

A Political Logic of Foreign Debt Accumulation

Thomas Oatley

Introduction

Developing country debt has steadily increased throughout the last thirty years. In the early 1970s, just prior to the first oil shock and the emergence of commercial bank lending to middle-income countries, the “typical” developing country held foreign debt equal to about 22 percent of its gross domestic product (GDP). Foreign debt burdens doubled during the decade, reaching 48 percent of GDP by 1979. The average debt burden almost doubled again during the 1980s, rising to about 93 percent of GDP by 1989 before stabilizing during the late 1990s at around 85 percent of GDP.¹ By the turn of the century, the 157 countries that the World Bank classifies as “developing” owed a total of \$2.3 trillion to foreign creditors.

Of course, this debt burden is not evenly distributed across all developing countries. Roughly two-thirds of developing countries have “manageable” foreign debt burdens. The World Bank estimates that approximately one-third of all developing countries are “lightly indebted,” with foreign debts of less than 48 percent of GNP and 132 percent of exports (World Bank 2003). Another third are “moderately indebted,” with foreign debts of between 48 and 80 percent of GNP and debt-to-export ratios between 132 and 220 percent. For these countries, foreign debt does not diminish economic performance, does not substantially decrease current standards of living, and does not greatly limit the ability of governments to fund social programs. The remaining third, about 47 developing countries in total, are so heavily indebted to foreign creditors that they can never be expected to repay what they have borrowed. Debt-to-GNP ratios for these countries rise above 220 percent, while debt-to-export ratios are in excess of 220 percent.

¹ While the use of averages somewhat exaggerates the growth of foreign debt, the median foreign debt shows the same trend. The median country’s foreign debt rose from 18.4 percent of GDP in 1970 to 37.7 percent of GDP in 1979, to 68.8 in 1989 before appearing to stabilize at the end of the century at about 65 percent of GDP. One reaches the same conclusion on the basis of debt to export ratios rather than the debt to GDP ratios presented here. Under the HIPC initiative, a debt to export ratio of 150 percent or less is considered “sustainable.” The median country in my sample had a debt to export ratio of 227 percent in 1998. In 1970, the median country’s debt to export ratio was only 84 percent.

For these countries, foreign debt places a substantial strain on almost all aspects of economic performance.

One might think that scholars would have devoted considerable effort to understanding the factors that account for this variation in foreign indebtedness. Yet, when one examines the literature on foreign debt, one finds very few studies that attempt to do so. There is abundant literature on practically every other aspect of foreign debt. Scholars have researched the international response to the Latin American debt crisis, the merits and demerits of the World Bank and IMF approach to the debt crisis, the economic consequences of large debt burdens, and the case for debt forgiveness. Yet, few scholars have tried to explain why some developing countries have become so heavily indebted while others have not.

Those that have appear content to place primary explanatory weight on shocks imposed by the global economy. Krueger (1987) for example, emphasizes the twin oil shocks of the 1970s and rising world interest rates in the early 1980s as factors contributing to the 1980s debt crisis. Iyoha (2000, 175) adopts a similar focus in explaining the growth of debt in sub-Saharan Africa: “a significant proportion of the increase in the region’s external debt since 1982 can be attributed to exogenous factors.” He goes on to note that additional debt was needed to finance “unexpected and unmanageable current account deficits and to finance burdensome debt-service payments.” Even the IMF emphasizes exogenous shocks. In its official discussion of the buildup of debt in the heavily indebted poor countries, it notes that “worldwide events in the 1970s and 1980s—particularly the oil price shocks, high interest rates and recessions in industrial countries, and then weak commodity prices—were major contributors to the

debt build-up in the HIPC countries” (International Monetary Fund 2000; see also Martin 2001; Oxfam International 2001; Pettifor 2003; Roodman 2001).

While systemic shocks may account for the general rise of developing country indebtedness during the last thirty years, they cannot explain variation in indebtedness. Governments in some countries clearly responded to shocks in ways that led them to accumulate large foreign debt burdens. Just as clearly, however, some governments responded in ways that did not result in huge foreign debt burdens. To understand this variation in foreign indebtedness, we first must understand why some governments borrowed heavily while others did not. Existing literature, however, offers only limited guidance about how to do so. Most literature mentions politics, but the references are descriptive, somewhat *ad hoc*, and rarely evaluated empirically. Roodman (2001), for instance, emphasizes government fraud and corruption, as well as efforts to strengthen military power, in his discussion of foreign debt accumulation, but provides little insight into why such practices were common in some countries but not in others.

