



WP/04/177

# IMF Working Paper

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## What Is an Emerging Market?

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## IMF Working Paper

Research Department

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September 2004

#### Abstract

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As developing economies become richer, they seek to contract with the global economy in increasingly complex ways. Dealing with that complexity often implies the need to renegotiate contracts. However, such recontracting is viewed with concern, particularly by market participants. At the same time, iron-clad commitments to abstain from recontracting are untenable. Sovereign debt experts have long dealt with this dilemma. This paper argues that the acute trade-off between commitment and flexibility is not unique to sovereign debt. Instead, it is the defining characteristic of an emerging market. Examples of World Bank guarantees on behalf of sovereign governments to private lenders, exchange rate regimes, and international bond contracts, highlight the evolution from commitment to flexibility. Early interaction with international markets typically benefits from strong transaction-specific commitment. However, the goal is to grow out of transactional commitments to achieve commitment through credible institutions. Institutional commitment allows the benefits of flexibility, with the country's "word" acting as the necessary assurance to behave responsibly.

JEL Classification Numbers: E61, G15

Keywords: Emerging Markets, Commitment-Discretion Trade-Off

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<sup>1</sup> For many helpful comments, I am grateful to Charles Blitzer, Michael Bordo, Thomas Duvall, Barry Eichengreen, Jeffrey Frieden, Mitu Gulati, Sean Hagan, Harold James, Martin Schindler, Daniel Tarullo, and Michael Tomz. Adrian de la Garza provided his usual expert assistance. This paper was prepared for the Georgetown Journal of International Law.

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## I. INTRODUCTION

A Google search for the definition of emerging markets draws this rich haul:<sup>2</sup>

- The market of a developing country with high growth expectations. [www.citibank.com/bahrain/personal/products/glossary.htm](http://www.citibank.com/bahrain/personal/products/glossary.htm)
- Investments in these markets are usually characterized by a high level of risk and possibility of a high return. [www.infoplease.com/ipa/A0873097.html](http://www.infoplease.com/ipa/A0873097.html)
- Emerging markets are extremely volatile, but they offer the potential to share in the early stages of a country's economic growth. [selco.org/consumer/glossary\\_savings+investing.asp](http://selco.org/consumer/glossary_savings+investing.asp)
- A sector within international stocks made up of developing countries, such as Kenya and China, where economic and political conditions may be more volatile. [www.schwab.com/SchwabNOW/ReDir/1,5348,%7C64%7C,00.html](http://www.schwab.com/SchwabNOW/ReDir/1,5348,%7C64%7C,00.html)
- Immature securities market in which there is not a long history of substantial foreign investment. [www.esec lending.com/industry/glossary.html](http://www.esec lending.com/industry/glossary.html)
- Markets in securities in newly industrialized countries and in countries in Central and Eastern Europe and elsewhere, in transition from planned economies to free-market economies and in developing countries with capital markets at an early stage of development. Examples are the stock exchanges in Mexico, Thailand and Malaysia. [www.ida.clientwebs.com/articles/glossary-main.htm](http://www.ida.clientwebs.com/articles/glossary-main.htm)

The countries listed in these definitions range from Kenya with a per capita income of \$350 in 2000 to Mexico with per capita income just above \$5000.<sup>3</sup> What is common across them? Good *growth prospects* appear desirable, but may reflect wishful thinking since only a handful of developing countries have grown at consistently higher rates than advanced economies.<sup>4</sup> Similarly, high *rates of return* are welcome but the evidence is that rates of return on emerging market securities have, on average, been not much better than those obtained by investing in U.S. treasuries.<sup>5</sup> Of greater relevance is the *high level of risk* and their characterization as

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<sup>2</sup> <http://www.google.com/search?q=define:Emerging+market>

<sup>3</sup> Calculated according to the World Bank Atlas method. See World Bank (2002).

<sup>4</sup> World Bank (2002) statistics show that outside of the East Asia and Pacific region, no regional grouping has grown at a systematically higher rate than “advanced,” or high income, economies in the last two decades.

<sup>5</sup> Klingen, Weder, and Zettelmeyer (2004) conclude that average return to private investment in emerging markets over the past few decades has been no higher than the risk free rate. The high  
(continued)

*extremely volatile*. Virtually any group of developing countries faces higher volatility than advanced industrialized economies. Finally, the *absence of a history of foreign investment* and their *transition* to market economies speaks to the dynamic nature of emerging markets, i.e., to the possibility that they may graduate from their current economic conditions to greater institutional and policy maturity as equal participants in the global market economy.

