Constraints, Opportunities and Information:
Financial Market-Government Relations around the World

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Politics are much more important than in developed markets. Every aspect of policy/performance generates politically related concerns. Who governs matters in these markets….It's hard to know what a government will do….There are not necessarily clear priorities for these governments; there are so many issues, it's hard to know how they will prioritize….The problems experienced in the developing world are totally non-existent in the developed world.[1]

I. National Politics and Global Financial Markets

In an era of capital mobility, electoral victories by left parties might send chills down the spines of international capital markets: left governments could preside over increased inflation, higher rates of corporate taxation, and larger public sectors. The extent to which elections create such worries for investors varies markedly, a fact illustrated by recent electoral victories of left parties in Brazil, Sweden and Germany illustrate.

The October 2002 election in Brazil heralded the ascent to power of the leftist Workers' Party, led by Luis Inácio Lula da Silva ("Lula"). Financial markets had been nervous about the prospect of Lula's victory – and about Brazil's fiscal situation – for many months. In late September, in response to public opinion polls showing a widening lead for Lula, the currency fell five percent against the dollar, and the spread on interest rates between US and Brazilian government bonds widened to nearly 22 percent (Financial Times, September 23, 2002; Economist, October 12, 2002). Credit ratings agencies downgraded Brazil's sovereign debt ratings, citing debt sustainability and economic stability in the face of a political transition. By late October, markets had priced Lula's victory into their assessments of credit and currency risk; the currency had fallen further (for a total decline of approximately 30 percent during 2002), and the substantial interest rate premium remained. Some analysts, however, began to suggest that Lula would moderate his positions once elected; the Bovespa stock index began to rally in the days preceding the election (New York Times, October 11, 2002).

Investors shifted their focus to whom Lula would appoint to his cabinet and the extent to which Lula would insist on hard-line Workers' Party economic policies. His initial statements appeared crafted to reassure financial markets, promising a balanced budget, low inflation, adherence to International Monetary Fund agreements, and continued debt payments, as well as job creation, social reform and hunger relief (New York Times, January 19, 2003). The new government also was expected to increase the central bank's autonomy, and its choices for chief of staff and finance minister came from the moderate wing of the Workers' Party (Economist, January 4, 2003). These actions led to some improvements in financial markets, with a reduction of the risk premium to 17 percent in November, and some improvements in the *real*'s value. At the same time, however, investors remain nervous about Brazil, and spreads hovered around 17 percent in early 2003. Investors continued to worry about how Lula will reconcile the demands of fiscal rectitude with his promises for social welfare, as well as about Brazil's continued ability to service and to roll over its public debt, which stood close to 60 percent of GDP (Financial Times, October 29, 2002).

[1] Interview with fund manager, October 1998, London.

In Germany and Sweden, these elections represented the continuation of left-party governments, and market responses were much less pronounced.[2] In Sweden's September 2002 poll, Goran Persson's Social Democrats increased their vote share from 36 to 40 percent, and Persson again moved to form an alliance with the Green and Left parties. In the two months prior to the election, the risk premium on Swedish government bonds (compared to US benchmark bonds) varied from 0.7 to 1.1 percent, reaching 1.1 percent for much of the two weeks prior to the election.[3] On the day following the election, however, the Swedish krona gained in value, and long-term interest rates fell (Financial Times, September 17, 2002), signaling that financial markets were not worried about the fiscal and monetary policies of the incoming government. Although Persson had campaigned on a platform of providing generous welfare taxes, even if doing so provided higher taxes, market participants noted Persson's commitment to overall fiscal and monetary discipline (e.g. Financial Times, October 3, 2002).

Political uncertainty in the weeks following the election – namely, concerns over the Social Democrats' ability to garner support coalition with the Green and Left parties – contributed to the persistence of interest rate premia and to a decline in the krona's value (Financial Times, October 1, 2002). Again, however, the premia on government bonds never exceeded 1.35 percent and, by mid-November, they had fallen to less than one percent. The relatively small premium on Swedish debt, despite its left government and its generous social policies, might be explained by its fiscal discipline. In 2002, Sweden's surplus was 1.7 percent of GDP, and its debt was 53.6% of GDP, and falling. While the Social Democrats and other left parties called for more generous supply-side policies, they did not call for abandoning their independent central bank or for breaching the overall fiscal targets. And the Social Democrats supported Sweden's entry into EMU, promising a referendum in fall 2003.

In Germany, the September 22 election also had modest effects on financial market risk premia. Chancellor Gerhard Schroeder's narrow re-election led to short-term losses in the German equity market, as some investors expressed concerns about structural reform (Financial Times, September 23, 2002). Germany's fiscal situation, with a budget deficit of 3.75% of GDP, a debt of 61% of GDP, and an eventual warning from the European Union, may have given investors greater reason for concern. But, despite the Social Democratic victory and the fiscal situation, German interest rates remained low. In mid-August, German benchmark government bonds were at a 0.2 percent premium over United States government bonds. After the election, the premium reached 0.3 percent, and widened to 0.5 percent by early October. The market effects of the election, however, quickly receded, with the Germany-US interest rate differential falling close to zero by late November. In part, markets may have hoped that the Green Party, which had a strong showing the election and remained part of the governing coalition, would realize some of its proposals for fiscal reform (New York Times, September 24, 2002). But again, investors also appeared to realize that, no matter what its fiscal or structural difficulties, Germany remained a safe investment location.

We can contrast the European and the Brazilian cases along several dimensions: despite similar budgetary problems in Brazil and Germany (Brazil's deficit in 2002 was 5.2% of GDP; its inflation rate was higher at 8.8%), and similar debt levels in all three nations, the election of a left-leaning government evoked very different market reactions. All three nations saw increases

[2] The same can be said of the German and Swedish elections in 1998. See Mosley 2003a, Chapter 3.
[3] Data on German, Swedish and US benchmark bond rates are from Global Financial Data.

in risk premia in the days leading up to the election, and immediately after the elections. But in Sweden and Germany, these increases were small; and the increases quickly receded. By contrast, Brazil paid very large risk premia, perhaps greater than its shaky economic fundamentals suggested, and these premia persisted into 2003.[4]

The above contrast in financial market responses to electoral outcomes suggests heterogeneity in private investors' behavior. While investors may always be averse to left-leaning governments or expansionary public policies, they are more averse to these outcomes in developing nations. Additionally, because of their concerns about default, investors consider a wider range of policy variables when evaluating developing nations. Governments of developing nations, therefore, can expect to pay a higher financial market price for government partisanship, political instability, and fiscal expansion; and they can expect that a variety of policies – macro as well as supply-side -- will generate financial market responses.

As a result, the impact of globalization on the feasibility of redistributive polices varies across countries. In nations with established political and economic systems and low risks of default, financial market pressures are "strong but narrow." Capital market openness allows investors to react swiftly and severely to changes in government policy outcomes; but investors consider only a small set of government policies when making asset allocation decisions. Governments that conform to capital market pressures in select macroeconomic areas, such as overall government budget deficits and rates of inflation, are relatively unconstrained in supply-side and micro-economic policy areas. But in emerging market nations, financial market pressures are both strong and broad: because of capital market openness, investors can easily punish governments, and their grounds for punishment include both macro- and supply side policies, as well as political outcomes. Ultimately, then, those societies most in need of egalitarian redistribution may have, in terms of external financial market pressures, the most difficulty achieving it.