Others assert more general claims about how politics drive foreign borrowing. Easterly (2002, 1680), for example, argues that rulers in poor countries borrow heavily because they discount the future. He suggests that this may be due to “political economy factors that cause the government to overspend...The ruling elite in impoverished societies keeps itself in power by buying off potential rivals and rewarding supporters...All of this requires the state to mobilize resources, which it does by borrowing against the future.” While suggestive, this provides little assistance in understanding variation in levels of indebtedness. Do all governments discount the future heavily? If so, then the discount factor cannot help us explain variation. If not, then we

need a theory to explain why some governments discount the future heavily while others do not. Snider (1990) suggests that governments borrow from abroad when they lack the political capacity to extract tax revenues from society. This capacity to extract tax revenues can vary across countries and time, and thus could explain variation in foreign indebtedness. Yet, Snider ignores why societies able to prevent governments from levying taxes today allow the government to borrow against their future incomes. This argument requires us to assume either that societies discount the future heavily, or that people are incapable of recognizing the relationship between today's borrowing and tomorrow's tax burden, thus contradicting the Ricardian Equivalence Theorem (Barro 1989). Neither assumption is particularly appealing. Thus, while existing literature suggests that politics play an important role in the accumulation of foreign debt, it fails to provide, much less evaluate, a framework that explains how politics matter.²

This paper takes some initial steps toward developing and evaluating a political explanation for variation in foreign indebtedness. Drawing on the political economy of taxation literature, I develop hypotheses about the relationship between political institutions and the government's incentive to borrow. I then test these hypotheses with a number of different techniques using data for eighty-five developing countries between 1975 and 1998. In a final section I place the statistical results in broader context and draw some broader conclusions.

Political Institutions and Foreign Debt

Why do some governments accumulate large foreign debt burdens, while others borrow little? To what extent are decisions about how much foreign debt to accumulate a

² One indication of the lack of ongoing research in this area is provided by the online Social Sciences Citation Index (SSCI) (queried November 28, 2003). According to the SSCI, the Krueger paper discussed above has been cited only five times since publication. None of the five articles focus on the accumulation of foreign debt. The Snider article has been cited only once, in a paper examining economic policy reform.

function of politics rather than exogenous economic shocks? And to the extent that politics at least partially determine foreign indebtedness, how should we conceptualize these political determinants? To offer some initial answers to these questions, I develop a set of hypotheses based on two basic underlying assumptions. First, I assume that it is useful to conceptualize a government's decision to accumulate foreign debt in much the same way as we conceptualize a government's decision to impose taxes. Because any funds borrowed today must be repaid at some point in the future, a government that borrows today is committing its future tax revenues to debt service. Consequently, a government's willingness to borrow will reflect its willingness to extract resources from society with taxes.³ This assumption allows me to use the theoretical logic that has been developed to think about the political economy of taxation to develop some insights into the politics of foreign debt.

Second, I assume that decisions about how much to borrow are shaped by the political institutions within which governments operate. Political institutions shape political behavior by rewarding politicians for some forms of behavior and policies, and punishing them for others. Assuming that politicians behave rationally, we expect them to respond to this reward-punishment structure in predictable ways. Applied to the question of debt, this approach suggests that in some political institutions rulers are rewarded for borrowing, and rulers respond by borrowing heavily. In other political institutions rulers are punished for borrowing, and politicians respond by limiting the amount they borrow. A necessary first step in developing a political model of borrowing, therefore, is to think

³ Debt and taxes are equivalent in the long run. This equivalence loosens if attention is restricted to a single short-run period. In a single short-run period, debt and taxes might be substitutes (the government borrows to avoid imposing a higher tax rate today or imposes a higher tax rate to avoid having to borrow) or complements (the government imposes a heavy tax rate and borrows).

about how the specific characteristics of political institutions shape the incentive to borrow.

The two assumptions allow me to draw on the political economy of taxation literature to develop some initial testable expectations about the political determinants of debt accumulation. The political economy of taxation literature is largely (though not exclusively) a theoretical literature that explores the relationship between mechanisms of political accountability, and tax rates. Its central question is simply “Will tax rates be higher in systems in which mass electorates can hold governments accountable or in systems where they can not?” Carried into the question of foreign debt, this literature can be used to ask, “Will foreign debt be higher in systems in which mass electorates hold governments accountable or in systems where they can not?”

Scholars working in this field can be organized into two broad schools, each of which develops a distinct theoretical logic to advance a distinct answer to the central question. The “Tocquevillian” perspective argues that taxes will be higher in political systems in which the masses can hold their leaders accountable. For simplicity, I will refer to such systems as democracies. The “predatory state” perspective argues the opposite: tax rates will be higher in political systems in which the masses cannot hold their leaders accountable. I will refer to these systems as autocracies. We look at each perspective in turn and then apply each logic to foreign debt accumulation.

