

Another Democratic Dividend: Bank Asset Flows to Developing Countries

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Abstract

Do private banks care about politics in their decisions to commit assets to emerging market countries? Existing research shows that foreign direct investment flows are increased by political stability and the protection of property rights in general, while FDI in services and manufacturing in particular responds to democratic governance. Yet the “democratic dividend” may be diminished if autocratic regimes can access alternative sources of foreign capital. One of the most important alternative sources are private bank loans. This paper investigates the economic, political, and institutional determinants of these capital flows into developing countries. Using a dataset of bank asset flows measured by quarter from 20 developed home countries (including all major banking hubs) to over 90 developing host countries, we find that even after controlling for a variety of economic and institutional variables such as GDP per capita, perceived corruption, and capital controls, democratic governance still appears to pay a dividend for developing countries in the form of more bank loans. Yet democracy also has a price: Bank asset flows to democratic countries are more volatile.

Keywords: bank lending, institutions, democracy

JEL classification: F34, F21, G21

1 Introduction

Despite fundamental changes brought about by financial globalization, banks remain at the heart of global finance. As lenders and financial intermediaries, private banks exert powerful control over the access to capital that countries enjoy. This holds especially true for developing countries. Yet while important studies of other flows of capital such as foreign direct investment (FDI) and portfolio investment have been published in recent years, the rapid growth of private bank lending to developing countries has not attracted the same attention.

Banks differ from other economic and political actors in a number of ways. Their primary function remains the provision of credit to the public and private sector. Banks also hold equity stakes in many companies, but they only rarely seek full control of firms that manufacture goods or offer non-financial services. Decisions about lending to firms and governments without a direct influence on the creditors' actions suggest that they might be driven by different criteria than the choice of location for FDI. Banks are also likely to evaluate risk differently because of political reasons. Bank lending to developing countries does not create a "local constituency." While in particular manufacturing investment brings the promise of jobs, often better paid than in domestic firms, bank lending almost exclusively relies on two factors: the ability and willingness of a debtor to pay back loans. Both are obviously influenced by politics.

Yet to date, very few studies have examined the political and institutional determinants of bank asset flows to emerging markets. Banks are well-suited as an object of study in their lending decisions, since they are much smaller in number than the countless manufacturing and non-financial services firms that undertake foreign investments. Because of the hub-like nature of international banking, they are also almost all located in a small number of developed countries. This study focuses on the political determinants of asset flows, in particular loans, from developed country banks and their subsidiaries in developing countries to emerging market borrowers in the public and private sector.

This paper presents empirical evidence of the strong influence of political institutions on the flows of bank capital. Countries whose governments are more democratically accountable receive more bank loans. Democracies, this finding suggests, earn a dividend, since their overall access to foreign capital is greater. However, the democratic dividend in the form of more bank loans and, by implication a broader set of capital sources for developing countries, comes with a price. Bank loans to more democratic countries are also more volatile.

The paper is organized as follows. The next section presents an overview of recent findings in the study of North-South capital flows, and develops several propositions about the influence of politics on bank asset flows in particular. Section 3 presents the data, econometric specification, and findings for both levels of flows and their volatility. Section 4 concludes and offers an outlook on future research directions.

2 Capital Flows From North to South

Bank lending to developing countries has a long history that reaches back to the first age of financial globalization before World War I. After an almost complete shutdown during the interwar years, banks again played an important role in the first decades after World War II, only to dry up again during the debt crisis of the early 1980s. As more and more countries defaulted on their loans, private banks decided not to offer new credit to governments. At the same time, the widespread use of capital controls prevented private actors in the South from accessing global capital markets.

Accordingly, developing countries only played a minor role in the lending decisions of private banks until the early 1990s. With the wave of liberalization that spread across the developing world, banks quickly rediscovered emerging markets, driven by the desire for stronger returns, the rapid economic growth of many developing countries during these years, and the financial liberalization that allowed the borrowing abroad by companies and non-state banks. While some of the surge in bank loans crosses international borders, the liberalization of financial services industries in developing countries and the subsequent entry of foreign banks greatly increased the loans granted by the subsidiaries of international banks to local borrowers.

Yet surprisingly, bank asset flows have attracted less scholarly attention in recent years. Perhaps because of the sudden growth in portfolio capital flows (bonds and equity) in the wake of rapid financial liberalization and, even more strikingly, the about-face of governments from restricting foreign direct investment to actively competing for it, these two forms of investment in developing countries have received much greater attention in the literature. Yet if banks use different criteria than direct or portfolio investors when they grant loans to developing countries, then their decisions have important political implications.