In this chapter, I examine the nature of financial market influences on government policy making. I focus specifically on the government bond market, which is a most likely location for financial market pressures. I begin with an examination of the factors that influence the nature of financial market pressures; this examination generates expectations about the relationship between policy outcomes and government bond rates in developed versus developing nations. Next, using qualitative and quantitative data, I test these expectations. I find that, as a result of their concerns with default risk, financial market participants treat emerging markets differently from developed ones. The chapter concludes with a discussion of how financial market pressures interact with domestic political institutions, and of how governments might seek to improve their autonomy vis-à-vis global capital markets.

There are also differences in the nature of financial market pressures over time. For instance, we observe periods of high optimism regarding developing nations (as in the early 1990s, or prior to the Asian financial crisis), as well as periods of high skepticism (during and

[4] Interest rate spreads on Brazilian government bonds fell dramatically later in 2003; by early 2004, spreads were close to four percent. Investors attributed the fall to Lula's adherence to fiscal austerity and inflation control, as well to general enthusiasm about Latin American emerging markets (Economist, February 4, 2004; The Banker, March 1, 2004).

immediately after the Asian financial crisis). In this article, however, I focus on variation across types of countries, rather than over time.

II. Theory and Hypotheses

Convergence, Divergence, and Economic Globalization. During the last decade, scholars have devoted substantial attention to specifying the impact of economic globalization on national policy choices.[5] This theme has attracted interest not only in the academic realm, but also within media and policy-making circles. Much of the popular literature on the subject offers grim prognoses for government policy-making autonomy. The academic literature falls into two broad groups – convergence and divergence. Predictions of convergence rely on the imperatives of cross-national competition and economic efficiency; the type of convergence predicted tends to be downward, rather than a common trend toward an intermediate position.[6] As races to the bottom ensue, governments lose the ability to provide goods and services to their citizens. Predictions of divergence, meanwhile, are based upon the continued diversity of national institutions and on domestic demands for compensation.[7]

In the realm of capital markets, the capacity for exit, and the political voice it confers on investors, is central to convergence-oriented accounts.[8] While capital market openness provides governments with greater access to capital,[9] it also subjects them to external discipline. Governments must sell their policies not only to domestic voters, but also to international investors.[10] Because investors can respond swiftly and severely to actual or expected policy outcomes, governments must consider financial market participants' preferences when selecting policies.[11] Investors' credible threat of exit – assumed in the earlier structural dependence literature but guaranteed by international capital mobility -- greatly increases their voice.

The alternative perspective, which predicts continued cross-national diversity in economic policies and institutions, relies on two arguments. First, national specialization is possible within globalization.[12] Firms and consumers have different preferences over taxation, services and regulation; governments offer different combinations of these goods; and consumers and firms locate in the jurisdiction that best matches their preferences. Second, economic globalization serves to heighten, rather than to reduce, pressures for government intervention. This implies expanded or sustained domestic demands for government intervention. Governments have domestic political incentives to insulate individuals from externally generated insecurity and volatility; governments might pay an external economic price (in higher interest rates, for instance) for

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[5] See Cohen 1996, Garrett 2001, Mosley 2003a for reviews of this literature.
[6] For examples and summaries of convergence arguments, see Andrews 1994, Garrett 1998, Garrett and Mitchell 2001, Germain 1997, Strange 1996.
[7] See Clayton and Pontusson 1998, Esping-Andersen 1996, Huber and Stephens 2001, Pierson 1994, 1996, Tanzi and Schuknecht 2000.
[8] Hirschman 1970. Also see Cerny 1995; for similar views from policymakers, see James Carville, quoted in *Economist*, October 7, 1995; Reich 1997, p. 64
[9] Garrett 2000, Pierson 2001, Quinn 1997.
[10] Simmons 1999, Tanzi and Schuknecht 2000.
[11] Obstfeld 1998. Likewise, Mueller 1998 suggests that, with international factor mobility, governments' ability to impose involuntary redistribution is curtailed sharply.
[12] Tiebout 1956. Also see Hall and Soskice 2001, Huber and Stephens 2001, Kitschelt et al 1999, Mueller 1998, Pierson 2001.

maintaining welfare state policies, but this price is offset by the internal political benefits of compensation.[13]

Recent empirical work assessing the validity of the convergence and divergence hypotheses, particularly in the advanced capitalist democracies, reveals a mixed pattern. Substantial cross-national diversity remains in areas such as government consumption spending, government transfer payments, public employment, and the public taxation,[14] but growing cross-national similarity characterizes aggregate monetary and fiscal policies. The latter often is associated positively with economic internationalization, while the former reveals the continued influence of domestic politics and institutions. Moreover, the impact of international capital markets on policy outcomes is contingent on earlier choices over exchange rate policies.[15] Under fixed exchange rates, left governments run larger budget deficits than right governments, and these governments use capital controls to reduce interest rate premia. Under floating rates, monetary – rather than fiscal -- policy is the preferred partisan instrument: left governments pursued looser monetary policies than right governments. In the developing world, economic globalization creates stronger pressures on governments, but some room for diversity in policies remains.[16]

This literature, although increasingly consistent in its empirical findings, does little to explore the causal mechanisms underpinning government policy choices. For instance, how do financial market participants evaluate government policy, and how do these evaluations generate the patterns of policy outcomes we observe?[17] In order to fill this lacuna, I specify a model of financial market operation; it describes the sources of cross-national and over-time variation in investors' influence.[18] I focus on the government bond market, because it provides a *most likely* location for the operation of financial market pressures. Bonds are both an important source of financing for governments, as well as a central part of large institutional investors' portfolios. The interest rates charged to governments for accessing the bond market also strongly influence the interest rates paid by other actors in the national economy. And higher public debt costs imply increased pressures in other areas of government policy.

The central argument of this work is that the consideration of government policies by financial market actors varies markedly across groups of countries. This pattern is driven by variation in investors' certainty regarding governments' creditworthiness, as well as the relative costs and benefits of employing information. In the advanced capitalist democracies, market participants consider key macroeconomic indicators, but not supply-side or micro-level policies. Market participants can charge high prices for certain government policies, but the range of policies used to set these prices is limited. In OECD nations, governments are pressured strongly

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[13] See Adserá and Boix 2001, Garrett 1998, Garrett and Mitchell 2001, Mueller 1998, Notermans 2000, Rodrik 1997.

[14] Garrett and Mitchell 2001, Hallerberg and Basinger 1998, Huber and Stephens 2001, Oatley 1999, Quinn 1997, Scruggs and Lange 2002, Swank 1998, 2002. Allan and Scruggs 2003 point out, however, that using programmatic qualities of welfare states (replacement rates, coverage ratios) rather than spending data paints a different picture. In their analyses, the welfare state is affected by global financial markets, as well as by government partisanship, and some retrenchment has occurred.

[15] Clark and Hallerberg 2000, Huber and Stephens 2001, Oatley 1999.

[16] On social security policies, see Brooks 2002. Rudra 2002 investigates the correlates of welfare spending in the developing world.

[17] Also see Cohen 1996, pp. 283-284.

[18] For a more detailed discussion of this model, see Mosley 2003a.

to satisfy financial market preferences in terms of overall inflation and government budget deficit levels, but they retain domestic policy-making latitude in other areas. The result is a "strong but narrow" financial market constraint in the developed world. For developing nations, however, the scope of the financial market influence extends to cover both macro- and micro-policy areas. Market participants, concerned with default risk, consider many dimensions of government policy when making asset allocation decisions.[19] Domestic policy-making in these nations is more likely to conform to the convergence view, as the financial market constraint is both strong and broad.

Default Risk, Information, and Financial Market Influences. Why do we expect differences in financial market behavior across groups of nations? The strength and scope of financial market influence depend upon the level of international financial openness, on investors' incentives to collect and employ information, and on the extent to which investors focus on similar types of information. The level of financial openness and the use of similar information affect the magnitude [strength] of financial market influence, measured in terms of interest rate changes, while the incentives regarding the use of information establish the grounds [scope] for those changes.

