

# DO COUNTRIES HAVE A “DEMOCRATIC ADVANTAGE”? Political Institutions, Multilateral Agencies, and Sovereign Borrowing

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This article examines the effect of political institutions on countries' risk characteristics and the role that domestic political institutions play in determining the interest rates charged to less developed countries. According to the “democratic advantage” argument, democracies should pay lower interest rates than authoritarian regimes because they are better able to make credible commitments. The author argues that such a claim must be revised in the case of developing countries. The results presented in this article support this assertion. First, they show that democracies are more likely to reschedule their debts, so they have no advantage; rather, the opposite is true. Second, there does not appear to be a significant difference between the interest rates paid by democracies and nondemocracies.

**Keywords:** *sovereign borrowing; democratic advantage; multilateral lending; developing countries; nonrandom selection*

Argentina's default by the end of 2001 put the problem of sovereign debt repayment back in the spotlight. As international investors speculated that the country would be unable to make loan payments on its public debt, Argentina's access to international credit was effectively cut off. The consensus that Argentina was on the brink of default proved right when the country decided to swap bonds for securities with lower value by the end of 2001. On December 24, Adolfo Rodríguez Saa was sworn in as Argentina's interim

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president and officially announced that he would halt payment on government debt. Some days later, on January 3, 2002, the administration of Eduardo Duhalde (the country's fifth president in 2 weeks) decided to uphold his predecessor's decision and missed a \$28 million interest payment due on an Italian lira bond.

Interestingly enough, though, the very next day, Argentina made a \$75 million payment to the International Monetary Fund (IMF). This payment sought to signal that the country was not willing to risk being cut off from more aid by multilateral organizations. The strategy paid off: The IMF's executive board agreed to let Argentina postpone for a year a \$933 million payment that was due on January 17. In addition, the IMF pledged to "work closely with Argentina" to develop a comprehensive strategy to restore sustained growth. Although bondholders felt that the IMF was once again letting a country get out of paying what it owed to private investors for political reasons, top officials of the Bush administration welcomed the decision.

The concern with "political" bailouts has become increasingly important to scholars and policy makers who analyze sovereign borrowing. Arguments about the role of political factors in determining a country's level of indebtedness are pervasive in both the scholarly and the consulting literature. However, the relationship between political institutions and sovereign borrowing has not been rigorously studied empirically. This article seeks to explain the effect of political institutions on countries' risk characteristics and the role that domestic political institutions play in determining the interest rates charged to less developed countries.

According to the "democratic advantage" argument (Schultz & Weingast, 2003), democratic countries have a greater ability to make credible commitments to repay their debts, and as such, they should be perceived as countries with a lower probability of rescheduling or defaulting on debt. This implies that these countries should be charged lower risk premium spreads than authoritarian ones. I argue that such a claim must be revised in the case of developing countries. The results presented in this article support this assertion. First, they show that democracies are more likely to reschedule their debts, so they have no advantage; rather, the opposite is true. Second, there does not appear to be a significant difference between the interest rates paid by democracies and nondemocracies. These findings are obtained using data for developing countries between 1971 and 1997.

The remainder of this article is organized as follows. The next section introduces the relationship between political regime and sovereign debt. The second section presents the different models of rescheduling. In the third section, the interest rates for dictatorships and democracies are calculated. Conclusions follow.

## SOURCES OF DEMOCRATIC “ADVANTAGE”

### THE PROBLEM OF SOVEREIGN BORROWING

Why is it that sovereign debt is so different from ordinary debt owned by nongovernmental entities? The literature points out two key factors: willingness to repay and enforcement problems.

First, repayment is not necessarily connected with the ability to repay. As Drazen (2000, p. 587) notes, a country may have the technical ability to repay a debt but still adopt a political decision not to do so. This fact is connected with the second element of sovereign borrowing: limited enforcement mechanisms. The main reason is that, as Bulow and Rogoff (1989) put it, collateral in the strict sense used in domestic contracts is “irrelevant.” The assets of debtor countries that a creditor could seize in the event of default are usually worth only a small fraction of the outstanding debt. This is because countries keep very limited assets abroad, and domestic assets cannot be seized by creditors (Drazen, 2000, p. 587). Taken together, these two factors imply that debtor countries may behave opportunistically, balancing the costs of defaulting against the benefits of repudiation (Bulow & Rogoff, 1989; Cohen & Sachs, 1986; Eaton, Gersovitz, & Stiglitz, 1986). The question, then, is how can creditors induce repayment? Several incentive mechanisms, such as punishment strategies and exclusion from borrowing markets, are discussed in the literature. However, these mechanisms tend to fail under a wide array of conditions (see Drazen, 2000, for a summary of these arguments).

Indeed, because debt repudiation constitutes an attractive option for debtor countries, lenders may respond by refusing credit altogether or by charging very high interest rates on new loans. Note that borrowing countries are the ones facing problems. A country may benefit from the ability to precommit not to repudiate its debt to secure good credit conditions. However, there are not many ways by which it can do this. Again, the opportunity to repudiate debts and the lack of adequate enforcement mechanisms create a credibility problem for borrowing countries.