This paper makes four claims relating to the characterization of emerging markets and their policymaking processes. First, the essential features of emerging markets—supported both by popular perception and by data—are their high degree of volatility and their transitional character, with transitions occurring in economic, political, social and demographic dimensions. Second, and the central theme of the paper, is the implication of the volatility and transition for a particularly acute trade-off between commitment and flexibility in policymaking. Commitment to a course of policy is desirable to attract productive investment, but may not be credible; flexibility is needed to respond to unexpected developments, but is liable to abuse. Third, a broader claim is that while the commitment-flexibility terminology is a useful one, rigid commitment with no flexibility is practically infeasible (as Bernanke and others, 1999, have argued) and, at the same time, flexibility itself is viable only when there exists a broader underlying commitment to disciplined behavior through institutions that limit the boundaries of discretion. Hence, the major transition in emerging markets is from transaction-specific commitments to institutional commitments. Finally, the lessons for policymakers are that neat solutions to problems will only rarely be possible and efforts will be needed on many complementary and interlocking fronts. As such, inertia in the policy reform process, while sometimes detrimental, often reflects the complexity of complementary efforts that are the building blocks of institutional maturity.

Viewed from this perspective, the sovereign debt debate can easily fall into “either-or” solutions (for a recent overview, see Eichengreen, Kletzer, and Mody 2004). This paper does not deal directly with sovereign debt matters; rather, it highlights common elements of the emerging market policy dilemma in three different contexts. Using examples of World Bank guarantees on behalf of sovereign governments to private lenders, exchange rate regimes, and international bond contracts, and recognizing the analytical and contextual differences in each case, the paper highlights the common evolution from rigid contracts to flexibility—from transactional to institutional commitment. Early interaction with international markets typically benefits from strong transaction-specific commitment. However, the goal is to grow out of transactional commitments to achieve commitment through credible institutions. Institutional commitment allows the benefits of flexibility, with the country’s “word” eventually acting as the necessary assurance to behave responsibly (see also Bordo and Flandreau, 2001).

World Bank guarantees are a mechanism to provide a hard transactional commitment to repay; over time, they have been used by borrowers of increasingly lower credit quality, implying that while the commitment may have been required in the early 1990s, when markets were still recovering from the aftereffects of the 1980s debt crises, such a transactional commitment is

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returns in the 1990s reflected either a rebound to compensate for the losses in the 1980s or a genuine break from the past, promising large future returns.

increasingly required only by low credit quality borrowers. Exchange-rate regimes can be used for monetary policy commitment by pegging a country's currency to some anchor currency or currencies. Does such commitment pay? The answer appears to be "yes," for countries with relatively limited interactions with capital markets; however, as capital market interactions increase, hard commitments become increasingly difficult to sustain and, at the same time, the potential benefits of greater flexibility appear more attainable. We observe also a trend towards greater flexibility of contracts in sovereign bonds, coinciding in some instances with the movement to exchange rate flexibility.

The next section further discusses the policymaking challenge in emerging economies. This is followed by a discussion of the three promised examples.

## **II. EMERGING MARKETS AND THEIR POLICYMAKING PROCESS**

The distinguishing volatility of emerging markets has been documented, for example, by Aguiar and Gopinath (2004) and the policy approaches to managing volatility have been discussed by Aizenman and Pinto (2004). The volatility arises from many sources, including natural disasters, external price shocks, and domestic policy instability.

The key issue in assessing emerging market volatility is whether it results from uncontrollable factors or is the consequence of the policy framework within which countries operate. The distinction between these two sources of volatility is not straightforward since even shocks on account of natural disasters can be mitigated if prevention and disaster management measures are in place. Kaminsky, Reinhart, and Vegh (2004) document that rather than acting as a stabilizing force, as in most advanced economies, emerging governments' policies are "procyclical," i.e., they reinforce economic booms and aggravate recessions. However, of crucial importance is perceived arbitrariness in policymaking, which undermines investor confidence and hurts long-term investment in productive assets. Policy instability is seen to hurt growth severely (see, for example, Fatás and Mihov 2003 and Mody and Schindler 2004). Constraints on policymaking that reduce actual or perceived arbitrariness can, consequently, help.