The Tocquevillian perspective asserts that tax rates will be higher in democracies than in autocracies (see e.g., Alesina and Rodrik 1994; Boix 2003; Meltzer and Richards 1981; Persson and Tabellini 1994).⁴ This approach assumes that the government uses

⁴ This approach has been called Tocquevillian because it asserts that, in his *Democracy in America*, de Tocqueville “associated the size of government, measured by taxes and spending, with two factors: the

taxes to redistribute income from the wealthy to the poor, and rules out by assumption the possibility that income is transferred from the poor to the rich. Its core theoretical logic is based on a voting model in which a single decisive voter determines society's tax rate. The decisive voter is assumed to prefer more total income, including the impact of tax payments and receipts from government transfers, to less total income. Consequently, the decisive voter's preference for tax and transfer systems is determined by the location of her income relative to the average income in society. If the decisive voter's income falls below society's average income, she will gain from government policies that redistribute income. In a redistributive system, she will be taxed little and she will receive a large transfer from the government. Consequently, she will have a larger income with a large tax and transfer system than without such a system. She will thus vote for a high tax rate. If the decisive voter's income is higher than society's average, she will lose from government policies that redistribute income. In a redistributive system, she will be taxed heavily, and she will receive no transfer payments from the government. Consequently, she will have a larger income without a large tax and transfer system than she will with such a system. She will thus vote for a low tax rate.

Political institutions, specifically the rules determining who is allowed to vote, determine where the decisive voter lies within the societal income distribution. In democracies with universal suffrage (and some income inequality), the decisive voter's income will fall below society's average income. In democracies, therefore, the decisive voter is likely to realize a higher income under a system of high tax and transfer rates.

spread of the franchise and the distribution of wealth" (Meltzer and Richards 1981, 916). Specifically, this literature asserts that de Tocqueville argued that governments were more likely to use tax and transfer systems to lessen income inequality when full franchise and high (pre-transfer) income inequality were both present.

Consequently, in democracies the decisive voter is likely to vote for a high tax and transfer system. As Meltzer and Richards (1981, 916) summarize, “any voting rule that concentrates votes below the mean (of income) provides an incentive for redistribution of income financed by (net) taxes on incomes that are (relatively) high.”

In autocracies, in contrast, the right to vote (or more accurately, the ability to participate in choosing the ruler) is restricted to a small fraction of society. Consequently, the decisive voter’s income will lie well above society’s average income. In autocracies, therefore, the decisive voter realizes a lower income under a system of high tax and transfer rates. Consequently, in autocracies the decisive voter is likely to vote against a high tax and transfer system. As Boix (2003, 26) explains, the decisive voter in such systems is wealthy and sees no point in redistributing income to himself. Consequently, no redistribution takes place. According to the Tocquevillian perspective, therefore, tax rates rise as the proportion of the population allowed to vote expands from a small set to the full population. Democracies are therefore likely to have higher tax rates and more redistribution than autocracies.

The predatory state perspective asserts that tax rates will be higher in autocracies than in democracies (see e.g., Adam and O’Connell 1999; Fauvelle-Aymar 1999; Lee 2003; Ndulu and O’Connell 1999; North 1981; Olson 1993; Przeworski 1990). In contrast to the Tocquevillian perspective’s assertion that rulers use taxes to lessen income inequality, predatory state models assume that rulers use state power to enrich themselves and those that keep them in power—the selectorate. The share of total societal income that the ruler extracts depends upon the size of the selectorate as a share of the total population. In autocracies, the selectorate is a small fraction of the total population. This small selectorate has an incentive to pressure the ruler to tax the rest of society very heavily and distribute the resulting revenue among them. Moreover, because the

income generated for each individual member of the selectorate by the tax and transfer system is quite large, the members of the selectorate do not engage in market-based activity. As a result, they are relatively unconcerned about the distortions that a high tax imposes on the economy. In autocracies, therefore, rulers will tax society heavily.⁵