Some authors argue that certain features of a borrowing country’s political institutions alleviate or exacerbate this commitment problem (Barzel, 1992; North & Weingast, 1989; Root, 1989). However, the role of domestic political institutions in determining a country’s borrowing abilities is not clear.

### A DEMOCRATIC ADVANTAGE?

Since the publication of North and Weingast’s (1989) seminal article on public borrowing in 17th-century England, the argument that limited govern-

ments alleviate the commitment problem has been a pervasive theoretical claim.

Along these lines, Schultz and Weingast (2003) argue that “representative institutions enhance a state’s borrowing power.” According to them, the commitment technology provided by representative institutions means that states possessing them have an advantage. Because “the constraints on liberal government increase the likelihood that the state will honor its debts, these states typically have superior access to credit than their nondemocratic rivals” (p. 36). In their view, institutions of limited government provide an effective way to enforce sovereign loans because they provide “means of punishing sovereigns, such as electoral accountability.” As a result, they claim, all being equal, a state with representative institutions will enjoy “greater access to credit, and lower interest rates, than a state whose political leaders are less constrained” (p. 14).

This is an interesting hypothesis, but it may not hold in the case of developing countries. Essentially, Schultz and Weingast’s (2003) argument rests on the idea that lenders will punish a sovereign borrower in a democracy by using the electoral mechanism. This proposition depends on at least two assumptions. The first is that lenders are agents in the domestic economy and as such have the right to vote. The second assumption is that lending takes place between a sovereign borrower and a lending community whose sole objective is to collect its debt payments. I address these assumptions one by one.

#### ENDOGENOUS SOURCES OF DEMOCRATIC ADVANTAGE

With respect to the first assumption, it is not clear why lenders will be able in a democracy to exert their right to vote. Namely, lenders may not be agents in the domestic economy. If this is the case, democracy alone does not create credibility. What matters is the representation of debt holders’ interests, which democracy provides only when those with stakes in the repayment of debt are sufficiently numerous domestically (Schultz & Weingast, 2003, p. 13).

In the case of developing countries, thus, the assumption that lenders are agents in the domestic economy is very restrictive. Although Organisation for Economic Co-operation and Development (OECD) governments raise much of their capital domestically, developing countries tend not to. One need only recall Latin American and Asian countries’ levels of net foreign debt prior to the 1982 and 1996 crises to see that OECD countries’ external debt/gross domestic product ratios stand at considerably lower levels. Hence,

the democratic-advantage argument may be weaker when taken to this different empirical domain (Schultz & Weingast, 2003, p. 13).

Drazen (1998) provides an explanation of why richer countries finance more of their spending by domestic debt. He presents a model stressing that the crucial difference between foreign and domestic debt is the differential ability of domestic and foreign residents to “punish” a government that takes actions detrimental to the value of their holdings. This difference implies that the effective cost of borrowing at home and abroad may differ substantially, so that the composition of the debt reflects the politically determined terms of borrowing (Drazen, 2000, p. 597). Drazen shows that by the median-voter mechanism, the preferred combination of domestic and foreign debt is determined by income distribution. As long as the median voter’s savings are less than the economy-wide average, the median voter prefers a domestic interest rate that is lower than the net effective cost of foreign borrowing. On the other hand, if the median voter’s savings are above the economy-wide average, the median voter prefers a domestic interest rate that is higher than the country’s cost of foreign borrowing. Given the world interest cost, then, a richer country would finance more of its spending by domestic debt, whereas a poorer country would finance more of its spending via foreign borrowing.

There is a way to get around this problem, though. One may postulate that although lenders may not be agents in the domestic economy, voters may have preferences over debt repayment such that they will act on lenders’ behalf (Schultz & Weingast, 2003, p. 13). However, as Drazen (1998) notes, the lower the effective cost of foreign borrowing, the higher the desired government spending. Because the median voter wants to keep a low domestic interest rate, this means that the median voter will certainly prefer to finance government expenditures with lower effective foreign borrowing costs, namely, by not repaying its foreign debts in full.

Hence, the first assumption is too restrictive under the following conditions: (a) when the representative lender is not an eligible voter and thus cannot punish the sovereign borrower with his or her vote and (b) when the median voter’s saving is less than the economy-wide average.

Note that the assumption of a domestic agent acting on lenders’ behalf will still hold either if the median voter’s saving is above the economy-wide average or if the median voter’s saving is less than the economy-wide average, but decisions do not depend on the median voter’s vote. As Drazen (2000, p. 599) notes, alternative political mechanisms for aggregating preferences would yield a different equilibrium interest rate and a different level of domestic debt in equilibrium. Therefore, if the decisive decision maker is not the median voter but an agent whose interests are aligned with those of the lenders, then this particular domestic agent will act on their behalf.

The first situation may arise in a rich country, where decisions are adopted by a majority vote of the population, and the second under a dictatorship. Because dictators are not constrained by electoral mechanisms, they may act on lenders' behalf even in poor countries. However, dictators may also have good reasons to reschedule or default on foreign debts. For example, such as in the case of the median voter in a poor democracy, the utility of a dictator in a poor country can also increase in government spending. However, if this is the case, the dictator may finance his or her government's expenditures with increased taxation or increased domestic borrowing. The dictator's final decision will eventually depend on the default penalty that international lenders can impose on the country.