That leads to the second defining characteristic of emerging markets: their transitional features. Emerging markets are in transition in several senses. They are almost always transitioning in important demographic characteristics, such as fertility rates, life expectancy, and educational status. Typically also, they are transitioning in the nature and depth of their economic and political institutions. Finally, and of special relevance, is the transition to greater interaction with international capital markets. The transitions are often long drawn and, at times, disruptive. Ranciere, Tornell, and Westerman (2003) argue that in attempting to force the transitions, countries may sometimes adopt policies that raise the rate of progress but, at the same time, increase the risks of crises.

The combination of high volatility and the transitional features of emerging economies generate a real challenge in policymaking. In conventional terminology, that challenge is the appropriate balance between commitment and flexibility, or between rules and discretion. To show good faith in policy initiatives, commitment is desirable and hence mechanisms that ensure such commitment will be valued by investors and will, ultimately, facilitate economic progress. A

sustained commitment demonstrates the willingness to stay the course despite the many ongoing transitions. That commitment is a pledge that despite the volatility to which the country is subject, policymakers will not respond in a manner that aggravates or amplifies the volatility—rather, to the extent possible, volatility will be dampened through policy actions.

However, and herein lies the dilemma, the endemic volatility and the long-term transitions imply that a commitment may outlive its usefulness and may even be rendered dysfunctional. A large shock may change the parameters in a manner that the old commitment hurts rather than helps. But, how should markets and investors judge whether giving up the commitment is desirable and not merely in the short-term interests of policymakers? The very volatility that emerging countries face often makes it difficult to distinguish whether the shock is a consequence of external forces or the result of poor economic policymaking. As such, if reneging on the commitment is easy, then the prior discipline of the commitment will also be less valuable.

Specialists on sovereign debt struggle with this question in terms of the appropriate contracts that govern the debt. Should there be flexibility in the ability to restructure debt if default is imminent? Or, should countries commit themselves through contracts that make the debt hard to restructure and hence raise the costs of default?

However, the point of this paper is that this debate is not one restricted to the sovereign debt arena. Rather, the trade-off between commitment and flexibility is one that pervades economic decision making even in institutionally advanced economies (see, for example, Bernanke and others, 1999), but becomes especially salient in the context of emerging markets. Hence, the sovereign debt policy debate needs to be set in a commitment-flexibility framework, drawing on country characteristics relevant to deciding where a country belongs on that spectrum. The analytical implication is that a country's choice of contractual terms will evolve over time from relatively hard commitment to greater flexibility, though within a disciplining framework, in response to its own development and to developments in the international economic environment.

My main argument is that, absent a tested institutional structure, policymakers initially attempt to achieve credibility through commitments in particular contexts through specially designed instruments, which I refer to as transactional commitments. Over time, either because the costs of the rigidity are revealed to be high or because the track record of performance creates a reputation for responsible behavior, the value of commitment declines. However, Bernanke and others (1999) note that as hard commitments, or strict policymaking rules, are relaxed, they need to be substituted by a conceptual framework that creates the boundaries within which flexibility will operate. In other words, the discretion that allows for flexibility requires the discipline of clearly articulated objectives and policymaking tactics. Such a framework I refer to as institutional commitment.<sup>6</sup> In the rest of this paper, I discuss examples to illustrate the trade-off and its evolution.

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<sup>6</sup> For a discussion of rules and discretion, as applied to the operation of the International Monetary Fund, see Tarullo (2001).

### III. WORLD BANK GUARANTEES

At the start of the 1990s, with foreign capital beginning to flow once again towards developing economies after the hiatus following the debt crises in the previous decade and with prospects for such flows looking increasingly promising, it appeared possible that official lending for development would decline in importance. To adapt to these changing circumstances, the World Bank began to reconsider the use of its guarantee authority.<sup>7</sup> Thus, instead of mainly lending directly to sovereign borrowers, as had been its practice, the Bank concluded that it could also accelerate private lending by guaranteeing (partial) repayment of debt owed to private creditors. Throughout the 1990s, a succession of changes in Bank policies expanded the scope and facilitated the use of its guarantee authority. The revival of guarantees began with a guarantee of principal repayment for a Hungarian sovereign borrowing in June 1990, the “mainstreaming” of guarantees offered by its International Bank for Reconstruction and Development agency in 1994 put in place policies and procedures for an enhanced volume of guarantee operations (World Bank 1994), and the ability to provide guarantees was extended in 1998 to the so-called “IDA-only” countries, i.e., to projects in those poor countries eligible only for concessional borrowing from the Bank’s International Development Association (World Bank 1997).