Just like banks evaluate different potential forms investment, recipients of foreign capital choose between different sources. Although developing country governments can be expected to have a preference for FDI over portfolio capital and bank loans because of its lower volatility, they may be unwilling to make the necessary commitments to transparency and stable governance. If democratic governance reaps the prize of more FDI, then less democratic governments might resort to bank loans instead. More generally, if banks are less discriminating than multinational firms in evaluating the institutional quality of the host countries that receive their capital, then the incentive structure created by international investment that rewards participatory government would have much less force. Autocratic regimes might choose bank loans to satisfy the economic demands of crucial domestic groups that support their rule. While they would forego the indirect benefits of FDI in the form of technology transfer and improvements of human capital, undemocratic regimes might be less disadvantaged in the international competition for capital than our knowledge of the determinants of foreign direct investment would lead us to believe. Ultimately, indiscriminatory lending to autocratic regimes might prolong their lifespan and exact a toll in economic development and political freedom. Conversely, if banks care about democracy, or more precisely, some of the implications of democratic governance like greater transparency, then their decisions will reinforce the economic “dividend” that democracy pays.

To provide an understanding of these incentive structures, consider the growing body of literature on the determinants of FDI. The focus here is on political and other institutional country-specific rather than firm-specific variables, many of which are surveyed by [Blonigen \(2005\)](#). The debate in political economy has focused on whether multinational firms worry only about stability and the protection of their property rights, or if democracy “pays off” in the form of more FDI. In other words, do authoritarian governments appear more attractive, perhaps because they manage to keep wages low ([Rodrik 1999](#)), or because they can enforce a business-friendly macroeconomic policies ([Evans 1979](#); [Haggard 1990](#); [Huntington and Dominguez 1975](#); [Tuman and Emmert 2004](#); [O'Donnell 1988](#))? Or do more democratically accountable governments have other advantages, such as transparency? [Jensen \(2006b, 2003\)](#) finds that democratic countries attract more FDI and hypothesizes that their governments are less prone to sudden policy shifts. [Rodrik \(1996\)](#) shows similar results for U.S. manufacturing FDI. [Resnick and Li \(2003\)](#), however, challenge these findings by disaggregating the protection of property rights and democracy, and show that once

the expropriation risk is accounted for, democracy offers no benefits in attracting foreign direct investment.

It is unlikely that the highly aggregated data of FDI inflows or stocks at the national level will yield more insight. Accordingly, researchers have initiated projects that use firm-level data (Jensen 2006a) or disaggregate FDI by sector. Recent findings by Schulz (2007) indicate that democratic governance matters for FDI in manufacturing and services, precisely the sectors that are likely to provide benefits (Lipsey 2002). By contrast, FDI in natural resources does not seem to be influenced by questions of democratic governance in the host country—and what’s more, by allowing greater extraction may even contribute to the “resource curse” (Karl 1997) whereby resource-rich developing countries are less likely to develop stable democracies.

A related question is whether problems of institutional quality such as corruption or unreliably legal and administrative procedures deter foreign investment. Wei (2000) finds that corruption, measured by a variety of indices, has a negative impact on FDI, overturning the findings of earlier research (Wheeler and Mody 1992). However, a fundamental challenge for these studies is that FDI is often measured in annual stocks that are rising only incrementally, just like institutions change only very slowly, giving little time-related information that can be used for the estimation.

Portfolio capital responds to similar variables as foreign direct investment, although for different reasons. Most of the global flows in this category are freely tradable bonds. Emerging market bonds are held by various institutional investors, including pension funds, university endowments, and hedge funds. Because bonds are traded at a price related to the interest (the “coupon” of the bond) and risk, they are highly sensitive to political events that markets perceive as influencing the chances of a default. The same holds true for other assets in this category like equity, as Bernhard and Leblang (2006) show: markets put a price on politics. Portfolio flows in particular are influenced by the transparency of the receiving country (Gelos and Wei 2002), as the frequency of publication of macroeconomic data strongly influences the investment decisions of managers of emerging market funds, both in terms of total asset flows as well as in the herding behaviour in the case of financial crises.