To begin, the extent to which investors can move their holdings from one country to another determines the capacity of investors to punish governments. With no capital mobility – and no credible threat of exit -- investors facing deteriorating conditions can wait and see, or convert their holdings to cash, but they cannot move their holdings to a different investment market. The strength of financial market pressures is reinforced by the structure of the investment management industry, which provides professional investors with incentives to rely on the same decision-making criteria. Because professional investors are evaluated in terms of their performance relative to other investors, contemporary government bond markets are, in fact, characterized by widespread reliance on similar indicators.[20] While the number of key indicators is central to determining the scope of the market constraint, the consensus among market actors on the identity of the key indicators is another important determinant of the *strength* of the financial market constraint.

The key actors are professional investors, that is, rational, wealth-maximizing decision-makers who face the challenge of distinguishing among sovereign borrowers. Investors have incomplete information regarding the credit worthiness of the countries whose bonds they are trading. The challenge to investors is to distinguish between good credit risks and poor credit risks, using government policy outcomes as signals of the government's type. But collecting and processing information regarding government policy outcomes – observing signals -- is costly. Investors, therefore, actively decide whether or not to collect and use particular types of information, based on their marginal costs and benefits.[21] Their decisions are based on two factors – first, on their prior beliefs regarding a government's type, based on the nation's level of economic development, and, second, on a cost-benefit analysis of each piece of information.

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[19] See Mosley 2003a, Chapter 4. For a classic treatment of default in economics, see Grossman and Stiglitz 1980.
[20] The use of similar indicators also relates the propensity for herd behavior in international capital markets. See Mosley 2003a, Chapters 2 and 3.
[21] This concept of active acquisition of knowledge differs somewhat from a Bayesian approach, which would suggest that market participants passively receive information and then use the information to update their priors. See Lupia and McCubbins 1998, Eichengreen and Mody 2000, and Rubinstein 1998.

Where an investor has a strong prior belief that a government is of the "good credit risk" type, she will invest only a small amount in the collection of information. Identifying a government's type is a fairly simple task, and one that usually can be done with a small amount of information, and at a low cost. Where an investor does not have a strong prior belief regarding a government's type, she will invest a much larger amount in the collection of information. Here the marginal benefit of a piece of information exceeds its marginal cost, as it allows the investor to distinguish between types of borrowing governments. In these cases, market participants will devote their scarce attention and time resources to the information that provides the greatest marginal benefit.

The need to economize on the use of information is particularly strong when financial internationalization is high. If investment is confined to a single country or set of countries, investors are able to consider a wide range of information, and to become very certain about the type of each government. But, when they are able to invest in a large number of nations, investors' information requirements are much greater.[22] For example, after investors diversify to twenty from five countries, investors who look at five indicators per country will have one hundred rather than twenty-five pieces of information to consider. Collecting and employing information about Country A prevents a market participant from collecting and employing information about Country B.[23]

Investment Risk and Economization. Investors may experience several types of investment risk: default risk, which results from a borrower failing to repay its obligation; inflation risk, which results when an asset's purchasing power declines; currency risk, which results from fluctuations in the value of local-currency denominated assets; and liquidity risk, where markets for an asset are thin and, therefore, transactions are difficult to execute.[24] When investors assign a high probability to governments being of the "good credit risk" type, default risk is minimal; investors can focus their attention on assessing inflation risk. They need only look to broad measures of government policy outcomes as signals; provided these signals confirm their prior beliefs, they will not dig deeper. Investors will reduce or eliminate the use of information relevant to default risk; they are willing to narrow their range of indicators because additional indicators are not relevant signals of the government's type. If salient investment risks (inflation risk and currency risk) can be evaluated on the basis of a small set of indicators, and if these indicators are high in quality, the marginal benefit of employing additional information is quite small. Under these conditions, market actors will avoid the costs of additional information and will rely instead on a small set of indicators -- "information shortcuts."[25] Therefore, when dealing with countries characterized by lower levels of default risk, market participants are likely to employ a narrow, less costly package of indicators. It is only when a "good credit risk" government does something out of character – rapidly increasing its level of public debt to a very high level, for example – that an investor would doubt its type.

But where governments are likely to be of the "bad credit risk" type, and investors cannot easily differentiate between types of borrowers, they must assess both inflation and default risk.

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[22] Erb et al 1999. Calvo and Mendoza 2000a and 2000b likewise note that international capital market openness increases the volume of available information, and therefore, the costs of information processing.

[23] Some claim that a reliance on a limited set of indicators also may lead to herd behavior, particularly when investors rely on news events or the behavior of other investors as information shortcuts.

[24] Sobel 1999. On liquidity risk in emerging markets, see OECD 2002, pp. 200-201.

[25] Simon 1982.

They employ a wide risk of information in order to infirm or confirm their prior beliefs. In such cases, investors will use a wide range of information about a government's willingness *and* ability to pay in order to gauge the government's creditworthiness. In their efforts to assess default propensity, investors will consider macro-policy indicators (e.g. inflation, deficits and debt), as well as supply side policies, labor market regulation, and the composition of government spending. Small budget deficits and low inflation may indicate low future inflation risk, but they are insufficient to assess future default risk. Considering a wide range of indicators allows for a more accurate assessment of investment risk. In addition, when uncertainty about the quality of information and the implications of information for policy outcomes is high (e.g. when it is not clear if falling budget deficits indicate fiscal consolidation or merely "cheap talk"), market actors will gather more information. Employing a higher-cost package of indicators allows investors to come to more precise conclusions regarding governments' types.

In many cases, then, a broad range of information is not necessary to make correct assessments of investment risk. For instance, although a market participant who collects and evaluates every available piece of evidence about Sweden may generate a more accurate assessment of the future performance of Swedish government bonds, she will forego the opportunity to make accurate assessments regarding the future of Hungarian and Czech bonds. In doing so, she sacrifices the ability to make broadly accurate assessments of many assets in return for the ability to make a very accurate assessment of a single asset – hardly rational behavior in a geographically diversified capital market, or where uncertainty regarding a government's type is low.

Developed versus Developing Nations. The signaling framework suggests that financial market participants are most likely to rely on a narrow set of indicators when evaluating bonds issued by governments of developed democracies. Investors assign a high probability to the fact that OECD nations are of the "good credit risk" type. The label "developed democracy" provides a degree of confidence regarding government policy, a more narrow range of possible policies, and, therefore, reduced concerns about default risk. Although investors *are* concerned about government policy outcomes in these nations, and *are* aware of variation in outcomes among developed countries, they place a considerable amount of confidence in these governments. Market participants' overall confidence in government policies and in information quality leads market participants to consider only a small set of aggregate indicators. They view good performance on these aggregates – macro-indicators -- as indicative of low inflation and exchange rate risk. At the same time, market participants see micro-indicators as largely unrelated to the government's type. And compliance with market pressures on macro-indicators does not necessitate particular changes in micro-indicators. Different mixes of micro-side policies characterize governments with small deficits and low inflation.[26] The result, then, is relatively narrow financial market influence.