The use of a World Bank guarantee by a sovereign authority implies the hardest repayment commitment possible. Here is how the guarantee works. The World Bank guarantees repayment to the lender and, at the same time, the government commits to repay the Bank if the guarantee is called. Thus, when a country uses the World Bank guarantee, the private creditor can look to the World Bank for repayment if the underlying obligations are not met. In this sense, the country’s promise to repay the private lender is as good as its promise to repay the World Bank, a promise that is special on account of the World Bank’s *de facto* preferred creditor status. The government’s commitment is not limited just to repayment of debt but extends, in some cases, to maintain certain regulations and policies. The so-called “partial credit guarantee” is the simplest of the guarantee products and the underlying loan transaction is a sovereign borrowing (although the proceeds may be earmarked for a government agency). However, under the “partial risk guarantee,” the loan is actually contracted by a private entity operating, typically, an infrastructure project in the country. The World Bank’s guarantee covers the repayment of that loan in the event that the government fails to honor its contractual commitments to the project. Thus, in this case, the government, through its “counter-guarantee” to the World Bank elevates its regulatory commitments to the project to the same level as its commitment to repay a World Bank loan.<sup>8</sup>

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<sup>7</sup> The World Bank consists of the International Bank for Reconstruction and Development (IBRD), which intermediates funds borrowed on commercial terms in international markets to developing economies, and the International Development Association (IDA), which is funded by commitments of international donor countries and lends on highly concessional terms. See <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20122644~menuPK:278902~pagePK:34542~piPK:36600~theSitePK:29708,00.html>

<sup>8</sup> The counter-guarantee distinguishes the World Bank’s guarantee from the political risk guarantees offered by the Multilateral Investment Guarantee Agency, another member of the World Bank Group.



The World Bank guarantee is, therefore, a mechanism for a country to temporarily raise the level of its commitments and thereby establish a track record of meeting its obligations. The higher level of commitment lowers the costs of borrowing on the guaranteed transaction but the greater benefit is, in principle, long-term. The premise is that the commitments offered by countries themselves—to repay their international loans or to meet their contractual obligations—are not always credible, especially in early interactions with foreign lenders and investors. Default on those commitments may occur for a variety of reasons, including unexpected adverse economic developments and political changes. However, experience with a few transactions under the World Bank’s guarantee should establish to international lenders and investors that the country will stand by its commitments even when it does not offer the extra security of a World Bank guarantee. The key, therefore, is the ability to reduce the formal level of commitment over time but retain credibility nevertheless.

While the transition from the special World Bank guarantee commitment to credibility without that commitment is an ongoing process, the trends are quite clear (Figure 1). The first guarantee of the 1990s was to Hungary at a time when its Moody’s Foreign Currency Long-Term Country Credit Rating was Baa2, i.e., one notch above the cut-off for the investment grade-level (Baa3). The three guarantees to China in the early 1990s were provided at even higher ratings. By the mid-1990s, however, the credit rating threshold for World Bank guarantees had declined. Guarantees in 1994 were made available to Jordan and the Philippines for sovereign borrowing and to support private sector investment in Pakistan’s Hub River project when all three countries were at the Ba3 level, well below the investment grade cut-off. Since then, although a few guarantees have been one or two notches above Ba3, the average rating of guaranteed sovereigns has further declined. A number of the guaranteed projects in recent years have been to IDA-only countries: Côte d’Ivoire, Bangladesh, and Mozambique.<sup>9</sup>

The experience with the World Bank guarantee suggests that the Bank played a valuable role in easing the entry of several emerging economies into international capital markets. Concerned by their volatility and the transitional nature of their economies, markets valued the additional commitment implied by World Bank guarantees. However, markets matured through the 1990s in their assessments of emerging markets. As the decade proceeded, the more creditworthy countries acquired a track record of policy performance and, hence, with the increasing acceptance of their own policy credibility, there was reduced need to “import” the elevated level of credibility implied by the World Bank guarantee. To the extent that countries that did not use the World Bank guarantee but benefited nevertheless from successful reputation enhancing experience elsewhere, the value of the program was even greater. Of course, countries own parallel efforts in deepening their financial markets and developing other relevant institutions also hastened the evolution of credibility.

Graduating from World Bank guarantees did not imply that countries had also “graduated” from their status as emerging markets, only that the bar had been lowered somewhat in terms of the mechanisms necessary to enhance their level of policy commitment. Progress was slower—

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<sup>9</sup> Where countries were not rated by Moody’s at the time of the guarantee operation, an equivalence based on Institutional Investor Ratings has been used.

though perceptible—with respect to two other instruments of commitment: exchange rate regimes and sovereign debt contracts.