Compared to these comprehensive studies of FDI and portfolio capital, very little research has explored the political and economic determinants of private bank lending. Ratha and Dasgupta (1999) find that economic growth, current account deficits, and increased foreign direct investment stimulate private lending flows. Their analysis, however, uses total inflows into each developing country as dependent variable, possibly obscuring differences between source countries. Hooper and Kim (2007) use only a cross-section of data from the year 2000, omitting possibly important effects of changes over time. Their central finding is that bank lending and FDI are to an extent substitutes: countries that do not attract much FDI because they are (in the perception of multinational firms) plagued by problems of corruption and a weak rule of law seem to instead rely on bank lending. In other words, countries either have to rely on alternative means of financing, or, more worrying, banks may be attracted to a more opaque business climate. Finally, Papaioannou (2005) improves on these studies by using a set of panel data from 20 home to over 60 host countries. However, most of the institutional variables in the analysis do not vary with time, while other variables are used only as composite indicators. Most importantly, he only considers gross asset flows—but if banks have local subsidiaries, then they can offset country-specific risk by granting loans to their parent and sister companies abroad and balance net asset and liabilities.

What are the implications of the aforementioned studies for the analysis of bank asset flows? Most importantly, bank asset flows are likely to be influenced by different considerations in home and host country. Lending decisions by private banks fall into two broad categories: the granting

of loans to private and public entities, and the taking of (usually non-controlling) equity stakes. From the viewpoint of the investment decision by the bank, holding assets in an emerging market country is only one of many choices. In the evaluation of different investment choices, emerging markets are generally seen as a distinct “asset class,” and therefore compete for a limited pool of capital, since banks will try to avoid an over-exposure to developing countries. The historically low correlation between FDI, portfolio capital (equity and bonds) and loans (Bosworth, Collins, and Reinhart 1999) suggests that when banks try to minimize risk, they allocate capital across different investment options. Within this asset class, however, individual countries are substitutable. In other words, the differences in country characteristics matter.

Lending: The Banks’ Perspective

Why would banks care about democratic accountability? One reason is that banks might rely on the information provided by and available about governments, and that democracies are much more transparent than autocratic governments. Rosendorff and Vreeland (2006) show that democracies are much more active in publishing macroeconomic data. But because accountability requires information, democracies are also more transparent at the micro-level at which lending decisions are made. In particular a free press provides a crucial source of information about the creditworthiness of public and private entities. Both should be important for banks, since the quality of the information available about a country allows a better assessment of credit risk.

The effect of an environment in which information is easily accessible should be independent of the stability-providing checks and balances emphasized by the veto-player literature (Tsebelis 2002). In particular the long-term commitment of capital through FDI is highly dependent on the predictability of policies and the ability of governments to stick to these. As shown by Henisz and Zelner (2001); Henisz (2002, 2000), the effect of veto-players in the political institutions and the resulting policy stability affects both the amount of FDI a country receives as well as the mode of entry chosen by multinational firms. Banks, however, may react differently to an unstable policy environment than firms engaging in foreign direct investment. Rather than refraining from lending, they might shorten loan terms, raise interest rates, or offset country-specific risks by raising capital locally to lend it back to the home country.

Borrowing: The Debtors’ Perspective

From the point of view of the developing country, bank lending partly represents an alternative source of capital separate from FDI by multinational firms. Banks will not necessarily stop lending unless a country defaults and completely forsakes international capital (like Cuba in 1988) or imposes harsh terms in the renegotiations (like Argentina post-2001). Since local banks in emerging markets are often extremely sensitive to macroeconomic conditions, foreign banks provide an important function that allows for more balanced growth: their asset and loan portfolio generally grows more quickly than that of local banks, and is considerably less volatile in times of financial crisis (Dages, Goldberg, and Kinney 2000; Clarke, Cull, Martinez Peria, and Sánchez 2005).

The activities of foreign banks in developing countries are not without critics, however, since in many cases, their entry has not resulted in the desired competition in the market (Schulz 2007). Another common charge is that foreign banks shun small businesses, although recent research suggests that counterintuitively, the largest foreign financial intermediaries are the most likely to lend to small companies, surpassing even large domestic banks (Clarke et al. 2005). Higher risk

may therefore result in a change in the composition or term structure (short- vs. long-term) of bank assets in emerging markets (for which very little data is available), but not necessarily in the overall amount. This leads to the possibility that a developing country may attract bank assets in the form of loans when it fails to draw in FDI. Since corruption deters FDI, it may therefore counterintuitively force countries to seek loans from banks, and therefore result in relatively greater inflows of bank assets. The following sections investigate these conjectures.