On the other hand, almost by definition, emerging market economies lack well-developed domestic capital markets and sometimes experience difficulties repaying external loans. Investors assign significant probability to the possibility that emerging market economies are "bad credit risks." They have very uncertain priors regarding the type of emerging market borrowers. Some are creditworthy, while others are not, and a low-cost package of information does not allow investors to distinguish between the two. For instance, investors often do not

[26] See Mosley 2003a, Chapter 3.

assume that governing parties will uphold their debt servicing obligations. Recent defaults or near-defaults in Argentina (2001), Ecuador (1999), Indonesia (2002), Russia (1998) and Ukraine (1998), among others, are illustrative.[27] It is quite possible for a government to win domestic political favor by dealing harshly with foreign investors, or for political instability to generate a sovereign default.[28] Given the wide possible range of investment risks that financial market participants face in emerging markets, and investors' greater uncertainty regarding the salience of these risks in particular nations, investors must rely on a broad set of indicators. Doing so allows them to assess governments' willingness and ability to repay their debts.

Additionally, the borrowing strategies pursued by emerging market governments can exacerbate investors' concerns about the ability to pay. In order to access international capital markets (or to do so more cheaply), emerging market governments often issue foreign currency-denominated, short duration bonds. These issues alleviate risks for investors, but also render default risk more salient.[29] Moreover, investors' desire to gather a wide swath of information is reinforced by the nature and availability of information in emerging markets: information may be of poor quality or simply unavailable. Rather than relying only on statistics from one official source, then, investors might collect fiscal policy information from several government ministries, the central bank, private industry, and intergovernmental organizations.[30]

As a result, the marginal benefits of additional information are great in emerging markets. Market participants will worry about the ways in which emerging market governments allocate spending, the supply side policies employed by governments, and the implications of regional and national elections. They will assess investment risks using not only macroeconomic indicators (inflation, fiscal balances, current account deficits), but also a wide range of micro-side indicators (e.g., the breakdown of government spending across areas and the structure of tax systems) and the political climate. Expenditures for investment, for instance, are seen to increase repayment capacity, while expenditures for pure consumption do not.[31] Likewise, even among emerging market economies with similar levels of public investment expenditure, we might expect investors to examine the efficiency of these investments. These micro-side indicators serve as costly signals of developing nation governments' types: a good credit risk will allocate its budget in market-friendly or neoliberal ways, whereas a bad credit risk government will not. The costs of the signal are found in domestic politics: the rationalization of public pensions and health care, to take an example, often hurts governments' public approval.[32]

This broad financial market constraint does not necessarily mean that market participants make more nuanced assessments of emerging market nations, or that they consider changes in one indicator in light of changes in many other indicators. Rather, it means that, for emerging

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[27] The Financial Times (September 24, 2002) notes that the amount of sovereign defaults nearly doubled in 2002, and is expected to increase again in 2003.

[28] Sobel 1999. On the effects of regime instability on investment, see Przeworski et al 2000.

[29] See Mosley 2003a, Chapter 6.

[30] In addition, International Monetary Fund (IMF) programs can serve as "seals of approval" for private investors. The IMF, however, may not always enforce its programs, particularly when dealing with politically important borrowers. See Stone 2002. Another means by which investors can deal with informational concerns is to rely on international data standards. See Mosley 2003b.

[31] IMF Survey, October 20, 1997, p. 328.

[32] On costly signals and audience costs, see Fearon 1994, Morrow 1994, 1999. Also see Stokes 2001, who suggests that orthodox governments are more inclined than heterodox governments to switch to more market-friendly policies, as doing so sends a more credible signal to markets.

market nations, there are more policy indicators that can elicit a financial market response.[33] For example, if there is no change in market expectations regarding Belgium's government deficit/GDP ratio or rate of inflation, there probably will be no change in Belgian government bond prices. Even if, however, there is no change in Peru's government budget deficit or inflation rate, bond prices may move in response to changes in the distribution of the government budget across spending categories.

In sum, the incentives facing professional investors suggest that the influence of international financial markets on the governments of developed countries is narrow in the sense that traders react to a small number of macroeconomic indicators, leaving governments wide latitude to pursue a variety of policy objectives. In contrast, the influence of international financial markets on emerging market governments with open capital accounts is both strong and broad. Market participants rely on a wide set of indicators and react sharply to changes that raise questions about a country's credit-worthiness.

III. Empirical Assessments

A. Financial Market Influence in the Developed World

To what extent does investors' behavior conform to the above hypotheses? In previous work, I present evidence regarding financial market pressures in advanced industrial democracies.[34] I gathered several types of evidence: interviews of institutional investors and fund managers, conducted in London and Frankfurt in 1997 and 1998; surveys of financial market participants, carried out in 1999 and 2000, and cross-sectional time series analyses for the 1981-1996 period. This evidence strongly supports the notion that financial market participants are concerned with developed country governments "getting the big numbers right," but they are much less concerned about the partisan affiliation or the micro-level policies of these governments. On the quantitative side, the strongest determinants of longer-term government bond rates are inflation and United States interest rates. Government fiscal balances, current account balances, and exchange rate levels also are significantly and somewhat strongly associated with government bond rates. Supply-side policies, on the other hand, generally do not have a strong and significant relationship with interest rates; and macro-policy outcomes are often uncorrelated with micro-policy and supply side choices.

From these findings, it follows that governments of developed democracies are not constrained broadly by financial market pressures. Investors are interested principally in the aggregate economic outcomes of inflation and government budget deficits. The means by which governments achieve these outcomes, and the nature of government policies in other areas, do not concern financial market participants. Therefore, complying with financial market participants' preferences over particular aggregate outcomes leaves governments with "room to move." This finding provides a causal underpinning for the continued cross-national policy

[33] Also see Calvo and Mendoza 2000b.
[34] See Mosley 2000, 2003a.

divergence frequently observed among OECD nations. It also is consistent with the nation that "stresses on contemporary welfare states would be there with or without globalization."[35]

B. Financial Market Influence in Emerging Markets

The situation is very different for governments of developing countries. Relatively open capital markets in middle-income developing nations allow for strong market responses to government policy changes.[36] Other factors can render these pressures even stronger: first, emerging market nations' reliance on foreign capital is greater than that in developed democracies; governments have fewer choices regarding how to access international capital markets. Additionally, emerging markets face the problem of greater capital flow volatility. Investment in emerging market economies often is driven by efforts at portfolio diversification and at high risk-adjusted returns, and often reacts to "push" factors in developed markets. In the 1990s, the volatility of returns on emerging market debt consistently and substantially exceeded that of returns in developed nation markets.[37] While emerging market governments may, as in the developed world, maintain divergent social and economic policies, doing so will be more costly (in terms of interest rate penalties and access to capital) in the developing world. Moreover, extant research on the relationship between default risk and interest rate premia in developing nations suggests that default risk *is* a central consideration.[38] For instance, a recent IMF review reports a relatively robust association between perceived default risk and levels of government debt.[39] And, as noted above, by borrowing at short maturities or in foreign currencies, emerging market governments often exacerbate default risk.

1. Interview and Survey Evidence: The Importance of Default Risk

Interviews with Professional Investors. The importance in the developing world of default risk and of gathering a wide set of information is reflected in my interviews with and surveys of professional investors.[40] These interviews, which were a follow-up to a 1997 survey focused on developed nations, were conducted in late 1998 and focused on the constraints facing emerging market economies.[41] Interview subjects were London-based participants in fixed-income markets; these individuals make longer-term recommendations regarding asset allocation, and most deal with nations in a variety of geographic regions. Interviewees answered a set of open-ended questions regarding asset allocation in emerging market economies.