Two important changes occur when we shift to a democracy with universal suffrage. First, the selectorate is much larger in a democracy than it is in an autocracy. At the limit, all adults vote and thus the group is 100 percent of the adult population. The larger size of the selectorate has two consequences. On the one hand, there are fewer people outside the selectorate that can be taxed with impunity. On the other hand, there are more people inside the selectorate that must get a share of whatever tax revenues are raised. Therefore, a high tax yields a smaller transfer for each individual member of the selectorate in a democracy than it does in an autocracy. The second important change is that members of the selectorate are more sensitive to the economic distortions caused by high taxes. Because individual incomes from government transfers are small, each member of the selectorate must earn the majority of his or her income from market-based activity. Consequently, each member's income is very sensitive to the distortions generated by higher taxes. Each member of the selectorate, therefore, must weigh the small income gain he realizes from a higher tax rate against the income loss he suffers from the tax distortion. On balance, this approach argues, the loss of market-based income is larger from the gain from a higher tax rate (Ndulu and O'Connell 1999, 54-5). Consequently, members of the selectorate in democracies prefer low taxes. The predatory state perspective therefore leads us to expect higher tax rates in autocracies than in democracies.

These two perspectives thus provide competing hypotheses about how mechanisms of political accountability shape the incentive to accumulate foreign debt. According to the Tocquevillian perspective, countries in which the masses hold governments accountable will have

⁵ Not without limit, of course. A rational dictator would not impose a 100 percent tax, but would instead impose the revenue maximizing tax rate.

larger foreign debt burdens than countries in which they do not. If government policy strives to reduce income inequality, we would expect governments accountable to mass electorates to be willing to use foreign debt to finance programs that benefit the decisive voter and the lower half of the income distribution. The wealthy would then be forced to repay this debt with higher taxes in the future. Because an unaccountable ruling clique cares little about reducing income inequalities, and further recognizes that debt represents a claim on its future income, it has little incentive to borrow funds that are channeled to the poor. Consequently, the Tocquevillian perspective suggests that foreign debt will be higher in countries in which mass electorates hold governments accountable than in countries in which they cannot hold governments accountable.

The predatory state perspective offers the opposite conclusion. Governments that are not constrained by mechanisms of political accountability will have larger foreign debt burdens than governments held accountable by mass electorates. When rulers are autonomous, they use policy to enrich themselves at the expense of the masses. Because foreign debt represents a claim on the future incomes of society as a whole, an unaccountable ruling clique should be quite willing to use foreign debt to finance activities that benefit them at the expense of the masses. Moreover, if such rulers expect a short tenure, and thus discount the future heavily, the incentive to borrow against future tax revenues is strengthened. Because such rulers believe they will not be around long enough to collect future tax revenues, they have strong incentive to borrow against these future revenues today. In countries in which social groups can hold the government accountable, citizens will recognize that foreign debt represents a claim on their future incomes. They will also recognize that the distortions that result from the required higher taxes will yield lower gross incomes. These citizens are also likely to discount the future less heavily than the ruling clique in an autocracy. Each recognizes that he or she will have to pay the future taxes required to service debt, and thus they do not sharply discount the future costs of immediate benefits available from foreign loans. Consequently, voters will prefer governments that borrow less to governments that

borrow more. The predatory state perspective thus suggests that foreign debt will be higher in countries in which rulers are not held accountable than in countries where they are.

In summary, the political economy of taxation literature suggests that the presence or absence of mechanisms of political accountability, established and institutionalized procedures that enable large societal groups to hold governments accountable for the decisions they make, shapes government behavior in predictable ways. This literature disagrees, however, on the precise relationship between political accountability and a government's incentive to borrow. The Tocquevillian perspective expects foreign debt to be higher in political systems in which governments are held accountable by a large fraction of society and lower in systems in which such accountability is absent. The predatory state perspective expects debt to be higher in political systems in which governments are not held accountable by a large fraction of society and lower in political systems in which such accountability is present. We turn now to evaluate these alternative explanations.

Data and Analysis

I evaluate these hypotheses in two ways. First, using a data set comprised of observations on eighty-five countries for the period 1975–1998, I explore the determinants of variation in the ratio of public foreign debt to GDP. Second, collapsing this data into period-long means, I explore the extent to which political institutions predict the attainment of HIPC status at the end of the period.⁶ Evaluating the hypotheses

⁶ HIPC (Highly-Indebted Poor Countries) initiative was established jointly by the IMF and World Bank in the late 1990s. It aims to provide debt forgiveness to eligible countries. Eligibility is determined in part on the basis of per capita incomes (only poor countries are eligible) and in part on the basis of total indebtedness. HIPC initiative countries are therefore countries that have been generally recognized to be so indebted that they can never repay what they have borrowed.

in these two ways will provide a more robust test than either approach could provide on its own. Consistent results across the two will provide reasonable evidence about the nature of the extant relationships. In assembling the data, I have attempted to be as inclusive as possible. Data availability meant that some countries had to be excluded. I also excluded the countries of east and central Europe, as well as the countries that emerged from the break-up of the Soviet Union because many simply did not exist throughout the span of time covered here, while for others I lacked data that was consistent over time.