3 Estimating Bank Asset Flows—Data and Specification

The dependent variable of interest is asset flows from private banks to emerging market countries. These flows are compiled by the Bank for International Settlements (BIS) in its “locational statistics,” based on the reporting of a total of 20 developed source countries. The reporting institutions are deposit-taking financial banks and similar financial institutions. For almost all source countries, the reporting banks account for over 90 percent and in some cases almost 100 percent of the assets and liabilities of all banking institutions within their borders. Since international banking is highly concentrated in “hubs,” the financial centres of the bigger OECD countries plus Singapore and Hong Kong, these flows comprise 85-90 percent of global bank flows—although this figure has been decreasing slightly since emerging market banks, e.g. from China, have become more active in over-seas lending. Private banks are reporting the stock of assets they hold in a particular country (the “vis-à-vis country,” henceforth referred to as the host country) to the central bank of the country in which they are based (the “reporting country,” henceforth the home country). The BIS then calculates flows from the quarterly differences in the stocks, and adjusts these for exchange rate changes. The time frame of the study is the third quarter of 1984 to the second quarter of 2004.

Bank assets include all loans to the government and the private sectors, as well as equity stakes in firms in the host country. However, the actual equity share is usually very small compared to loans—less than 5 percent for most countries and time periods. For practical purposes, we can therefore consider the flows to be bank loans, including repurchase transactions, financial leases, promissory notes, subordinated loans, foreign banknotes and coins and trade-related credit. Although the aggregation of equity and loans introduces a slight error in the variables, the data is still of much higher quality than that used in most studies in political economy, thanks to the high technical expertise of monetary authorities in the source countries and of the BIS itself, the consistent requirements in the reporting, and the role of central banks as regulators that should provide a strong incentive for compliance.¹

As with most data on international transactions, the distribution of the variable poses some challenges. Approximately 32 percent are zero values, the rest is highly skewed towards home and host countries with high per capita GDP. Following the practice in trade economics where this problem is common (Eichengreen and Irwin 1995), I take the natural log, but retain the zeros by replacing them with 1 before the transformation. This transformation is only applied to the gross flows, since the net flows are already almost symmetrically distributed. Moreover, unlike in the case of trade data, the zeros are much more evenly spread across the cases. Some home-host country pairs show zero values, but all host countries receive bank loans from some partner country

¹For example, UN Comtrade data frequently shows differences of more than 100 percent between what exporting countries and the importing countries report for their corresponding flows of bilateral trade, even after adjusting for freight and customs charges. Similar problems plague data on foreign direct investment on a balance-of-payments basis, since not all countries adhere to the OECD standards.

in almost all years. Even post-communist countries relatively quickly managed to attract bank capital after their economies opened up.²

To estimate the determinants, the model builds on a simple specification with basic economic variables: GDP and GDP PER CAPITA adjusted for purchasing power parity differences, deflated by the quarterly US consumer price index with 2000 as base year, and logged to make the distribution more well-behaved. More developed countries in terms of GDP per capita are expected to lend and attract more bank assets, while total GDP may be negatively associated with lending, since many smaller home countries specialize in financial services rather than manufacturing activities—with Luxembourg as the extreme example.

The panel is imbalanced, with $1 < T < 79$ with an average of 56, and $N = 1876$. I begin my estimation with the economic base model specified as

$$Assets_{ijt} = \alpha_i + \alpha_j + \alpha_t + \beta_1 GDP_i + \beta_2 GDP_j + \beta_3 GDPcap_i + \beta_4 GDPcap_j + \varepsilon_{ijt} \quad (1)$$