Recent defaults and near-defaults have raised the salience of default risks for market participants.[42] It is not surprising, therefore, that market participants are very concerned about governments' ability and willingness to pay. As in developed nations, market participants

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[35] Pierson 2001, p. 82. These stresses include the shift from manufacturing-oriented to services-oriented economies; changing demographic and family structures; and the maturation of welfare states. Also see Garrett 1998, Huber and Stephens 2001.
[36] Armijo 1999, Garrett 2001.
[37] IMF 1998, p. 23.
[38] E.g. Balkan 1992, Edwards 1986.
[39] IMF 2001. Also see Min 1998.
[40] Also see Armijo 1999, Grabel 1996, Haley 1999, Maxfield 1997, Summers 2000.
[41] This section draws on interviews with market participants, conducted in London during October 1998. A full list of interview subjects' firms and dates of interviews is available from the author.
[42] Also see New York Times, September 29, 1999.

consider macro-outcomes, including the inflation rate and the deficit/GDP ratio. Additionally, because a government's ability to repay depends on its capacity to generate revenues, market participants also consider the sources of government revenue, the balance of payments position, existing government debt, and the structure of government borrowing. Because of the prevalence of foreign currency denomination, exchange rate considerations also are very important.

In contrast with developed-country asset allocation, market participants **also** look at micro-policy indicators. For instance, they consider not only a government's aggregate fiscal stance but also the components of its fiscal policy. They collect information regarding the sources of tax revenue and the government's capacity to collect taxes. On the expenditure side, market participants consider how resources are allocated across spending categories. Are public funds used for consumption or for [growth-enhancing] improvements in infrastructure? How is the pension system structured? What is the role of government subsidies in the economy? Furthermore, market participants consider a government's level of fiscal flexibility: in a crisis, is the government able to change or reallocate spending?

Moreover, professional investors point out that, in developing nations, unpredictable political climates affect governments' willingness to repay public debt.[43] In emerging market economies, market participants view the range of possible policy outcomes as relatively wide: some governments will pursue capital-friendly policies, but others may advocate policies hostile to international investors.[44] A change in government can have large implications for policy outcomes.[45] For instance, immediately following Hugo Chavez's strong electoral showing in 1998, the Venezuelan equity market index fell eight percent. Market participants cited fears about Chavez's promises of radical political reform and his rejection of the "savage neo-liberal economic model."[46] The importance of politics to default makes country risk analysis an essential part of the asset allocation process; such analysis is essentially absent when investing in developed nations. Lastly, interviews suggest that the quality and availability of information are important considerations in emerging markets. Of those participants interviewed in October 1998, eleven of thirteen cited informational concerns as a factor in their emerging market asset allocation behavior, and eight of these eleven described information as a *very central* concern.[47]

Surveys of Professional Investors. A survey of mutual fund managers, conducted in mid-2000, provides similar evidence. The survey subjects for the first round were managers of the largest internationally oriented U.S. mutual funds, ranked according to assets under management.[48] This sample consisted of 178 individuals. The subjects for the second round of surveys were drawn from a database (Morningstar's Principia) including mutual funds of all sizes; I selected those funds with substantial activity outside the United States.[49] This database

[43] Predictability is often more important than the form of government to market participants. Several point out that stability of policy is more important than the degree of democracy. See Armijo 1999, Mahon 1996.
[44] Interviews 52, 53, 56, 57.
[45] Interview 59.
[46] Financial Times (November 24, 1998; November 16, 1998; November 10, 1998).
[47] Also see Summers 2000.
[48] Ratings are based on data from CBS MarketWatch; several categories of mutual funds – including International, Global, and Emerging Market – were used to compile the survey pool.
[49] Data are from the April 2000 release of the Principia CD-ROM. The fund categories of International Hybrid, Diversified Emerging Markets, Asia/Pacific Stock, Foreign Stock, World Stock, Latin America Stock, and Europe Stock were used.

generated a pool of 486 potential subjects. Each subject received a four-page questionnaire. Part I of the survey requested basic descriptive information, such as the number of and size of funds managed, the type of assets held, and the geographic allocation of capital. Part II asked respondents to rate the importance, on a scale of one to ten, of thirteen policies or political factors. A follow-up reminder regarding the survey was sent two weeks later.

A total of forty-seven surveys were returned. After eliminating those surveys that did not reach the intended recipients,[50] the resulting rate of response was approximately eight percent. The very low response rate is not surprising, given the time demands faced by fund managers.[51] By comparing the characteristics of the respondents to those of the entire sample, however, we can increase our confidence that the bias generated by survey non-response is acceptable. Among respondents, the number of funds managed by respondents ranged from one to eighty-six, with four as the median number managed. Average fund assets under management were $17.5 billion in the May survey (reflecting the selection of participants based on fund size), $4.7 billion for the July respondents, and overall $8.9 billion. The median fund size was considerably smaller, at $1.5 billion.

To compare the respondents with the total potential pool of managers, the average fund size in the Principia database was $332 million. The average fund size for respondents – calculated by dividing total assets under management by the number of funds managed – was $1.1 billion.[52] Similarly, the median fund size is $34 million in the Principia database and $318 million in the May and July responses. The responses reported below, then, are biased toward larger mutual funds. This may reflect the fact that the managers of smaller funds are less likely to devote time to responding to surveys. In any case, larger mutual funds are more able to impact the fortunes of emerging market nations, so a bias toward these funds is acceptable.

The overall asset allocation results from the survey indicate that, on average, 86.9 percent of fund managers' assets are invested in OECD, or advanced capitalist, nations, while the remaining 13.1 percent are invested in emerging market economies. On average, 34 percent of investment is in the Euro-11 Area, 29 percent in North America and 15 percent in Japan. Other investment locations include Latin America (six percent), emerging Europe (two percent) and the Middle East and Africa (two percent). Again comparing this allocation with that of the wider Principia database, the allocations generally are similar.[53]

Survey respondents rated the importance of a series of policies and political factors to their asset allocation decisions. The rating scale ranged from one to ten, where lower values denoted "not at all important" and higher values denoted "very important." This evidence allows us to compare fund managers' treatment of emerging market and developed nations; if the strong and broad pattern holds in developing nations, we should observe marked differences in the

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[50] This reduced the May sample size to 161 and the July sample size to 432.

[51] On the general problem of survey non-response in political science, see Brehm 1993.

[52] There is very little difference in fund size between the May and July survey groups; the average size for May respondents is $1.09 billion and the average for July respondents is $1.05 billion.

[53] The categories used by Principia are slightly different than those used in the survey. The geographic breakdown is US and Canada (10 percent), Europe (40 percent), Japan (15 percent), Asia-Pacific (16 percent), Latin America (6 percent) and others (3 percent). The breakdown between developed and emerging in Principia is 73 percent and 25 percent, with two percent of assets coded as "N/A."

importance of these factors, as well as a pronounced attention to default risk in emerging markets.