For example, some accounts claim that Nicolae Ceausescu would repay his country's debt religiously while Romanians were in dire straits. On the other hand, the decision of president Alan Garcia to default on Peru's sovereign debt in 1985 seems to indicate the opposite phenomenon. Anecdotes aside, I believe the consequences of this assumption for the democratic advantage argument need to be examined more systematically.

From a theoretical point of view, I hope the reader is aware by now of the possible weakness of the democratic-advantage argument under certain circumstances. From an empirical point of view, I propose the following testable implication:

*Hypothesis 1:* The "endogenous" explanation of a democratic advantage does not hold for countries where lenders are not agents in the domestic economy and/or the median voters' savings are less than the economy-wide average (such as in developing countries).

#### AN EXOGENOUS SOURCE OF DEMOCRATIC ADVANTAGE?

The second assumption that is implicit in Schultz and Weingast's (2003) argument is that lenders are motivated only by economic objectives. This is certainly true for private lending. However, restricting the discussion of sovereign borrowing to commercial loans excludes an important aspect of this phenomenon, namely, the role of foreign assistance in the form of grants and loans that international financial institutions and richer countries give to poorer countries.

Taking multilateral lending into account is important for two reasons. First, multilateral resource transfers to developing countries have played an important stabilizing role in the past 30 years. As Rodrik (1996) shows, multilateral lending tended to compensate for the shortage of private flows during the 1980s. Second, multilateral organizations typically charge lower

interest rates than private lenders. As Ann Krueger, the IMF's current second-ranking official, put it, "we [the IMF] lend at precisely the point at which the private sector is reluctant to do so—and at rates well below those that would be charged by private creditors" (quoted in Drajem, 2002). Moreover, as Drazen (2000, p. 602) notes, foreign assistance is sometimes given for noneconomic reasons, on the basis of strategic and/or political considerations of a donor country or organization.

The following question then arises: Could it be the case that multilateral lending is "politically correct"? In other words, do multilateral lenders give a positive premium to democracy? This seems to be the current prevailing discourse of multilateral lenders. They claim that they wish countries not only to pursue economic development but also to adopt democratic institutions. In her description of the Inter-American Development Bank, Holway Garcia (1999) notes that one of the bank's new roles in recent years has been to support the advent of democracy in Latin America.

Some anecdotal evidence from Latin America and Africa supports these claims. For example, Krueger (1999) recalls a conflict between the World Bank and the IMF in the late 1980s. According to her, whereas the IMF refused to lend more money to Argentina until strong steps were taken to restore macroeconomic stability, the World Bank (under pressure, especially from the American government) continued lending to support the democratic process in that country (Kanenguiser, 2003, pp. 73-76; Krueger, 1999, p. 11). In the case of Africa, Ayittey (1999) notes that after the collapse of communism in 1989, Western donor governments and multilateral institutions added the respect for human rights and the establishment of multiparty democracy as conditions to receive financial aid.<sup>1</sup> He also comments on how France and Britain suspended aid to Malawi (in 1992) and Sudan (in 1991) to protest their lack of democracy and human rights violations.<sup>2</sup>

Note, though, that the source of this hypothetical advantage is very different from the one originally proposed by Schultz and Weingast (2003). The source of this advantage rests on the assumption that the political objectives of multilateral organizations (or of their most powerful members) are consis-

1. "On May 13, 1992, the World Bank and Western donor nations suspended most aid to Malawi citing its poor human rights record, a history of repression under its nonagenarian 'life-president' Hastings Banda. . . . The decision came after protest by workers turned into a violent melee in Blantyre. Shops linked to Banda and the ruling party were looted and government troops fired point-blank at the protesters, killing at least 38" (quoted in Ayittey, 1999, p. 4).

2. According to Ayittey, France halted aid to Togoland in February 1993, following the killing of prodemocracy demonstrators by soldiers loyal to President Eyadema, whereas countries such as Benin, Zambia, and Madagascar, which held multiparty elections in 1991 and 1992, were rewarded.

tent with the support of democracy. However, it is naive to take the declared intentions of multilateral lenders at face value. Political lending may be unrelated or at most “orthogonal” to the promotion of democracy. For example, Thacker (1999) finds evidence that regardless of their regime, political friends of the United States are more likely to receive IMF loans than its enemies. It may also be the case that democracies make more difficult negotiation partners, and thus multilateral organizations may prefer to deal with dictatorships (Vreeland, 2003, p. 73).<sup>3</sup>

In any case, given that multilateral lenders can distinguish between countries with different probabilities of rescheduling or default, these perceptions will be reflected in interest rates, with riskier countries being charged higher risk premiums (Edwards, 1984). Hence, the effect of the political institutions should be primarily reflected in the countries’ rescheduling and default probabilities. That is, it can be the case that democracies are more prone to reschedule their debt than dictatorships, or vice versa. As mentioned above, a country’s “political will” to repay its loans is the critical aspect that will determine how risky a loan is and in turn that country’s risk premium. If this is the mechanism through which political institutions affect countries’ creditworthiness, then once this is taken into account (via interest rates), only credit conditions should matter in pricing debt. The effect of political regime on interest rates thus should not be different across regimes. After all, a good risk is a good risk, and a bad risk is a bad risk.