Determinants of Public Foreign Debt

I begin with a pooled-time series analysis of the variation in government and government guaranteed debt. The dependent variable, the logged value of the ratio of public foreign debt to gross domestic product, “is the sum of public, publicly guaranteed long-term debt, use of IMF credit, and short-term debt” (World Bank 2002).⁷ I employed three variables to measure mechanisms of political accountability. First, I included a measure of *Regime Type*—democracy vs. autocracy—derived from the Polity IV index of democracy. This index rates each country on a scale ranging from no democracy (-10) to high democracy (10). I assigned a 1 to all country years that were rated 7 or higher in this index and a 0 to all other country years. I also included a measure of the specific political system in place. This variable, *Parliamentary*, takes the value of 1 for all country years in which a parliamentary system is in place and 0 otherwise. Because parliamentary systems

⁷ This measure is likely to overstate the real debt burden for poor countries. A large share of poor country debt is borrowed on concessional terms (i.e., at below market rates of interest). Thus, all else being equal, the burden of a given level of foreign debt is lower for a poor country than for a wealthy country. Ideally, one should measure foreign debt in net present value terms. However, such data do not exist for more than a few years dating from the late 1990s.

impose greater constraints on executive action than presidential systems, I assume that parliamentary systems impose greater accountability than presidential systems. This effect need not be limited to democracies (but could be accentuated there). Boix (2003, 210-12), for example, argues that some accountability exists in what he calls “parliamentary dictatorships” in which a ruling class participates in the decision-making process. Finally, I included a dummy variable for executives who serve long terms in office (more than ten years). I assume that regardless of the rules established by formal institutions, long executive tenures are evidence of a lack of meaningful political competition, and thus of a lack of political accountability. Using the Database of Political Institutions variable *Years in Office*, I created a dummy variable called *Executive Tenure* that takes the value of 1 for each year of the term of an executive who serves for eleven or more consecutive years. All other country years are coded 0.

I do not have strong expectations about the signs for these coefficients. As a first step, statistically significant coefficients for these variables will provide confidence that political accountability shapes the incentive to borrow and thus the accumulation of foreign debt. Precisely how it does so, and thus whether the logic is that emphasized by the Tocquevillian or the predatory state hypothesis, depends upon the pattern of signs associated with these coefficients. Support for the Tocquevillian hypothesis exists if the analysis returns positive signs on *Regime Type* and *Parliament*, as well as on the interaction between these two variables, and a negative sign on *Executive Tenure*. Support for the predatory state hypothesis exists if we see the opposite pattern of signs. That is, negative signs on *Regime Type* and *Parliament*, as well as on the interaction between them, and a positive sign on *Executive Tenure* would suggest that the logic of the predatory state hypothesis is at work.

I initially control for three structural factors that might also be expected to influence the amount of foreign debt that countries accumulate (I control for additional factors later in the

analysis). First, *Per Capita Income*, measured in constant U.S. dollars, controls for the level of development. I expect a negative sign on this variable, as wealthier countries will have larger pools of domestic savings and will thus have less need to draw on foreign capital. *Gross Domestic Product* (GDP), measured in U.S. dollars, controls for economic size.⁸ I also expect a negative sign on the coefficient for this variable. Finally, *Trade Openness* is the sum of imports and exports as a share of GDP. More open economies should be able to carry larger foreign debt burdens because their greater export capacity enables them to service a larger debt more comfortably. Thus, I expect a positive sign on the coefficient for this variable. I also included dummy variables for four of the five regions represented in the sample and for all but one of the years included. The inclusion of the dummy variables for each year controls for system level effects that are common to all countries but vary each year (such as changes in the international financial system, changes in IMF and World Bank lending practices, common shocks, etc.). I estimated all models using Stata routines for time series cross sectional analysis with unbalanced panel data. Standard errors are panel corrected, and the model included a panel-specific AR1 process. The results of the analysis are presented in table 1.

⁸ I also estimated the model using population rather than GDP as a control for size. This model returned results practically identical to those reported here using the GDP measure.