Table 1 reports these results. The first column lists the indicator, using the wording from the survey. The second column lists the overall average score. This column indicates that the most important indicators are the expected rate of inflation, and the ability and willingness of governments to repay debt. When we divide the sample based on geographic allocation, however, important differences appear. The third column reports the average for those fund managers with more than 25 percent of assets invested in emerging markets (n=7); the fourth column reports averages for all others in the sample (n=40). For all but one factor (tax policy), the importance of these factors is greater in emerging markets. In seven of thirteen cases, the

Table 1: The Importance of Policies and Political Factors to Asset Allocation

Factor	All Respondents	Emerging Markets (>25% assets)	All Other Respondents
Expected rate of inflation.	6.93	8.5*	6.84
Political independence of national central bank.	6.15	7.8*	6.03
Expected government budget deficit.	5.73	7.0*	5.59
Political independence/insulation of fiscal policy-making authorities.	5.95	7.3*	5.89
Overall level of government debt (e.g. debt/GDP ratio).	6.27	6.5	6.24
Total size of government sector (e.g. government spending/GDP).	5.73	6.0	5.70
How governments allocate spending across functional categories (e.g. public investment spending vs. transfer payments).	4.88	5.8	4.84
Tax policy (e.g. marginal rates of taxation).	6.39	5.8	6.59
Degree of government intervention in labor markets.	6.07	7.0	6.08
Ability of government to repay sovereign debt.	7.27	8.7*	7.14
Willingness of government to repay sovereign debt.	7.46	8.3*	7.41
Partisan orientation of government (e.g. Social Democrats, Liberals, Christian Democrats).	4.98	5.33	4.97
Expected changes in government (e.g. upcoming elections).	6.29	7.67*	6.08

*Indicates a difference from "All other respondents" that is significant at a 90% or greater level of confidence.

difference between groups of respondents is statistically significant. Particularly large differences exist for the ability of governments to repay debt, monetary policy, fiscal policy, and expected changes in government. If we define emerging markets more loosely – as more than ten percent of assets in emerging markets – the differences between categories are similar, albeit

with less statistical significance. The survey results, then, provide additional confirmation for our expectation that investors treat developed and emerging markets differently, and that default risk is more salient for emerging market investors. They also provide additional evidence that information quality and availability are more serious problems in emerging and developed markets.[54]

Credit Ratings. Lastly, evidence of investors' concern with default risk also occurs in the methodologies employed by sovereign credit ratings agencies. Some agencies, which include Standard and Poor's, Moody's, Duff and Phelps (DCR) and Fitch-IBCA, rate sovereign and corporate debt instruments. These agencies sell their ratings to institutional investors and other portfolio market investors. Other agencies, including Euromoney and Institutional Investor, provide country-risk ratings to a variety of private sector investors. The practices of these agencies reveal two things implied by the previous discussion: first, default risk is salient emerging market economies, but assumed to be non-existent in developed economies. Second, greater uncertainty surrounds ratings in emerging market economies.

Although ratings agencies sometimes fail to anticipate major events, investors use ratings agencies as a guidepost in the pricing of sovereign debt.[55] Additionally, because many institutional investors are required to hold assets of some minimum credit rating, ratings changes can generate substantial reallocations.[56] A review of ratings methodologies indicates that ratings agencies take for granted that default risk is very low in advanced industrial democracies, even when outstanding debt is high.[57] Variance among developed nations ratings is very small, despite large differences in levels of public debt. Along these lines, Ul Haque et al's[58] study of rating methodologies and outcomes finds that different groups of countries are treated differently by ratings agencies, above and beyond their objective economic characteristics.

Ratings agencies devote the bulk of their attention to emerging market economies; there, they consider a wide range of economic policy outcomes and political attributes. They assume neither willingness nor ability to repay debt.[59] Rating agency assessments include aggregate fiscal outcomes as well as the breakdown of government spending, the structure of the tax system, and the nature of government regulation. For instance, Standard and Poor's considers the purposes of public sector borrowing, as well as trends in inflation and public debt.[60] It also evaluates supply-side policies, including the tax code, domestic regulation, and national investment policies.[61] In light of recent financial crises, ratings agencies also have begun to place stronger emphases on the strength of domestic banking systems and on the degree of reliance on foreign capital inflows.[62]

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[54] For survey results that address information issues, see Mosley 2003b.
[55] IMF 1998, IMF 1999, World Bank 2000.
[56] IMF 1998, Keefer and Knack 1997, Sinclair 1994.
[57] This discussion is based on the methodologies employed by Standard and Poor's, Institutional Investor, and Euromoney. For more detail, see Mosley 2003b, Chapter 4, as well as Sobel 1999.
[58] Ul Haque et al 1997.
[59] Interview, Director, IBCA, January 1997; Sinclair 1994.
[60] Standard and Poor's, March 27, 1995.
[61] Standard and Poor's, August 1992.
[62] IMF 1999; *IMF Survey* (August 17, 1998), pp. 259-260.

Ratings outcomes highlight the creditworthiness of developed economies, as well as the investment community's difficulty in assessing investment risk in emerging markets. Credit ratings of OECD nations tend to be high, with little variance among countries, and a high correlation between different agencies' ratings. Emerging market nations (middle-income developing nations, classified as such by the World Bank) have lower ratings, on average; they also are characterized by greater variance, both across countries and across ratings agencies. Interestingly, while low income developing nations have lower average ratings than emerging market nations, they are characterized by less variance across countries and across ratings agencies. These outcomes suggest that uncertainty regarding information and politico-economic outcomes is highest among emerging market nations, generating greater variance across countries and less agreement across ratings agencies.[63]

2. Quantitative Evidence

Variation in Government Policies. The "strong and broad" financial market constraint relies on investors' uncertainty regarding policy outcomes in developing nations, as well as on higher levels of default risk in those nations. Evidence from the 1990s highlights the general pattern of policy variability in emerging markets. This variability, which is greater than in the developed world, renders investors less able to assume a constant level of risk across developing nations. Rather, they must look closely at each nation and its propensity for default.

Table 2 provides summary data for a variety of economic policy indicators, for a group of developed and developing nations.[64] These data suggest that economic fundamentals tend to be worse in developing nations, and perhaps more importantly, that these outcomes display more variation in developing nations. In each of the six categories listed, variance is greater in developing than in developed nations. In all categories other than government debt and government consumption, policies also are "worse" in developing nations. Higher debt in the OECD likely reflects greater access to credit, while higher consumption reflects larger public sectors.

Correlates of Interest Rates. We can also use cross-sectional time series models to assess the extent to which economic policy outcomes and political factors are associated with government bond rates in the developing world. For the developing world, macro-policy data are more readily available for recent years, and cross-nationally comparable data on micro-policy indicators is largely unavailable.[65] The results reported in this section rely on data for the developed and developing nations listed in the Appendix, using annual data for the 1990 to 2000 period. Although cross-sectional time series estimation suffers from some problems for this sort of data, the results provide additional evidence of differences in the evaluations of developed and developing nations.

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[63] Information in this paragraph is based on credit ratings from Euromoney, Institutional Investor, and Standard and Poor's, for the mid- to late 1990s. Also see Calvo and Mendoza 2000b, Mosley 2003b, Sobel 1999.

[64] Country classifications rely on those generated by the International Finance Corporation's Emerging Markets Database, and are found in the Appendix. Also see www.spglobal/com/method.pdf

[65] *IMF Survey*, February 23, 1998, p. 52.

Table 2: Variance in Policy Outcomes, 1990-2000

Policy Indicator	Developed Nations: Mean	Developed Nations: Standard Deviation	Developing Nations: Mean	Developing Nations: Standard Deviation
Government budget balance/GDP	-1.96 (n=187)	4.9	-2.65 (n=410)	4.3
Inflation Rate[66]	2.76 (n=231)	2.16	16.64 (n=445)	19.87
Current account balance/GDP	1.05 (n=226)	5.29	-2.58 (n=482)	6.04
Government debt/GNP	67.69 (n=175)	25.91	52.05 (n=464)	31.53
Government consumption/GNP	19.78 (n=223)	3.99	14.94 (n=513)	5.67
Change in real effective exchange rate	-0.004 (n=231)	0.050	0.015 (n=248)	0.116

*N refers to the number of country-years. Calculations are based on data are from World Bank, *World Development Indicators* 2002, and *Global Development Finance* 2002. Debt data for developed nations also rely on the OECD *Economic Outlook*, December 2002.

The strong and broad model of financial market influence on governments implies that, because of the salience of default risk, emerging market nations are treated differently from developed nations. That is, the constraint is broader, and perhaps stronger, not merely because governments of emerging market economies pursue a different set of macro-policies than governments of developed economies, but also because emerging market governments are characterized by greater policy uncertainty, by less accurate information, and by higher levels of default risk. *Even when* emerging market economies have outcomes on macro-policy indicators that are similar to developed nations' outcomes, they should pay higher interest rate premia.