#### IV. EXCHANGE RATE REGIMES

A country's choice of its exchange rate regime is motivated by a number of considerations (Ghosh, Gulde, and Wolf 2003), but an important one, and one that is relevant to this discussion, is the degree to which the regime ties the government's hands and hence restrains it from being tempted into dysfunctional policies. Of particular relevance is the fixing (or pegging) of the exchange rate (to an anchor such as the U.S. dollar or a basket of currencies), which limits the discretion in terms of monetary policy actions and, hence, reduces the possibility that high inflation may be engineered to reduce the real value of the government's domestic debt obligations. While pegging the exchange rate thus implies a commitment to good monetary policy behavior, it limits the government's flexibility in responding to unexpected events. Moreover, as countries seek to increase their presence in international capital markets, the commitment is likely to be tested by international investors.

In an important respect, the example of exchange rate regimes is different from the other two used in this paper. In the case of World Bank guarantees and bond contracts, a legal obligation is entailed. An exchange rate regime, in contrast, can be changed by a government without breaking a formal contract. However, the ability to arbitrarily change exchange rate regimes is severely circumscribed. As documented in Husain, Mody, and Rogoff (2004), pegged regimes, in particular, tend to be highly persistent. Moreover, a pegged regime is a particularly relevant signal of monetary policy commitment in developing and emerging market economies. Broz (2002) argues and demonstrates empirically that where institutions are poorly developed and, hence, the policy environment is not transparent, the alternative of an independent central bank to maintain a low inflation commitment is often not credible. In those non-transparent settings, the independence can be overridden because public scrutiny is not easy. In contrast, an exchange rate peg is a more discrete signal, easier to interpret and monitor, and hence less amenable to manipulation.

The tension between commitment and flexibility has led several countries, over extended periods of time, to adopt so-called "intermediate" regimes, which combine elements of commitment and flexibility. The goal is to enjoy the benefits of both: commitment to signal seriousness of policy intent and flexibility to adjust to shocks. Economists are divided on the desirability of intermediate regimes. John Williamson (2000) has been a long-time advocate. But Barry Eichengreen (1994) and Maurice Obstfeld and Kenneth Rogoff (1995) have argued that intermediate regimes are unsustainable and that, therefore, countries need to choose between the two extremes of true pegs and full flexibility. Stanley Fischer (2001), then First Deputy Managing Director of the International Monetary Fund, gave further impetus to this "bipolar" view, suggesting that trends in the 1990s indicated that countries were, in fact, moving towards the two poles. However, subsequent analysis of regimes as they are actually operated (the *de facto* regimes) as distinct from the announced (or *de jure* regimes) showed that the middle ground of intermediate regimes had continued to hold a substantial share of the world's distribution of exchange rate regimes (Figure 2).

But there is no reason to believe that all countries face the same choice and need to make the same decision. Instead, varying levels of commitment are likely to be appropriate to different groups of country, reflecting, in particular, the transitional nature of emerging markets (Rogoff, Brooks, Husain, Mody, and Oomes, 2004). The evidence suggests that developing economies with limited interactions with international capital markets benefit from policies that imply strong commitment to stable exchange rate and monetary policies. Thus, for these developing economies, the harder end of the commitment in exchange rate regimes—either fixed or close to fixed exchange rates—delivers lower inflation without sacrificing economic growth: alternatively, more flexible regimes are associated with higher inflation but no evident gain in growth (Figure 3).

For, emerging markets—those developing countries with significant exposure to international capital markets—inflation continues to be lower in regimes with the harder commitment to exchange rate stability (Figure 3). Hence, commitment continues to be valuable. The evidence, however, also suggests that where commitments are very hard, i.e., with pegged or nearly pegged regimes, the likelihood of financial crises is high, reflecting the inability to adapt to changed circumstances, the incentives of entrepreneurs and financial agents to undertake risky activities on the presumption that exchange rates will not change, and speculative pressures from investors who seek to test the commitment (Rogoff, Brooks, Husain, Mody, and Oomes 2004). Thus, the evidence is ambiguous: commitment may deliver macroeconomic stability in the form of lower inflation, on average, but those gains may unravel in periodic crises. Commitment has value but is also costly. It is this tension that is emblematic of emerging markets.