Both gross and net measures of the dependent variable show heteroskedasticity and serial correlation as indicated by the test developed by Wooldridge (2002, 282–283). We have theoretical reasons to believe that some of the factors influencing bank lending decisions will be spatially correlated as well. Obviously, banks can only raise a finite amount of capital in given time period that they can lend to borrowers. Moreover, decision-makers may find it prudent to diversify across different countries and regions to minimize country-specific, but unanticipated risk. One such risk factor is macroeconomic crises that may spill over into neighbouring countries, resulting in heterogeneous responses to such shocks. This should in turn motivate banks to spread their loan portfolio beyond interdependent regions. Ultimately, controlling for such variables is nearly impossible without bank-specific and perhaps even credit manager-specific data that we are unlikely to obtain given the confidential nature of such information. Nevertheless, we should do our best to adjust our estimates for the resulting uncertainty: while contemporaneous spatial correlation will not cause problems for the consistent estimation of the parameters, it will cause yield inconsistent estimates of their standard errors. Fortunately, the nonparametric covariance matrix estimator proposed by Driscoll and Kraay (1998) offers a solution to this problem for a panel with $N > T$, but with T sufficiently large, as in our case. It produces standard errors that are robust to lagged and contemporaneous spatial correlation, heteroskedasticity, and autocorrelation of a moving-average type up to some lag.³ The estimation includes a full set of dummy variables for home, host and time.

“Testing up,” the model is expanded by adding further variables. Two likely candidates, current account deficits and economic growth, are not found to be significant, possibly due to the extremely limited data, and are excluded from the model. I then add Chinn and Ito’s (2006) measure of CAPITAL OPENNESS. The Chinn-Ito index is based on a coding of the reports issued by the IMF on capital controls maintained by its member countries. Although IMF reports and therefore the index only measure whether countries apply capital controls of various types, but not their intensity, it is highly likely that these are closely correlated. Moreover, the Chinn-Ito index is publicly available and has a broad coverage of over 100 countries for more than 30 years. The effect of capital controls is difficult to specify theoretically. On the one hand, capital controls should prevent some private actors from accessing international bank lending. On the other hand, if they prevent economic actors

²This also suggests that there are no selection effects that would require such a model.

³Note that this is the opposite case of $T > N$ of when the well-known panel-corrected standard errors method is appropriate, as emphasized by Beck and Katz (1995, 635) themselves. The Driscoll-Kraay estimator is implemented as a downloadable program for Stata called `xtscc`. See Hoechle (2007) for an introduction.

from accessing international capital markets, they may be positively associated with increased bank loans because private actors have to rely on bank-based financing.

With this basic model in place, we can introduce the institutional variables. A variety of measures of institutional quality have been proposed and introduced in the past, but very few are available for a sufficient sample of countries, and even fewer span a time period that would allow the creation of a panel data set. Among the available measures, the International Country Risk Guide (ICRG) produced by the Political Risk Services Group (PRS) stands out since the methodology used has remained consistent since it was first published in 1984. Most of its measures are based on expert assessments of various countries over time. While this implies more subjective judgement by a smaller group of observers than measures that are based on surveys, the ICRG measures have the advantage that they are more reliable and comparable across countries and time. In comparison, survey measures tend to produce rankings of countries and relative positions, but they cannot capture an overall progress towards less corrupt governments across the world. The ICRG data has also been used in the financial literature to successfully predict expected returns of emerging market investors (Erb, Harvey, and Viskanta 1996)—suggesting that they either capture risk factors well, or at a minimum are measuring with reasonable accuracy what financial managers consider to be risk factors. Finally, the indeces are the only ones that are available on a monthly basis, which averaged over three months allows the use of the full information in the quarterly observation of the dependent variable.

I focus on the measures that influence country risk via institutional quality. CORRUPTION is an assessment of, in the words of the PRS, “actual or potential corruption in the form of excessive patronage, nepotism, job reservations, ‘favor-for-favors,’ secret party funding, and suspiciously close ties between politics and business.”⁴ RULE OF LAW measures the strength and impartiality of the legal system and general observance of the law by the population. DEMOCRATIC ACCOUNTABILITY classifies countries along the spectrum from an alternating democracy, dominated democracies, to one-party states and autarchies. While some of the subcomponents may be debatable (for example, a country is counted as a “dominated democracy” as soon as the same party has served more than two terms as governing), the measure is quite strongly correlated with other indeces used in the literature.⁵ Finally, GOVERNMENT STABILITY provides an index of the host government’s ability to carry out its declared policies and its ability to stay in office based on its legislative strength and popular support. All variables drawn from the ICRG are rescaled to range from 0 to 10. For all of these indicators, higher values signify better institutional quality, except for the CORRUPTION score that is inverted for ease of interpretation: a higher score implies a greater incidence of corruption as measured by the ICRG. To differentiate government stability as conceptualized by the ICRG from more permanent institutional constraints faced by the executive, I also add the measure of VETO PLAYERS developed by Henisz (2000) in its 2006 update.