Table 1. Determinants of Public Foreign Debt

	Model 1	Model 2
Per Capita Income	-0.0002*** (2.45E-05)	-0.0002*** (1.99E-05)
GDP	-2.23E-12*** (3.07E-13)	-1.98E-12*** (3.24E-13)
Openness	0.004*** (0.001)	0.004*** (0.001)
Executive Tenure	0.12*** (0.03)	0.14*** (0.03)
Regime Type	-0.03 (0.02)	-0.03 (0.02)
Parliament	0.06 (0.05)	0.06 (0.05)
Regime Type X Parliament	-0.12** (0.05)	-0.11** (0.05)
Change in Terms of Trade		-0.002** (0.001)
World Interest Rates		0.01 (0.01)
Government Budget Deficit		0.001*** (0.0001)
Inflation		-0.01*** (0.001)
Observations	2167	2019
R-Squared	.43	.47
Wald Chi2	265.48	403.20

Notice first that the control variables are all statistically significant and carry signs that accord with our expectations. Large countries and wealthier countries carry smaller debt to GDP ratios than smaller and poorer countries. A country's position in and relationship to the international economy is also an important determinant of its foreign debt burden. Countries that are more open to trade carry more debt as a share of GDP, perhaps, as noted above because a higher volume of exports enables them to service a larger debt.

Turning to our variables of interest, the analysis provides substantial evidence that mechanisms of political accountability matter. Moreover, the signs on the estimated coefficients for our measures of political accountability suggest that the predatory state hypothesis provides a better explanation for the accumulation of foreign debt than does the Tocquevillian hypothesis. Two of the four measures returned statistically significant coefficients. First, *Executive Tenure* yielded a statistically significant positive coefficient, indicating that long-serving executives accumulate larger foreign debt burdens than executives who serve shorter tenures. Second, the interaction between *Regime Type* and *Parliament* returned a statistically significant negative coefficient, indicating that governments operating in parliamentary democracies accumulate substantially less foreign debt than governments operating in other types of political systems.

The other two measures failed to yield statistically significant coefficients. *Regime Type* returned a negative coefficient, suggesting that governments classified as democracies carry smaller foreign debt burdens than governments classified as autocracies. The coefficient was not statistically significant, however. *Parliament* returned a positive coefficient, suggesting that governments operating within parliamentary systems accumulate more foreign debt than governments operating in other types of political systems. As with *Regime Type*, however, the coefficient for *Parliament* was not statistically significant. The central message of the analysis, therefore, is that governments that operate with few mechanisms of accountability borrow more heavily from foreign lenders than governments that operate within institutions through which society can hold them accountable.

This conclusion might be vulnerable to the charge of spuriousness as it omits other potentially important causes of foreign debt accumulation. As noted in the introduction, much of the literature on foreign debt emphasizes the role of exogenous shocks. I controlled for such shocks with two variables. *Terms of Trade* measures the change in the ratio between the price a country receives for its exports and the price it pays for its imports. A country facing declining terms of trade (a rise in the price of its imports relative to the price of its exports) will be forced to finance a portion of its imports with foreign debt. I used three measures of the change in terms of trade: the percent change in the country's terms of trade from year $t-1$ to year t ; the percent change in the country's terms of trade from year $t-2$ to year $t-1$; and a three-year moving average (years $t-2$, $t-1$, and t) of the percent change in the country's terms of trade. As the values on this variable can range from negative numbers indicating declining terms of trade to positive, I expect a negative sign on the coefficient for this variable.⁹ I also included *U.S. Interest Rates* as a proxy for world interest rates. I expect a positive sign on this variable: governments will borrow more in order to make the higher debt service payments that result when world interest rates rise.

A sizeable literature also argues that macroeconomic policies play an important role in foreign debt accumulation. Easterly (2002, 1686), for example, argues that the policies of the heavily indebted countries “were worse precisely in those areas—large current account deficits and budget deficits—that led to high debt accumulation.” The IMF notes that “Domestic factors . . . played a large role in the debt build-up. Many countries were already living beyond their means, with high trade and budget deficits and low savings rates, and had no way to cushion themselves from external shocks. Instead, they borrowed more heavily,

⁹ I also estimated versions of the model using changes in export growth in place of as well as along with changes in terms of trade. This variable never returned a statistically significant coefficient.

often without any change in policies to reduce their dependence on loans” (International Monetary Fund 2000).