The dependent variable in these analyses is the interest rate spread – the difference between the interest rate charged by banks on loans to prime customers (LIBOR, the London Interbank Offer Rate)[67] and the interest rate paid by banks for demand, time or savings deposits. While all OECD nations issue comparable government securities, the pattern of issue varies widely across emerging market nations; data on the interest rate spread is cross-nationally comparable and more widely available. Where data on benchmark government bond or Treasury bill rates exist, they are highly correlated (bivariate correlations of 0.71 and 0.61, respectively) with the interest rate spread variable. Additionally, using an interest rate spread measure controls for changes over time in global credit conditions.

[66] I exclude the 48 country years (in developing nations) in which annual inflation is greater than 100 percent. Excluding these nations serves to reduce cross-national variance.

[67] The LIBOR spread reflects the differences in risk between loans in national markets and low-risk interbank, dollar-denominated loans.

Tables 3 reports results from several cross-sectional time series models, using annual data for the 1990-2000 period.[68] The independent variables include several macro-policy indicators – the rate of inflation, the current account/GDP ratio, the government budget balance/GDP, and government debt/GNP, as well as the exchange rate regime and the level of capital market openness.[69] To these basic economic variables, I add a dummy variable for elections, an interaction between elections and OECD status (Column 2); an indicator of the quality of economic data (Column 3); and a dummy variable for OECD nations (Column 4).

Table 3: Interest Rates in OECD and Developing Nations

Independent Variable	1 Economic Variables (Basic Model)	2 Basic Model plus Elections	3 Basic Model plus Elections and Data Standards	4 Basic Model plus Elections and OECD Member
Inflation Rate[70]	0.589*** (0.017)	0.586*** (0.017)	0.594*** (0.017)	0.575*** (0.017)
Current Account Balance/GDP	-0.494*** (0.096)	-0.531*** (0.094)	-0.541*** (0.094)	-0.376*** (0.108)
Government Budget Balance/GDP	-0.155 (0.119)	-0.108 (0.115)	-0.057 (0.117)	-0.408*** (0.124)
Government Debt/GNP	-0.026* (0.015)	-0.032** (0.014)	-0.029** (0.014)	-0.029* (0.017)
Capital Account Openness	0.372** (0.173)	0.477*** (0.161)	0.537*** (0.160)	1.504*** (0.317)
Exchange Rate Regime	0.572*** (0.097)	0.545*** (0.093)	0.591*** (0.094)	0.431*** (0.105)
Election Dummy Variable		2.581*** (0.678)	2.383*** (0.678)	1.898*** (0.739)
OECD*Election Interaction		-2.881*** (0.898)	-2.851*** (0.955)	-2.185** (0.908)
Subscription to SDDS			-1.356* (0.707)	
OECD Dummy Variable				-9.431*** (1.865)
Observations (N)	489	489	489	489
Countries	61	61	61	61
Wald Chi^2	1543.73	1614.38	1734.27	1420.99

Standard errors are in parentheses.
***p<.01; **p<.05, *p<.10.

[68] Cross-sectional time series models are estimated using generalized least squares, with a correction for AR(1) autocorrelation and heteroskedastic error variance across panels.
[69] Data are taken from the World Development Indicators 2002. The exchange rate measure is from Reinhart and Rogoff 2002; it classifies exchange rates along a zero to fifteen scale, with zero connoting fully fixed, and fifteen assigned to fully floating regimes. The capital openness measure is taken from Brune et al 2001; it ranges from zero (closed capital accounts) to nine (open capital accounts), and is an average measure for the 1990s.
[70] All coefficients are rounded to three places.

The models in Table 3 suggest that, in both developed and developing nations, economic outcomes are important determinants of the interest rates paid by governments. Interest rates are associated significantly and positively with inflation, and significantly and negatively with current account balances. [71] Government budget balances also are associated negatively with interest rate spreads (larger deficits lead to higher spreads), but this association is statistically significant only in the last model. The government debt/GNP variable is always significant, but is not in the expected direction: the estimate implies that nations with higher debt levels pay lower interest rates. This could reflect the fact that, where interest rates are very high, governments are less able to access international capital markets. Additionally, nations with floating exchange rate regimes and open capital markets tend to pay higher interest rates, all else equal. When capital markets are opened, governments usually lose the ability to intervene in domestic financial markets, and interest rates rise closer to world levels.

To the basic model (1), Model 2 adds an election dummy variable, as well as an interaction term capturing the effects of elections in OECD nations (OECD*Election). The estimate on the election variable is positive and significant: during election years, interest rate spreads are higher, even after accounting for monetary and fiscal conditions. The interaction between OECD status and elections, however, is negative and significant; in general, elections result in higher interest rates, but in OECD nations, this effect disappears. While elections may matter for interest rates in developing nations, they do not in developed nations. Because investors are not concerned with default risk in developed nations, they do not need to consider the implications of political events for default when investing in the OECD. Other political variables, such as government fractionalization, are positively associated with interest rate levels (e.g. higher fractionalization associated with larger spreads); but these estimates are not statistically significant, and they reduce the number of observations.

Model 3 includes a dummy variable (subscription to SDDS) to gauge the presence of informational concerns. The IMF launched the Special Data Dissemination Standard (SDDS) in 1996, with the aim of ensuring that developing countries provided timely and accurate economic information to the financial community. As of February 2003, 52 nations (developed and developing) subscribe to the data standard.[72] In the above model, subscription is associated significantly with lower interest rate spreads. Although there was no variance in this measure until 1996, it appears to have an impact on investor confidence in later years.

The final model (Model 4) adds a "country category" variable, coded 1 for developed democracies (OECD nations), and zero for developing nations.[73] This variable gauges the extent to which, once macro-economic outcomes are accounted for, developing nations *still* pay higher interest rates than developed nations. The negative and significant coefficient on this variable indicates that two nations, one developed and one developing, with similar macro-economic fundamentals, are treated differently by financial market participants. The OECD variable likely serves as a proxy for financial market participants' concerns about the attributes of

[71] Negative numbers indicate deficits, so the negative coefficient implies higher rates with deficits, and lower rates with surpluses.
[72] For a history of the SDDS and a discussion of its effectiveness, see Mosley 2003b.
[73] Because of collinearity, Model 4 does not include the SDDS subscription variable.

developing nations – high default risk, political uncertainty, and poor information quality,[74] for instance.

Lastly, when micro-policy variables (such as total government consumption, total tax revenue, government spending on subsidies, and health care spending) are added to the above models, they tend to be associated positively with interest rate spreads. In most cases, however, the estimates are statistically insignificant. The exception is expenditure on wages and salaries, which is associated significantly and positively with interest rate spreads. The wages measure, however, is correlated with country category; spending on wages tends to be much higher in frontier and emerging markets.[75] This effect, therefore, likely reflects an emerging markets-developed markets difference, rather than a general attention to micro-policy indicators.

In sum, because of concern with default risk and information quality, financial market pressures in developing nations are broader than those in developed nations. These broader constraints imply that, as developing nations open themselves to flows of short-term capital, they will experience both costs and benefits. The benefits will flow from a more efficient allocation of global investment and, presumably, higher rates of economic growth. The costs will come from greater constraints on policymaking autonomy, as well as from potential effects on equity and income distribution. If developing nation governments wish, for domestic political reasons, to maintain or create redistributive social policies that are viewed by investors as signaling a reduced commitment to repaying their foreign debt, they may well pay a high financial market price for doing so. Financial markets might reward redistributive policies that are growth promoting; this will depend on the extent to which investors consider longer-run outcomes rather than shorter-run budgetary effects.