Finally, I include two additional control variables: COLONY from Rose (2004) is a dummy variable that equals one if the host country was ever a colony of the home country, while SANCTION is a dummy to control for economic sanctions imposed by the home on the host, drawn from the Peterson Institute’s list of such international actions.⁶ Since former colonial ties are strong predictors of commercial ties, it is possible that these influence bank asset flows in similar fashion, since banks from the former colonizer are often predominant in the host country—consider the role

⁴http://www.prsgroup.com/ICRG_Methodology.aspx#PolRiskRating

⁵The correlation with the POLITY IV measure, common in political science but not available on a quarterly basis, varies annually between 0.65 and 0.76.

⁶<http://www.petersoninstitute.org/research/topics/sanctions/sanctions-timeline.cfm>

Variable	Expected Sign
CORRUPTION	-
RULE OF LAW	+
DEMOCRATIC ACCOUNTABILITY	+
GOVERNMENT STABILITY	+
VETO PLAYERS	+
COLONY	+
SANCTION	-

Table 1: Expected signs of the coefficients

of Barclay’s Bank in former British colonies in Africa, or the role played by Spanish banks in Latin America. Sanctions should in principle impose stark limits on bank activities, but the quality of the measure is problematic since it offers no indication of how restrictive the imposed measures are for the host country, and because some measures are likely to have been omitted completely. Table 3 sums up the theoretical expectations.

3.1 Determinants of the Levels of Bank Assets Flows

Table 3.1 on page 9 presents the results for gross and net assets. Recall that the gross flows are logged while the net assets are presented in level form because of their starkly different distributions. The basic economic model shown in (1) and (2) performs as expected: more developed home and host countries as measured by GDP per capita both send and receive more bank asset flows in gross and net values. Since smaller economies often specialize in services, it is unsurprising that the GDP of the home country also has a negative sign: compare the relative importance of banking for the economies of Luxembourg and Hong Kong with Germany, Japan, or even the United States. A smaller economy is also associated with a positive external balance in bank assets.

The results confirm the key expectations about the role of democratic governance and the rule of law. Both are contributing to greater gross and net lending to developing countries. However, former colonial ties have a positive effect on gross but a negative effect on net flows. One possible explanation for this finding is that banks become a vehicle for capital flight from developing countries.

Likewise GOVERNMENT STABILITY and CORRUPTION negatively affect *net*, but not *gross* asset flows by conventional levels of statistical significance. Moreover, the analysis suggests that sanctions have a *positive* effect on net asset flows. Given the questionable measure of this variable, this result should be taken with a grain of salt, unless we are willing to accept that banks try to profit from economic sanctions on a large scale.

3.2 Politics and the Volatility of Bank Asset Flows

While the total inflows of bank assets obviously matter for developing countries, their *volatility* is at least of equal importance. Unlike foreign direct investment that implies a commitment over a longer term, bank loans are often short-term and consequently highly variable. The table below

	(1)	(2)	(3)	(4)
	Net assets	Gross assets	Net assets	Gross assets
ln GDP/cap home	0.447*** (0.084)	1.628*** (0.188)	0.532*** (0.102)	1.755*** (0.214)
ln GDP/cap host	0.103*** (0.027)	0.755*** (0.083)	0.047 (0.026)	0.705*** (0.086)
ln GDP home	-0.084*** (0.020)	-0.185*** (0.039)	-0.093*** (0.021)	-0.194*** (0.045)
ln GDP host	0.022*** (0.005)	-0.045*** (0.012)	0.024*** (0.005)	-0.041*** (0.012)
CapitalOpen			-0.038*** (0.009)	-0.058*** (0.013)
Corruption			-0.016** (0.006)	-0.017 (0.013)
DemocAcct			0.012* (0.005)	0.034*** (0.006)
RuleofLaw			0.035*** (0.006)	0.029*** (0.006)
GovStability			-0.016** (0.005)	-0.017 (0.009)
Colony			-0.385*** (0.039)	1.631*** (0.088)
Sanction			0.158*** (0.039)	0.153 (0.082)
VetoPlayers			-0.086* (0.040)	-0.185** (0.065)
N	104670	104670	104670	104670

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Driscoll-Kraay standard errors in parentheses.