*Hypothesis 2:* There should be no difference between the interest rates paid by democracies and nondemocracies.

### **POLITICAL INSTITUTIONS AND SOVEREIGN DEBT RESCHEDULING**

To construct adequate international portfolios, lenders have to calculate schedules of future payments associated with assets, forecasts of risk-free interest rates for each period, the likelihood of repayment for each period, and country-specific risk premiums. Portfolio theory contends that the overall risk associated with any “bundle” of assets (which in this case is a group of international loans) can be separated into nonsystematic and systematic components. Systematic risk represents underlying factors that commonly affect

3. Rodrik (1996) and Stone (2002) discuss additional reasons for multilateral lending, including agencies’ predisposition to defend their reputations.

the rescheduling or default probability of all debtors. Nonsystematic risk is asset specific because it is determined by individual debtor countries' economic and political characteristics.

In this section, a model of debt rescheduling for a cross-section of debtor countries taking into account domestic political institutions is estimated. The sample consists of 1,321 observations on 80 countries for the period from 1971 to 1997, including 376 cases of debt rescheduling covering 51 countries.

The dependent variable (RESDBT) is defined broadly to include the rescheduling or restructuring of debt but excludes arrears on either principal or interest.<sup>4</sup> This is a dichotomous variable that takes the value of 1 if such events are observed and 0 otherwise.

Following Przeworski, Alvarez, Cheibub, and Limongi (2000), regimes are classified as democracies if during a particular year they simultaneously satisfy four criteria: (a) the chief executive is elected, (b) the legislature is elected, (c) more than one party competes in elections, and (d) incumbent parties have in the past or will have in the future lost an election and yielded office. All regimes that fail to satisfy at least one of these four criteria are classified as dictatorships (pp. 18-29). Hence, political regime is a dichotomous variable that takes the value of 0 if a country is a democracy and 1 if it is a dictatorship according to these criteria.<sup>5</sup>

Regarding the economic determinants of the probability of default, the following explanatory variables are considered<sup>6</sup>:

1. Debt/output ratio (DEBTGNP): In most theoretical models of foreign borrowing, the debt/output ratio plays a crucial role. This variable can be considered to be an indicator of the degree of solvency of a particular country (Edwards, 1984).

4. During the 1970s and 1980s, outright defaults were replaced by debt restructuring (Edwards, 1986). Hence, this is the standard definition of default in the existing literature.

5. The main difference from other classifications is the use of a dichotomous classification. As Przeworski et al. (p. 57) note, alternative measures of democracy generate highly similar results, while their measure has several advantages over polychotomous classification. In particular, it is based exclusively on observed facts, and it contains less measurement error.

6. It is worth mentioning that no "canonical" model exists in the literature. As Palac-McMilken (1995) notes, the literature includes at least 13 different model specifications. I estimated a number of different models including variables suggested by these diverse studies. A summary of the results from the different models is available on request. Edwards (1984) looks specifically at developing countries' foreign borrowing and default risk, hence the model used in this study is based on his. The data were obtained from the *Global Development Finance Report* (World Bank, 1999b) and the *Development Report* (World Bank, 1999a).

2. Debt service ratio (DEBTXGS): This variable is computed as the ratio of debt service to exports. As Edwards (1984) notes, it measures possible liquidity (as opposed to solvency) problems faced by a particular country.
3. The ratio of the current account to gross national product (GNP) (ACCGNP): This variable measures the quantity of investment financed through borrowing from abroad. According to some authors, this variable should capture a country's perspectives for future growth, and hence it should be negatively related to rescheduling probabilities (Cohen & Sachs, 1986; Edwards, 1984).
4. The ratio of international reserves to total debt (RESDBT): This variable measures the level of international liquidity held by a country.
5. Change in GNP (CHGNP): Some authors suggest that higher output will enhance a country's creditworthiness.
6. The ratio of short-term debt to total debt (SHRTDBT): This variable seeks to capture the fact that many countries are able to avoid the rescheduling of their sovereign debt by borrowing short-term funds in the international markets. This variable should be negatively correlated to rescheduling probability.
7. The sum of past rescheduling (SUMPDEF): The history of a country can be seen as an indicator of how good or bad a risk that country is. Hence, this variable measures how countries' rescheduling probabilities are affected by their past behavior.

With respect to the econometric specification, I estimate a binomial probit model including fixed effects for each country. I also use a transition model to account for possible problems caused by temporal correlation of the observations.<sup>7</sup> This model is based on analyzing the transitions from a lagged value of the dependent variable of 0 or 1 to a current value of the dependent variable of 0 or 1 (on the basis of simple first-order Markov assumptions), allowing for different processes on the basis of the lagged value of the dependent variable (Amemiya, 1985; Beck, Epstein, Jackman, & O'Halloran, 2002; Przeworski et al., 2000).

The results are presented in Table 1. In the second column, the results of the model without including the regime variable are presented. The third column of Table 1 reports the model including political regime among the independent variables. The last column in Table 1 presents the results from the transition model including political regime among the independent variables.

