (0.0190)	-0.0424* (0.0242)
Executive Constraints											0.0000440 (0.00280)	-0.00362 (0.00362)	0.00271 (0.00354)	0.00311 (0.00475)
Constant	0.0427*** (0.00534)	0.0739*** (0.00777)	0.0479*** (0.00673)	0.0728*** (0.0123)	0.0897*** (0.0224)	0.143*** (0.0309)	0.0643*** (0.00608)	0.0857*** (0.00930)	0.0440*** (0.00540)	0.0785*** (0.00780)	0.0445*** (0.0111)	0.0848*** (0.0153)	0.0653*** (0.0209)	0.119*** (0.0340)
N	126	126	126	126	126	126	126	126	126	126	126	126	126	126
R-sq	0.002	0.003	0.002	0.000	0.031	0.037	0.158	0.043	0.000	0.024	0.000	0.007	0.176	0.071
All specifications are estimated using Ordinary Least Squares. All right-hand-side variables are averages over all available years over the period 1970-2004.														
Heteroskedasticity-consistent standard errors in parentheses. * (**) (***) indicates significance at the 10% (5%) (1%) levels.														

**Table 3: Panel Regressions for Sovereign Theft**

<i>Dependent Variable</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
<i>is Dummy for:</i>	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	Default	Exprop	
Debt Stock/GDP(1)	0.146*** (0.0553)	0.0167 (0.0221)													0.179*** (0.0545)	0.0113 (0.0235)	0.295*** (0.108)	-0.0390 (0.0794)	
FDI Stock/GDP(1)			-0.0428 (0.0331)	-0.0129 (0.0230)											-0.0531* (0.0289)	-0.0163 (0.0185)	-0.110 (0.108)	-0.0326 (0.0742)	
CPIA(1)					-0.0308*** (0.00810)	-0.00352 (0.00824)									-0.0252*** (0.00910)	0.00120 (0.00922)	-0.0206 (0.0144)	0.00346 (0.0141)	
Real GDP Growth(1)							-0.676*** (0.140)	-0.0167 (0.0831)							-0.540*** (0.136)	0.0121 (0.0870)	-0.339** (0.139)	-0.0341 (0.0987)	
Dummy for Right-Wing Government									-0.00426 (0.0135)	-0.0205 (0.0124)					0.00260 (0.0119)	-0.0142 (0.0110)	-0.0120 (0.0210)	-0.00895 (0.0217)	
Executive Constraints											-0.00498* (0.00279)	-0.000644 (0.00232)			-0.00385 (0.00252)	0.00121 (0.00195)	0.00417 (0.00479)	0.000837 (0.00641)	
Number of Default Years in Previous 5 Years													0.00566 (0.00389)		0.00268 (0.00391)	-0.00481* (0.00183)	-0.0185*** (0.00601)	-0.00846* (0.00496)	
Number of Exprops in Previous 5 Years														0.0556*** (0.0158)	0.0125 (0.0113)	0.0540*** (0.0168)	-0.00446 (0.0117)	0.0190 (0.0239)	
Constant	0.0219*** (0.00791)	0.0305*** (0.00648)	0.0547*** (0.00920)	0.0357*** (0.00743)	0.150*** (0.0302)	0.0452 (0.0279)	0.0599*** (0.00743)	0.0337*** (0.00581)	0.0477*** (0.00662)	0.0379*** (0.00697)	0.0679*** (0.0135)	0.0361*** (0.0118)	0.0439*** (0.00610)	0.0197*** (0.00432)	0.133*** (0.0299)	0.0174 (0.0313)			
N	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560	
R-sq	0.016	0.000	0.001	0.000	0.012	0.000	0.031	0.000	0.000	0.002	0.003	0.000	0.001	0.039	0.062	0.041	0.230	0.159	
Country Fixed Effects	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y
Year Fixed Effects	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y

All specifications are estimated using Ordinary Least Squares using pooled country-year observations for which all explanatory variables are available. Heteroskedasticity-consistent standard errors clustered at the country level in parentheses. \* (\*\*) (\*\*\*) indicates significance at the 10% (5%) (1%) levels.