Finally, when countries graduate to the status of advanced economies, flexibility appears to generate value without apparent costs. Greater flexibility is associated with higher growth and lower (though not always statistically significant) inflation. These benefits are not offset by higher frequency of financial crises, which tend to be rare in advanced economies. Thus, advanced economies can apparently benefit from policy flexibility while the credibility of their economic policies derives from the institutional framework in place rather than from special instruments that are designed to severely limit the discretion of policymakers. Limits do exist even in advanced economies, through, for example, independent central banks and rules for the conduct of fiscal policy. But these typically set up the general framework within which decision makers operate. Thus, for example, Alan Blinder (1998, p. 44) notes that “...the Bundesbank’s entire reputation as an enemy of inflation did not collapse when German inflation rose from about zero in 1986 to about 4 percent in 1992. Nor should it have.” Similarly, Michael Bordo and Finn Kydland (1996) point out that countries that tied their currencies to the price of gold in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries (under the Gold Standard) were permitted to temporarily break from that tight link to deal with unexpected events. It was foreseen that countries may abandon the standard briefly, but this flexibility was viewed as an advantage rather than as a concern since it was assumed that the flexibility would be used constructively and that countries would return to their policy trajectory when the special circumstances requiring the deviation were no longer operative. Bordo (2003) concludes that these economies were thus able to enjoy the benefits of both commitment and flexibility and did not face a trade-off between the two, as appears to be the case currently for developing countries.

Though the bipolar hypothesis—that countries would gravitate to the two poles of pegged and freely floating exchange rate regimes—is not yet evident in aggregate trends, a small but important movement is noteworthy. A small group of emerging market economies is trending towards greater flexibility of exchange rate regimes, while putting in place the complementary institutions that anchor, as in advanced economies, the overall credibility of macroeconomic policies. Led by the early example of Chile, countries in this list include Mexico and Brazil (for details, see, Rogoff, Brooks, Husain, Mody, and Oomes 2004). This is another indicator of how emerging markets are graduating to a status in which they could legitimately claim to have “emerged.”

## V. BOND CONTRACTS

The final example for this paper draws on the same tension between commitment and flexibility in the context of bond contracts. Unanimous Action Clauses (UACs) require all bondholders to agree to changes in the payment terms, making it hard to change those terms. Bonds with UACs, therefore, imply a strong commitment on the part of the bond issuer to honor the payment terms. Under Collective Action Clauses (CACs), a qualified majority of bondholders can agree to change the payment terms, which provides the issuers and the bondholders greater flexibility in restructuring the payment terms if the need arises. The concern with affording bondholders such flexibility is that they may choose to abuse it, forcing a restructuring even when repayment is economically feasible.

There has been some debate about whether the differing degrees of commitment have had economic costs (Becker, Richards, and Thaicharoen 2003). What is not controversial is that, through the 1990s, the credit quality of bond issuers appears to have influenced bond contracts. Equating, for the purpose of this discussion, bonds under U.K. law to bonds with CACs and bonds under U.S. laws to those with UACs, the relative importance of these two types of bonds depended on the credit rating of the bond issuer. Thus, sovereigns (and their agencies) in the lowest Institutional Investor Rating range (0-35) tended to use the U.K. law significantly more often than U.S. law (Figure 4). In the early 1990s, U.K. law bonds in this low-rated category were more than twice as likely as U.S. law bonds. In the turbulent period of the Asian and Russian crises, few bonds were issued in this category, but they were dominantly under U.K. law. It appears as if towards the end of the period under consideration, the ratio of U.K. law to U.S. bonds declined even in this low-rated category; however, the last period was also one of low volatility, which, as I discuss below, has a bearing on the choice of law and the relative spreads.<sup>10</sup>

In joint research with Barry Eichengreen and Kenneth Kletzer, we also find that these low-rated issuers pay a premium for the restructuring flexibility of these bonds (Eichengreen and Mody

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<sup>10</sup> Choi and Gulati (2004) note that contractual provisions vary even within the set of U.S. law bonds. They find, moreover, that lower rated issuers have more inflexible contracts. Their finding is consistent with presented here and also reported in Eichengreen and Mody (2004) that contracts become less flexible as credit quality worsens; however, Choi and Gulati (2004) do not find that further deterioration of credit quality leads the worst credits to be more likely to issue bonds with restructuring flexibility.