IV. Conclusions: Domestic Politics, Push vs. Pull Factors, and Country Categorizations

This chapter explores the influences of global capital markets on government policy making, with a specific focus on the government bond market. I suggest that, because of professional investors' incentives and information needs, financial market pressures will vary across groups of countries. In the advanced capitalist democracies, market participants consider key macroeconomic indicators, but not supply-side or micro-level policies. The result is a "strong but narrow" financial market constraint in the developed world. For developing nations, however, the scope of the financial market influence extends to cover both macro- and micro-policy areas. Market participants, concerned with default risk, consider many dimensions of government policy when making asset allocation decisions. Domestic policy-making in these nations is more likely to conform to the convergence view, as the financial market constraint is both strong and broad.

The empirical evidence presented in this chapter supports this view: as a result of their concerns with default risk, financial market participants treat emerging markets differently from – and more stringently than -- developed ones. The consequences of strong and broad financial market influence for developing country governments are rather severe. Because the interest

[74] When the SDDS dummy variable is included in these models, the coefficient remains negative, but is statistically insignificant.

[75] For the 1990-2000 period, average spending on wages is 13.1 percent of expenditure in OECD nations, 19.9 percent of expenditure in emerging markets, and 22.7 percent of expenditure in frontier markets.

rates charged to governments are related directly to a wide range of economic policies, social policies, and institutional features, governments that want to please international market participants are highly constrained. We are likely to observe many instances of emerging markets governments attempting to please pro-market constituents and international lenders rather than other domestic interest groups.

The implications of this conclusion for policymaking depend, however, on three sets of factors: (1) the interests and institutions that characterize domestic politics; (2) the role of push (global) versus pull (country-specific) factors in capital flows to emerging markets; and (3) the ability of developing countries to move between groups, emerging and developed. Each of these factors will mediate the ways in which financial market pressures ultimately influence redistributive policies, especially in a dynamic sense. By way of conclusion, I treat each in turn.

First, domestic interests and institutions vary across developing nations, and these will affect the ways in which governments respond to financial market pressures. In some cases, public opinion may push governments in exactly the same direction as global capital markets – toward monetary and fiscal restraint, and toward smaller public sectors. In other cases, the reverse will be true. In addition, domestic political institutions, such as electoral systems, coalition governments, and federalism, will affect the ways in which financial market pressures are interpreted domestically. And economic conditions – and the need to attract and retain capital – also will affect the extent to which governments will accede to or will resist financial market pressures. Therefore, in order to understand fully the linkage between global capital and national governments, a second causal mechanism is necessary. We need to connect events in global capital markets with changes in government policy, and we must consider how various domestic institutions and ideologies mediate these changes. In other words, under what conditions do governments accede to financial market influence, resist financial market influence, or attempt to insulate themselves from financial market influence?[76]

Second, the above account links country-specific ("pull") factors with capital market activity. While these pull factors are an important determinant of market activity in emerging markets, a second category of factors – "push factors" also can be important. Under some circumstances, exogenous ("push") factors, rather than country-specific evaluations, drive activity in global capital markets.[77] These exogenous factors include investors' attitudes regarding risk, changes in United States interest rates, and savings/investment rates in wealthy nations. When push factors dominate, the link between capital flows and government policy outcomes is more tenuous. In such periods, market participants might seek the high returns available in emerging markets and be willing to charge risk premia that are lower than economic fundamentals imply. Governments will be less constrained. And in periods of flight from emerging markets the risk premia charged to governments far exceed those implied by economic fundamentals. In these situations, governments can do little to attract foreign capital.

Thus, there is a second type of variation in financial market influence – variation over time, rather than across countries. Often, the global market environment is normal, and pull factors dominate; governments' costs of borrowing depends on their policies, as well as on their

[76] For a more detailed discussion of the domestic political side of financial market-government relations, see Mosley 2003a, Chapter 5.
[77] E.g. Eichengreen and Mody 2000.

country category. But, in other periods, push factors dominate, and the global market environment is characterized by a mania (risk acceptance) or a panic (risk aversion). In these market environments, developing countries find their access to capital to be either very easy (mania) or very difficult (panic). In the former, even nations with poor policies can access capital at low rates, and constraints are meager; in the latter, even nations with good policies have difficult in attracting investment. Therefore, we should observe variation in policy that is correlated with variation in global market sentiment. For instance, when global liquidity is high, we should observe more cross-national diversity among developing-nation policies. Ultimately, if we want to understand the means by which emerging market economies might ameliorate the influence of global capital markets, we should seek out causal explanations for changes in global attitudes regarding emerging markets. It also useful to realize that, under most conditions, a combination of push and pull factors drive capital flows. While the overall amount of flows depends on push factors, the division of flows among nations likely is due to pull factors.[78]

Third, how stable are the groups to which investors assign nations? That is, under what conditions might investors change their assessments of a nation from "emerging market" to "developed," with the attendant reduction in attention toward default risk and micro-policy outcomes? As investors update their country categorizations,[79] are some governments able to gain greater autonomy vis-à-vis global capital markets? It appears that, as a result of their longer-term policy and institutional choices, nations can move across categories, from "emerging market" to "emerged" to "developed democracies" (or in the opposite direction) and these moves bring changes in financial market pressures. Investors' concerns about default risk in Portugal, for instance, likely were much more severe in the late 1970s and early 1980s than they were in the late 1990s, when Portugal had democratized and was on the verge of joining EMU.[80] Likewise, barring the Asian and Mexican financial crises, the newer members of the OECD (e.g. Mexico, South Korea) might well have climbed into the southern tier of the "developed" category in the late 1990s. Of course, moving across categories – which would bring a reduction in financial market pressures – may first require many policy choices (for instance, central bank independence) that serve to reduce governments' policymaking autonomy. Ultimately, there might not be a way for developing nations to avoid financial market constraints that are relatively strong and relatively broad.

[78] Also see Mosley 2003a, Chapter 4.
[79] On Bayesian updating by investors, see Tomz 2001.
[80] For a discussion of how EMU changes government-financial market relations, see Mosley 2004.

Appendix: Nations included in Tables 2 and 3

OECD Nations	Developing Nations		
	Emerging Markets	Frontier Markets	Others
Australia	Argentina	Botswana	Azerbaijan*
Belgium	Brazil	Bulgaria	Bolivia*
Canada	Chile	Croatia	Costa Rica
Denmark	China	Ecuador	Dominican Republic
Finland	Colombia	Estonia	El Salvador
France	Czech Republic	Jamaica	Georgia
Germany	Egypt	Kenya	Moldova*
Ireland	Greece	Latvia	Mongolia*
Italy	Hungary	Lithuania	Uruguay*
Japan	India	Mauritius	
Netherlands	Indonesia	Ukraine	
New Zealand	Jordan		
Norway	Korea		
Portugal	Malaysia		
Spain	Mexico		
Sweden	Morocco		
United Kingdom	Peru		
	Philippines		
	Poland		
	Russia		
	Slovakia		
	South Africa		
	Sri Lanka		
	Thailand		
	Zimbabwe		

* Included in some IFC/S&P's indexing, but not part of the frontier/emerging categories.

Additional developing nations are categorized as emerging and frontier, but are excluded due to data availability. These are Armenia, Bangladesh, Belize, Cote d'Ivoire, Ghana, Israel, Lebanon, Namibia, Pakistan, Romania, Slovenia, Taiwan, Trinidad and Tobago, Tunisia, Turkey, and Venezuela.

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