I include two variables to capture the impact of the macroeconomic environment. *Government Budget* is the size of the surplus or deficit in the government’s budget as a percent of GDP. I expect countries with larger deficits to have larger foreign debt burdens. Thus, I expect a negative sign on the coefficient for this variable. *Inflation* is the change in prices from year $t-1$ to year t . I estimated models using two measures of inflation: the GDP deflator and changes in the consumer price index. I report the results based on the GDP deflator, though the results for the two are broadly similar.¹⁰

The results from these more fully specified models, presented in column two of table 1, provide substantial evidence that exogenous shocks and the macroeconomic environment are both systematically related to changes in foreign debt to GDP ratios. The coefficient for Change in Terms of Trade is correctly signed and statistically significant. Countries facing declining terms of trade in the recent past have higher debt-to-GDP ratios than countries with stable or improving terms of trade. However, this result is sensitive to measurement and model specification. While the three-year moving average measure reported here yields a statistically significant coefficient, neither the current year change in terms of trade nor a one-year lag of this variable are statistically significant. Governments therefore appear to accumulate foreign debt in response to deteriorating terms of trade only when the negative shock is persistent. Governments also appear to use at least a portion of the windfall provided by a positive terms of trade shock to reduce their total indebtedness. The measure of world interest rates failed to return a statistically

¹⁰ I also estimated the model with lagged values for these variables. The coefficient for government budget was not statistically significant, though the coefficient for inflation was and carried the expected sign.

significant coefficient in all models I estimated. One might suspect that this is due to the inclusion of the year dummies in the model. Yet, the interest rate variable failed to return a statistically significant coefficient even in models that excluded the year terms.

Macroeconomic policy is also an important determinant of foreign debt-to-GDP ratios. The coefficient for Government Budget carries the hypothesized negative sign, indicating that countries with large budget deficits carry heavier foreign debt burdens than countries with balanced budgets. Moreover, this coefficient is highly significant. The coefficient for *Inflation* also carries the hypothesized positive sign, indicating that countries with high inflation carry large foreign debt burdens. This coefficient is also highly significant. Thus, like terms of trade shocks, macroeconomic imbalances play an important role in the accumulation of foreign debt.

While terms of trade shocks and the macroeconomic environment do influence the accumulation of foreign debt, they do not vitiate the impact of our measures of political accountability. The inclusion of these additional control variables fails to alter the size of the estimated effect or the standard error for *Regime Type X Parliament*. The coefficient for *Executive Tenure* increases, and the standard error for this estimated effect falls slightly. There is little evidence, therefore, that the political effects identified in the initial analysis are spurious relationships that disappear once we control for other likely explanations for the accumulation of foreign debt.

Predicting HIPC Status

To further evaluate the relationship between political accountability and foreign debt accumulation, I collapsed the data into period-long means. I then evaluated the degree to which the presence or absence of mechanisms of political accountability was associated with HIPC status at the end of the period. This analysis is complicated by the fact that only low-income countries are eligible to enter the HIPC initiative. Consequently, I could not include all countries

in the sample. I therefore restricted the analysis to the set of countries that the World Bank classifies as low income. With missing data, this yielded a sample of only forty-four countries.

I begin with two simple contingency tables (see table 2). These contingency tables allow us to see whether there is any relationship between *Regime Type* or *Executive Tenure* on the one hand and *HIPC Status* on the other. Panel A presents the results from the analysis using *Regime Type*. There are only five democracies in the sample, yet in spite of this limited number of democracies, the analysis suggests that *Regime Type* is significantly related to HIPC Status. More than three quarters of the non-democratic countries were HIPCs by the end of the century, while only one of five democracies achieved this status. This relationship is statistically significant (using a one-sided Fisher's exact statistic) at the .02 level.

Table 2. Accountability and HIPC Status

Panel A				
		HIPC Status		
		No	Yes	Total
Democracy	<i>No</i>	10 (23.3)	33 (76.7)	43 100
	Yes	4 (80)	1 (20)	5 100
Total		14 (29.2)	34 (70.8)	48 100
Pearson Chi² = 6.98 Pr = 0.008				
1-sided Fisher's exact = 0.021				

Panel B				
		HIPC Status		
		No	Yes	Total
Long Executive Tenure	No	10 (41.7)	14 (58.3)	24 100
	Yes	4 (16.7)	20 (83.3)	24 100
Total		14 (29.2)	34 (70.8)	48 100
Pearson Chi² = 3.63 Pr = 0.057				
1-sided Fisher's exact = 0.055				

Panel B
for *Executive*
data suggest an

reports the results
Tenure. The raw
underlying

relationship, with 83 percent of countries with long-serving executives attaining HIPC status by the end of the century, while only 58 percent of countries without long-serving executives

attained this status. The measure of statistical significance in this analysis suggests, however, that the relationship is a bit weaker than in the case of *Regime Type*, as the one-sided Fisher's exact returns a p -value of 0.055. Both contingency tables confirm the basic relationships suggested by the pooled analysis of debt-to-GDP ratios reported above. Low-income countries classified as non-democracies, and low-income countries with long-serving executives are more likely to have attained HIPC status than low-income democracies and low-income countries with more frequent executive turnover.