The first item of interest in Table 1 is that the expanded specification including political regime does predict better than the initial model. The

7. To check for possible autocorrelation, I also estimated a two-way fixed-effects probit model. However, the lack of theoretical reasons to expect "period" effects, the small number of periods for the Eastern European countries, problems of overparameterization, and the corresponding loss of efficiency lead me to view the results from the two-way fixed-effects probit as unreliable.

Table 1  
*Fixed-Effects (FE) and “Transition” Binary Probit Estimates of Debt Rescheduling: Test of Hypothesis 1 (n = 1,321)*

Variable	Initial Model	Model With Political Regime	
	FE	FE	Transition <sup>a</sup>
Constant			-1.652 (0.193)
REGIME		-0.575** (0.203)	-0.245* (0.131)
DBTGNP	0.015*** (0.002)	0.015*** (0.002)	0.011*** (0.002)
DBTXGS	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
ACCGNP	3.258** (1.048)	3.297** (1.053)	-2.106* (1.031)
RESDBT	-0.007 (0.005)	-0.007 (0.005)	-0.007* (0.003)
CHGNP	0.354 (0.328)	0.401 (0.331)	-0.681* (0.412)
SHRTDBT	-0.066*** (0.009)	-0.064*** (0.009)	0.008 (0.006)
SUMPDEF	0.065** (0.021)	0.046* (0.023)	
DEFAULT (lagged)			2.675*** (0.301)
Log-likelihood	-391.803	-387.688	-465.931

*Note:* Standard errors are in parentheses. In the transition model, the independent variables are lagged by 1 year.

\* $p < .05$ , two-tailed. \*\* $p < .01$ , two-tailed. \*\*\* $p < .001$ , two-tailed.

probability of a greater  $\chi^2$  with  $df = 1$  is low enough (0.004) to reject the null hypothesis, so political regime does have a significant effect.

Because Table 1 demonstrates the robustness of the findings across these different models, the following discussion focuses on the results contained in the fixed-effects model including political regime. The model performs fairly well in predicting debt rescheduling. If the mean of the dependent variable (0.28) is taken as the cutoff probability, the model correctly predicts that debt rescheduling will not occur below that threshold in 88% of the cases, whereas a “false positive” is reported in only 21.5% of the cases.

The frequency of debt rescheduling in the raw data amounts to 26% in the case of dictatorships and 34% in the case of democracies. Column 3 of Table 1 shows that this difference is robust to the inclusion of the economic controls. Dictatorships are less likely to reschedule their debts, because the coef-

ficient for political regime is negative and statistically significant. This finding is consistent with Hypothesis 1. In the case of developing countries, having democratic institutions will not necessarily help a government make a credible commitment to repay its debts.

Most remaining results are consistent with the existing literature.<sup>8</sup> The coefficient for the debt/output ratio is significantly positive. This suggests that a higher level of indebtedness will be associated with a higher probability of debt rescheduling. With respect to the debt service ratio, the coefficient is not statistically significant. This differs from Edwards's (1984) results. Note, however, that in his case, the reasoning is the following: If a country experiences a decline in exports in relation to its debt service burden or an increase in the latter relative to a given level of exports, the country could well be forced to renegotiate its debt. This reasoning rules out the acquisition of short-term debt to cover liquidity problems. Because the latter is also included in my model, its presence may explain why this coefficient is statistically not different from zero (note that the coefficient of the ratio of short-term debt to total debt is negative and significant).

The coefficient of the current account ratio is positive, just as in Edwards's (1984) model. This variable measures the quantity of investment financed through borrowing from abroad. Thus, if investment programs involve returns that are inadequate to repay their financing costs, creditors might consider that a country lacks the economic control necessary to generate the revenue for debt service (McFadden, Eckaus, Feder, Hajivassiliou, & O'Connell, 1985). The coefficient of the ratio of reserves to total debt is, as expected, negative but not statistically significant. The coefficients on short-term debt and past defaults are significant and have the expected signs, whereas the coefficient of GNP change is not statistically significant, just as in Edwards's original model.

To further interpret these coefficients, I also calculate marginal effects. For political regime, it is calculated as the change in the probability of debt rescheduling given a country's regime, while keeping all the other independent variables at their means. Thus, being a dictatorship diminishes the probability of debt rescheduling by more than 7%. For the remaining covariates, I calculate the expected change in the probability of debt rescheduling given a 1-standard deviation increase in that variable while keeping all the other independent variables at their means. A 1-standard deviation increase in the debt/output ratio raises the probability of debt rescheduling by 18%, whereas the ability of borrowing short-term funds (a 1-standard deviation increase in

8. In particular, they are in accord with the findings of Edwards (1984).

short-term debt) decreases the probability of debt rescheduling by more than 6%.

### **DO DEMOCRACIES PAY LOWER INTEREST RATES?**

The analysis in the previous section has shown that in developing countries, democracies cannot commit to repay their debts with higher credibility than dictatorships. Therefore, contrary to Schultz and Weingast (2003), one should not expect democracies to enjoy lower interest rates than nondemocratic countries.

#### **THE DETERMINATION OF INTEREST RATES**

As mentioned above, portfolio theory contends that the interest rate required by a lender is a function of the risk assumed. On the other hand, borrowing countries may look after cheaper loans when they are in financial trouble. This behavior is similar to the one displayed by individuals. As their financial conditions deteriorate, countries seek to pay outstanding debts contracted at higher interest rates by securing new loans at lower interest rates.