2004 and Eichengreen, Kletzer, and Mody 2004). Table 1, Panel A shows that result: for the full sample period, between 1991 and 2002, issuers rated between 0 and 35 pay a significant premium under U.K. law. Thus, we conclude that even though the lowest rated issuers would benefit from the lower rate on U.S. law bonds, the hard commitment implied by such bond contracts is not typically tenable. As such, they end up with more flexible contracts but pay for the flexibility. This is not unlike the payment for flexibility under freely or managed floating regimes in developing countries.<sup>11</sup>

As countries move up the credit rating scale, they first shift towards U.S. law bonds (in the rating 36-50 category), presumably because the underlying commitment is more credible. Note, however, that even so, the share of U.K. law bonds remains substantial, prior to 1998, more U.K. law bonds were issued than U.S. law bonds in the 36-50 rating category. In principle, this shift towards greater use of U.S. law bonds should permit such issuers to benefit from the greater commitment in the bond contract. U.K. law bonds continue to require a premium in the 36-50 rating group, though the extent of the premium and its statistical significance is lower than that for issuers in the 0-35 category.

A further examination seems warranted, to evaluate if there have been secular changes and whether market conditions make a difference to the relative spreads on the bonds with different contractual arrangements. Four periods are considered, differing in the degree of market volatility. (1) 1991:1-1995:3 (including the aftermath of the Mexican crisis); the variability of the emerging market bond spread (EMBI spread) was about 2.5 percentage points a day. (2) 1995:4-1997:2 (the period of exuberance for emerging market bonds); the spread variability fell to about 1.5 percentage points a day. (3) 1997:3-1999:4 (the period with the greatest concerns about systemic stability and including the Asian, Russian, and Brazilian crises); the spread variability rose to above 2.5 percentage points a day. (4) The recent period up until the end of 2000 has been marked by cautious market sentiment but without systemic crises and with lower spread variability.

The findings are intuitive. The premium for the lowest rated category remains large throughout, being the lowest in the period of exuberance. However, interesting shifts are observed for the 36-50 category. In the first period, the premium for this category is small and statistically insignificant. In the exuberant period, from mid-1995 to mid-1997, U.K. governing law issuers in this category received a small discount, though again it was not statistically significant. In contrast, when markets turned ugly following the onset of the East Asian crisis, even the issuers in the 35-50 category paid a statistically significant premium for flexibility. It was as if a viable commitment during the period of turmoil was particularly valuable. Once the threat of systemic crises subsided, in the fourth period, the premium for flexibility fell both in economic and statistical terms.

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<sup>11</sup> Becker, Richards, and Thaicharoen (2003) do not find a similar premium for flexibility for the lowest rated issuers. They appear to use a smaller sample of bonds and do not distinguish between the 0-35 and the 36-50 categories.

Since the four periods are distinguished by the degree of EMBI spread volatility, it is useful also to examine how the volatility interacts directly with the governing law. Panel B of Table 1 presents these interactions. For all issuers rated below 50, and for the entire period from 1991 to 2002, the finding is that governing law by itself does not have a significant influence on spread; rather, it is the interaction with the underlying environment, proxied by the EMBI spread volatility, which is crucial. Thus, for all issuers below the 50 rating level, when the daily volatility is 1 percent, the average premium on U.K. law bonds is about 31 percent ( $0.15 \cdot 1 + 0.16$ ); when the volatility rises to 2 percent, the premium on U.K. law bonds rises to 46 percent ( $0.15 \cdot 2 + 0.16$ ).<sup>12</sup> For bonds in the 36-50 category, one percent volatility is associated with no premium or discount on U.K. law bonds (commitment is not particularly valuable when the issuer is relatively creditworthy and markets are confident of their assessments); a rise in volatility to 2 percent generates a premium of about 17 percent.

In early 2003, Mexico issued a bond under U.S. law but with collective action provisions, triggering a trend away towards greater use of collective action clauses by sovereign issuers. This significant shift is consistent with the analysis presented above, having occurred in a period of relatively calm markets with the majority of such bonds issued by the more creditworthy emerging markets. The shift could mark a break from the past if the innovation generates confidence that the flexibility will be wisely used and institutional progress in the issuing countries will provide the commitment to service debt. At the same time, if the uncertainty in pricing emerging markets falls further, the markets requirement for commitments in bond contracts will also decline.

Just as a host of “intermediate” regimes characterize exchange rate arrangements, it seems likely that bond contracts could evolve in a number of ways to suit particular needs. Already, Choi and Gulati (2004) have noted significant contractual variations across bonds issued under U.S. law; moreover, these variations are not random but appear to reflect credit quality considerations. The implication is that current policy initiatives need to leave room for the possible evolution and, as such, attempts at standardization of contracts should seek to define those key areas that are important to debt valuation but leave open the possibility of adjusting the parameters within each of the key areas to suit the country requirements and the global environment.