As a second step, I performed a logit analysis using HIPC Status as the dependent variable.¹¹ The results from this analysis are presented in table 3. I began by regressing HIPC status only against *Executive Tenure* and *Regime Type*. The results from this analysis are consistent with what we learned from the contingency tables. Democracies are significantly less likely to attain HIPC status, and countries with long-serving executives are significantly more likely to do so. As in the contingency tables, the relationship between *Executive Tenure* and *HIPC Status* is a bit weaker than the relationship between *Regime Type* and *HIPC Status*. I then added controls for exogenous shocks and macroeconomic conditions. The addition of these control variables alters the results. The coefficient for *Regime Type* remains negative, but shrinks in size. As a consequence, the p -value for this coefficient falls from .03 to .12. The coefficient for *Executive Tenure* increases in size substantially, and attains statistical significance with a p -value of .03. Only one of the three added control variables, *Terms of Trade*, yields a statistically significant coefficient. Countries who on average experienced declining terms of trade over the period were more likely to attain HIPC status. Neither the government's average budget deficit nor the average rate of inflation was a significant predictor of *HIPC Status*.

Table 3. Determinants of HIPC Status

¹¹ Essentially identical results were attained using probit analysis. I report only the logit.

	Model 1	Model 2	Model 3	Model 4
Regime Type	-2.69** (1.24)	-2.01 (1.29)	-1.69 (1.60)	-2.09 (1.48)
Executive Tenure	1.36* (0.76)	3.49** (1.63)	4.80* (2.51)	3.81** (1.87)
Budget Deficit		0.05 (0.13)	0.03 (0.19)	
Inflation		0.05 (0.04)	0.10 (0.07)	
Terms of Trade		-0.78** (0.4)	-1.09 (0.8)	-0.76 (0.53)
Per Capita Income			-0.004** (0.002)	-0.003** (0.001)
Constant	0.62 (0.45)	0.54 (0.9)	3.81** (1.97)	3.74** (1.53)
Observations	44	44	44	44

As a final step I controlled for per capita income. I estimated two versions of this model. The first version includes both political variables and all controls. In this specification, the statistical significance of *Executive Tenure* falls slightly (p -value .056), and the relationship between *Terms of Trade* and *HIPC Status* is substantially weakened (p -value falls to .17). The second version excludes the two macroeconomic control variables. In this specification, *Executive Tenure* achieves an acceptable level of statistical significance (p -value .042), while *Terms of Trade* remains statistically insignificant. Overall, the logit analysis confirms the patterns identified by the contingency tables (and by the pooled time series analysis). Countries in which citizens could hold governments accountable were significantly less likely to develop extreme foreign debts than countries where such mechanisms of political accountability were absent.

Conclusion

Governments do not wake up one morning and discover that they have become heavily indebted to foreign lenders. Nor is the accumulation of foreign debt driven solely by the need to respond to negative terms of trade shocks. The central message of the analysis reported here is that governments accumulate lots of foreign debt when there are no political checks to limit their ability to do so. Governments become heavily indebted because when they can operate without fear of being held to account by those who will ultimately repay this debt, they borrow heavily from foreign lenders for long periods of time.

It is hardly surprising that autocracy and large foreign debts go hand-in-hand. For while it may once have been possible to romanticize the developmental prospects that a “strong state” makes possible, forty years of subsequent experience should be sufficient to teach us that strong states more often act in the interest of state leaders and their cronies than in the interest of society as a whole. Autocratic rules extract from their societies whatever resources are available, and they borrow heavily against whatever resources they believe will be available tomorrow. They use the resulting revenues to finance extravagant lifestyles and to equip their militaries with the means to repress potential rivals. In the process, they push their societies to the verge of bankruptcy. Democracies fare substantially better, perhaps only because governments are prevented from the excesses of autocracy by mechanisms of accountability.

The broader concern, of course, is what to do about the foreign debt that the most heavily indebted governments have accumulated. While debt forgiveness is the current rage, this paper provides reason to be skeptical about debt forgiveness alone as a lasting solution. On the one hand, the analysis presented here does support the call for forgiving “odious debt” accumulated and spent by governments. However, unless debt forgiveness is accompanied by meaningful political reform, current forgiveness will—as it has in the past—simply be replaced by large debt burdens in the future (see Easterly 2002), and linking debt forgiveness to poverty reduction is not the solution. Autocratic governments have little incentive to reduce poverty (if they had such

incentives, they would not be so heavily indebted to begin with). A lasting solution to the debt problem must be based on fundamental political restructuring. If the developing societies that are now so heavily indebted are ever to be placed on sustainable foreign debt paths, they must develop democratic forms of government.

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