Note also that the determination of the interest rate does not depend exclusively on a borrowing country's economic and political characteristics. Other factors affect the rate at which funds are loaned to countries. These factors are commonly referred to as the borrowing conditions, and they comprise the maturity of the loan in question or the grant element (if such exists).

The international conditions when a given loan is granted also matter. For example, liquidity in international capital markets will benefit countries across the board with lower interest rates. Conversely, when there is no liquidity in international markets, "cheap" loans will be difficult to secure for almost every country.

Finally, it is important to take into account the role of multilateral agencies in sovereign lending first because, as noted above, multilateral agencies do not usually set interest rates in the same way private lenders do, and second to test whether there is a "democratic premium" in multilateral lending.<sup>9</sup>

The sample used to estimate the interest rates is the same as above. The dependent variable is the average interest rate on all new public and publicly

9. For example, in Africa, loans were extended to governments under various foreign aid programs at concessional rates (below market interest rates with grace periods and longer terms to maturity) to finance development projects and to fund structural adjustment programs (economic restructuring) and democratization programs (Ayttey, 1999).

guaranteed loans contracted during a given year by a particular country. For each country-year, I look at the average interest rate obtained from private lenders and from official creditors. Similarly, information on the grant element and the maturity of loans depends on the type of creditor. Public and publicly guaranteed debt from official creditors includes loans from international organizations (including loans and credits from the World Bank, regional development banks, and other multilateral and intergovernmental agencies) and loans from governments and their agencies (bilateral loans). The independent variables seek to capture the borrowing terms for each individual country, the economic conditions in world financial markets, the role of multilateral agencies, and each individual country's borrowing profile. Hence, the following explanatory variables are considered:

1. Grant element of loan (GRANT): This variable is the average grant element for all new public and publicly guaranteed loans contracted during a given year by a particular country. For private lending, this variable is identified as GRANTPR and for multilateral loans as GRANTOF.
2. Maturity (MATURITY): This variable is the average maturity (in years) for all new public and publicly guaranteed loans contracted during a given year by a particular country. For private lending, this variable is identified as MATPR and for multilateral loans as MATOF.
3. London Inter-Bank offer rate (LIBOR): This variable seeks to capture the international conditions in financial markets.
4. The ratio of multilateral debt to total debt (MULTI): This is the percentage of multilateral debt in relation to total debt.
5. Change in GNP (CHGNP).
6. Variable interest rate (VARATE): This variable is the ratio of long-term debt with interest rates that float with movements in a key market rate (such as LIBOR or the U.S. prime rate) to total long-term debt. It conveys information about borrowers' exposure to changes in international interest rates.
7. Debt rescheduling probability (PRDBTRES): This variable is calculated from the debt rescheduling probabilities estimated above, transforming the predicted values by the probit function.

#### **THE IMPACT OF POLITICAL REGIMES**

The question is whether lenders care about debtors' political institutions, once other characteristics have been taken into account. Evaluating the effect of domestic political institutions on the interest rates that are charged to different countries requires distinguishing between the effects of borrowing conditions and of political institutions. However, assessing the effects of political institutions is not straightforward.

The standard difficulty is nonrandom selection (Heckman, 1979). Przeworski et al. (2000) show that political regime selection is indeed not random: Democracies and dictatorships exist under very different economic conditions. Similarly, inferences about the effect of domestic political institutions on sovereign borrowing may suffer from “selection bias.” The problem is the following: If, as stated above, multilateral institutions seriously consider the respect for human rights and the establishment of multiparty democracy as necessary conditions to receive financial aid, then political regime selection may be endogenous. That is, if a country adopts proposed political reforms, it will be more likely to become democratic and to receive better borrowing conditions. In this case, an unobservable factor, the multilateral lending agencies’ true commitment to democracy, affects both the selection of regimes and borrowing conditions. Moreover, such conditions may be “selectively” enforced across countries (Thacker, 1999).

A methodology failing to account for such unobserved factors may overstate the effect of political institutions by attributing the effects of “political lending” to domestic political institutions (Achen, 1986; Przeworski & Limongi, 1997; Vreeland, 2003). To capture the possible effects of relevant and unobserved variables, the following statistical procedure is performed.<sup>10</sup> Every statistical model has a stochastic component usually referred to as the “error term.” The unobserved explanatory variables, which are usually assumed to be random disturbances, are picked up in the error term. If the errors from the estimation of selection are correlated with the errors from the estimation of the interest rates, then the effects of unobserved variables are not random. Those that drive domestic political institutions also determine interest rates. The method for correcting for selection effects caused by unobserved variables thus involves measuring the correlation between errors from selection and the errors from interest rate determination. This correlation serves as an approximation of the effects of the relevant unobservable variables (Vreeland, 2003, p. 116).