Table 2: Asset flow model results

presents a model that estimates the influence of the institutional variables on the variance of gross and net asset flows, using a simple linear maximum-likelihood model with fixed-effects dummies for home, host, and time. Concretely, it parametrizes σ_i^2 as $\varepsilon^{z_i\gamma}$, where z_i are the exogenous variables that influence the variability around the expected value, and γ is a vector of parameters. Thanks to the large-sample properties of ML estimators, the parameter estimates are very similar to those of the full models shown earlier.

The last four lines of the table show the estimates of σ^2 for the coefficients on CORRUPTION, DEMOCRATIC ACCOUNTABILITY, RULE OF LAW, and GOVERNMENT STABILITY. While it is not surprising that corrupt environments might make asset flows more volatile, the same seems to be the case for the higher flows received by democratic countries with a strong rule of law. This also holds for gross flows for countries with more stable governments. Apparently, the increased flows of bank capital are unreliable—a problematic situation for policymakers in developing countries.

4 Conclusion: Bank Asset Flows as a Democratic Dividend

During the past two decades, the governments of many developing countries have moved towards greater democratic accountability. While this is a positive development in itself, the findings in this paper suggest that these countries are likely to reap a purely economic dividend: greater bank asset flows. This result is encouragingly robust, even when we consider the separate effects of efforts to reduce corruption, to enforce contracts, and the general strength of the rule of law in the receiving country. The “democratic dividend” takes several forms. Countries with more democratic governments enjoy an overall greater availability of capital, but can also choose between different sources of funding. This should not only increase economic growth, but also give developing countries greater freedom of policy choice in their engagement with the global economy.

However, the findings also suggest a cautionary note: Although democratic accountability and a stronger rule of law increase the flows of bank assets into developing countries, the increase in these flows comes at the cost of a greatly increased volatility. The driving forces of this volatility are not easily discernible from the macro-level data used for this study. More research is needed in this direction.

	(5) Net Assets	(6) Gross Assets
Parameter estimates		
ln GDP/cap home	0.469*** (0.043)	1.612*** (0.072)
ln GDP/cap host	0.002 (0.015)	0.669*** (0.028)
ln GDP home	-0.088*** (0.010)	-0.186*** (0.015)
ln GDP host	0.005 (0.003)	-0.045*** (0.006)
Capital Openness	-0.028*** (0.004)	-0.059*** (0.006)
Corruption	-0.018*** (0.003)	-0.018*** (0.004)
Democratic Accountability	0.010*** (0.002)	0.035*** (0.003)
Rule of Law	0.023*** (0.003)	0.029*** (0.004)
Government Stability	-0.010*** (0.002)	-0.016*** (0.004)
Colony	-0.318*** (0.013)	1.607*** (0.022)
Sanction	0.098*** (0.012)	0.128*** (0.021)
Veto Players	-0.083*** (0.019)	-0.176*** (0.029)
Variance estimates		
Corruption	0.037*** (0.003)	0.044*** (0.003)
Democratic Accountability	0.172*** (0.002)	0.023*** (0.002)
Rule of Law	0.209*** (0.003)	0.027*** (0.003)
Government Stability	-0.002 (0.002)	0.028*** (0.002)
N	104670	104670

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses.

Table 3: Volatility model results

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Variables	GDP/cap home	GDP/cap host	GDP home	GDP host	Capital openness	Corruption	Democratic Accountability	Rule of Law	Government Stability	Colony	Sanctions	Veto players
GDP per cap home	1.00											
GDP per cap host	0.33	1.00										
GDP home	0.23	0.11	1.00									
GDP host	0.13	0.06	0.04	1.00								
Capital openness 2005	0.24	0.37	-0.10	0.04	1.00							
Corruption	0.09	-0.19	0.03	0.01	0.01	1.00						
Democratic accountability	0.20	0.34	0.12	0.04	0.18	-0.37	1.00					
Rule of law	0.31	0.42	0.06	0.06	0.23	-0.34	0.30	1.00				
Government stability	0.56	0.38	0.23	0.09	0.22	-0.07	0.18	0.46	1.00			
Colony	-0.08	-0.02	-0.02	0.04	-0.01	-0.01	0.00	-0.02	-0.02	1.00		
Sanctions	-0.00	0.04	0.03	-0.28	0.03	0.01	0.02	0.06	0.08	0.15	1.00	
Veto players	0.29	0.37	0.12	0.06	0.16	-0.31	0.62	0.46	0.26	-0.01	0.03	1.00

Table 4: Correlation Matrix