In practical terms, what is needed is an instrumental variable obtained from the selection model. In this case, the model of interest is whether a country possess a democratic or an authoritarian regime. To produce the selection variable, I estimate a dynamic probit model with political regime as the dependent variable. The model specification follows the one developed by Przeworski et al. (2000). This model is able to correctly predict 98.4% of the democratic regimes and 96.1% of the authoritarian ones. Hence, it allows me to obtain the instrument needed to measure the unobservable variables

10. The following intuitive explanation draws from Vreeland (2003).

(referred to as LAMBDA in the remainder of the article). LAMBDA represents the marginal probability of misclassifying an observation. Thus, it is one way of measuring the errors associated with the selection equation. Note that LAMBDA has a convenient property: When it is included in the estimation of the interest rates, the parameter capturing its influence indicates the correlation between the selection and the interest rate determination error terms. Therefore, if this parameter is significant, selection on unobservable variables does exist (Vreeland, 2003, p. 117).

Once the selection instrument LAMBDA is obtained, I estimate selection-corrected estimates of interest rates. The sample is partitioned into two groups (the authoritarian and the democratic countries), and the interest rate equations are estimated separately for each one by ordinary least squares regression, including the selection instrument, LAMBDA, among the independent variables. This generates two sets of “unbiased” parameters, one characterizing countries with democratic institutions and the other characterizing countries without them.

Finally, to address the potential problems caused by the panel structure of the data, a one-factor fixed-effects model with an autocorrelated error structure is estimated. Its specification is:

$$\text{INTEREST}_{it} = \alpha_i + \beta'x_{it} + \varepsilon_{it},$$

where  $\varepsilon_{it} = \rho\varepsilon_{it-1} + \eta_{it}$  and the  $\alpha_i$ s values are country-specific constants.<sup>11</sup> The results are presented in Table 2.

From Table 2, the relationship between a country's predicted debt rescheduling probability and the determination of the interest rate can be seen. In the case of private lending, the coefficient of the predicted debt rescheduling is positive for democracies and negative for dictatorships. Something similar occurs with multilateral lending, although the coefficient for democracies is not statistically significant.<sup>12</sup> These results suggest that borrowing countries try to secure cheaper loans when they are in financial trouble. In the case of democracies, though, countries with higher rescheduling probabilities have to pay risk premiums. Interest rates paid by democratic countries are also more sensitive to changes in LIBOR. Whereas the interest rate for dictatorships increases on average 0.06 with each unit change in

11. The inclusion of LIBOR, which captures time effects, makes unnecessary the use of a two-way fixed-effects specification.

12. From 1982 to 1987, for example, multilateral official creditors re-lent \$1.29 to the highly indebted countries for every dollar repaid (World Bank, 1988). Thus, these results are consistent with moral hazard problems associated with multilateral lending.

Table 2  
*Interest Rates for Democracies and Dictatorships: Selection-Corrected, Fixed-Effects (FE)/Ar1  
 Ordinary Least Squares Estimates*

Variable	Private		Multilateral	
	Democracies (1a)	Dictatorships (1b)	Democracies (2a)	Dictatorships (2b)
GRANT	-0.171*** (0.008)	-0.213*** (0.009)	-0.118*** (0.006)	-0.129*** (0.005)
MATURITY	0.221*** (0.016)	0.459*** (0.019)	0.181*** (0.013)	0.195*** (0.011)
LIBOR	0.145*** (0.029)	0.059* (0.028)	0.081*** (0.018)	0.019 (0.016)
MULTI	-0.039** (0.014)	-0.058*** (0.011)	0.003 (0.009)	-0.001 (0.006)
CHGNP	-0.821* (0.364)	0.049 (0.481)	-0.223 (0.278)	-0.261 (0.283)
VARATE	-0.167 (0.898)	0.816 (1.231)	0.487 (0.609)	2.215** (0.741)
PRDBTRES	1.242* (0.557)	-0.954* (0.487)	0.547 (0.383)	-0.713* (0.296)
$\lambda$	0.008 (0.312)	-0.441 (0.391)	-0.051 (0.241)	-0.456* (0.228)
Adjusted $R^2$	.81	.78	.82	.82
$n$	490	707	490	707
Basic model vs. FE/Ar1 $\chi^2$ ( $p$ value, $df$ )	319.479 (.000, 48)	157.107 (.000, 59)	209.261 (.000, 48)	167.570 (.000, 59)

Note: Standard errors are in parentheses.

\* $p < .05$ , two-tailed. \*\* $p < .01$ , two-tailed. \*\*\* $p < .001$ , two-tailed.

LIBOR, in the case of democracies, the interest rises on average by 0.14 given the same change in LIBOR.

The results also show that the grant element and the maturity of multilateral loans have almost the same impact on the determination of the interest rate for countries under both types of political regimes, and that countries that depend more on multilateral debt pay lower interest rates on average than countries that do not depend as much on multilateral debt, regardless of their political regimes.<sup>13</sup>

More important, the results in Table 2 allow one to check if unobserved variables play a role in the determination of interest rates. In the case of multi-

13. However, the “signaling effects” of multilateral lending are not considerable. This is consistent with the evidence presented by Rodrik (1996).

lateral loans, the statistically significant effect of LAMBDA for dictatorships but not for democracies implies that unobserved variables that affect the choice of political regime also affect the determination of the interest rate. Note, though, that in this case, the factors that make countries have lower probabilities of being democratic are the ones that make multilateral lenders offer them lower interest rates. This result flies in the face of many of the declared intentions of multilateral lenders cited above.

The question that gives the title to this section, though, remains open. Do democracies pay lower interest rates? To answer this question, it is necessary to test what is the net effect of domestic political institutions on sovereign borrowing. In other words, the effects of, say, political lending must be separated from the effects of domestic political institutions. The task to be performed is to construct counterfactual observations that are matched for observed and unobserved conditions. For each country having nondemocratic domestic political institutions during a given year, one must imagine the fate of that same country in that same year having democratic institutions. The same has to be done for each country with democratic institutions. These observations can be generated using the unbiased “democratic” and “authoritarian” parameters calculated above. The vector of independent variables characterizing each country at each year can be multiplied alternatively by the democratic parameters and the authoritarian parameters. The parameters on the selection instrument are left out. This removes the effects of selection and produces two counterfactual observations for each country during each year, which are matched for all conditions, observed and unobserved. These selection-unbiased values of interest rates for “democracies” and “dictatorships,” then, are averaged separately over all countries and years, so that the difference between them is the net effect of the domestic political institutions.<sup>14</sup>

Table 3 shows the hypothetical interest rates for dictatorships and democracies if selection were random, including if they had the same rates of debt rescheduling. Because observations are matched for all conditions, the remaining difference between the interest rates is attributed to the effect of domestic political institutions.

14. Note, though, that the parameters were estimated using a fixed-effects model. Hence, there are no values for the counterfactual observation intercepts. That is, there is no single value for the constant but a different one for each country. This requires an additional step, constructing a constant for dictatorships and democracies. This is done in the following way: First the constant for each existing observation is extracted. Then a weighted average (given the number of observations for each country) constant for dictatorships and democracies is calculated.

Table 3  
*Observed and Hypothetical Mean Values of Interest Rates*

	Observed		Hypothetical	
	Democracies	Dictatorships	Democracies	Dictatorships
Multilateral loans	5.41 (2.43)	4.22 (2.63)	5.08 (1.53)	4.51 (1.91)
Private loans	7.39 (3.32)	7.11 (3.75)	6.85 (2.28)	6.59 (3.29)
<i>n</i>	539	767	1,321	1,321

*Note:* Standard deviations are in parentheses.

The evidence in Table 3 supports Hypothesis 2. The effect of domestic political institutions on the interest rate is not different across regimes. The observed average interest rate on private loans is around 7% for both types of regimes, and the hypothetical selection-corrected rates for the two regimes are almost the same. Something similar occurs with multilateral loans. The difference between the actual and the hypothetical average interest rate on private loans for democracies is 0.54, and for dictatorships, it is 0.52. In the case of multilateral loans, this difference amounts to 0.33 in the case of democracies and  $-0.29$  in the case of dictatorships.

### CONCLUDING REMARKS

This article has analyzed the relationship between domestic political institutions and sovereign borrowing in developing countries. Overall, the results indicate that less developed countries do not display a democratic advantage.

The empirical analysis has used data on sovereign loans granted to 80 countries during the period from 1971 to 1997. The results obtained suggest that democracies are more likely to reschedule their debts. Another interesting result is that borrowing countries seek cheaper loans when they are in financial trouble. In the case of democracies, though, countries with higher rescheduling probabilities must pay risk premiums. The results also indicate that despite multilateral lending agencies' intended support for democracy, there appears to be no systematic bias in favor of democratic countries in terms of the interest rates offered by these agencies. The effect of the domestic political institutions is primarily reflected in the countries' rescheduling and default probabilities. And once this is taken into account (via the interest rate), then only credit conditions matter in pricing the debt.

What, then, are the relevant “political factors” involved in multilateral lending? A plausible answer is related to the factors that drive regime selection. The findings in this article indicate that dictatorships are more likely to honor their debts than democracies. The reason has to do with the different decision-making mechanisms that characterize democracies and dictatorships. This is where multilateral lending differs from private lending. As Rodrik (1996, p. 175) points out, multilateral agencies can impose certain conditions when they lend money to recipient countries. This allows multilateral agencies to assume a much more active and intrusive role involving policy advocacy, leverage and bargaining.<sup>15</sup>

The role of conditionality then raises the following conjecture: If multilateral agencies can condition democracies to behave as nondemocracies on debt matters, the problem dissolves. Namely, if the decisive decision maker is no longer the median voter but the political leadership (e.g., the president, the finance minister), then repayment is ensured. Hence, the mechanism at work may be the following. Multilateral agencies bail out democracies in exchange for changes in their behavior: “We will bail you out, but you promise to conduct yourself as if you were a dictatorship when it comes to repaying the debt.” Note that only democracies can promise to behave as dictatorships, because dictatorships will behave in such a way in any case. This article does not address the merits of this argument. However, it raises the question of whether, paradoxically, this might be the source of a very different kind of democratic advantage for developing countries.

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15. Ann Krueger's (1999) discussion of policy-based aid provided by multilateral agencies is quite illustrative. Macroeconomic stabilization is usually at the top of the list in the reform agenda. Likewise, governments tend to make use of political conditionality imposed by multilateral agencies to face domestic political coalitions and organized groups with vested interests. See also Vreeland (2003) and Dollar and Pritchett (1998).

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