## VI. CONCLUSIONS

The inherently volatile nature, and the transitional characteristics, of emerging markets make policymaking particularly hard in these economies. Long-term investment requires stability and predictability. Policymakers are constrained by the lack of strong institutions with a track record to convey the sense of stability. Absent the ability of institutions to provide the necessary commitment to prudent policies, the option of transactional commitments becomes an attractive one. Thus, commitments embodied in specific contracts are a possible substitute to a seasoned institutional framework.

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<sup>12</sup> Note, though that the statistical margins of error on these point estimates are large because the coefficient on governing law itself is not significant at the standard levels.

The questions of interest then are whether transactional commitments do, indeed, serve as effective substitutes to institutional commitments and whether transactional commitments will eventually be discarded as the country “emerges.”

In this paper, I have tried to show that transactional commitments can be valuable, up to a point. Thus, World Bank guarantees allowed newly emerging economies to participate in the renewed flow of international capital in the 1990s. The guarantee transaction was a truly hard one: to treat, in effect, the creditor with the same priority as the World Bank. For private infrastructure projects that were financed with the help of World Bank guarantees, there was a contractual commitment to a particular project as a substitute to the regulatory framework that needed time to develop. Resources could, therefore, be channeled to potentially high return projects even in the absence of strong institutional commitments to stable and transparent policies. But, as the evidence presented shows, the hard commitment had to be used sparingly—not all creditors can be given preferred creditor status. Over time, many countries have “graduated” from the need for World Bank guarantees, which continue to be relevant mainly for low-income countries. In this sense, a successful transition has been achieved

The commitment to an exchange rate regime has much greater significance for economic performance than does a World Bank guarantee and, for this reason, the shifts in regimes are likely to be undertaken only with considerable deliberation. Since the stakes are higher, countries have experimented with a range of mechanisms, reflecting varying levels of commitment. There is apparently some value to a developing country tying its hands by limiting the flexibility of the exchange rates: inflation is lowered. However, as countries begin to emerge—participate more deeply in international capital markets—the risk of the commitment being tested and, hence, the risk of financial crises increases. At this point, the shift from a transactional commitment—in this case, to a particular exchange rate—to a broader institutional commitment to prudent policies becomes important. Such a transition has, indeed, been occurring, though in a measured manner.

In between the two extremes of World Bank guarantees and exchange rate regimes, lies the case of sovereign bond contracts. These have greater significance than World Bank guarantees for the issuing country itself and for the global architecture of capital flows but less so than does the system of exchange rate regimes. Here, once again, we see the tension between flexibility and commitment. Where countries have low credit rating but contractual commitment is feasible, bond issuers receive a discount. However, the lowest rated issuers are typically unable to offer that commitment and end up paying the premium for that. As ratings improve, the transactional commitment becomes credible but the value of that commitment also declines. We see, then, that led by the example of Mexico in February and March 2003, several developing countries have issued bonds with collective action clauses, adding to the flexibility of the bond contracts.

Mexico’s decision to issue a bond under U.S. law but with collective action clauses was the culmination of an active policy effort. However, the arguments developed in this paper suggest that Mexico had invested for almost a decade in the type of financial and institutional development necessary for imparting credibility without binding contracts and that it, therefore, took the lead in this respect should not be surprising. Following its crisis in late 1994, the country’s credit rating has been steadily upgraded, taking it above the investment grade

threshold. At the same time, Mexico is in the vanguard of countries that have stepped back from commitment to fixed exchange rates, adding to flexibility in that respect also. Mexico was also successful in October 2003 in issuing a domestic peso-denominated bond with a maturity of 20 years (for a peso amount of 1 billion, just under \$100 million at the then exchange rate)<sup>13</sup> suggests that Mexico is well on its way to establishing the type of institutional credibility that makes transactional commitment increasingly unnecessary. The institutional credibility, in turn, possibly derives from domestic reforms dating back to the early 1990s and commitments made under the North American Free Trade Agreement in 1994, reflected further in Mexico's status as an investment-grade country.

Thus, at the start of the 1990s, a new group of developing economies started their efforts to emerge into the global economy. In this paper, I have focused on that emergence in the dimension of their financial transactions with the rest of the world. The high economic and political volatility of these economies steered them often towards offering commitments in the context of specific transactions that they were engaged in: these commitments had value. However, transactional commitments are limiting—and, possibly, counterproductive, where they become untenable. As a result, the move to transactional flexibility with broader institutional commitment to good behavior is the way to go. The good news is that emerging markets appear to be moving in that direction.

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<sup>13</sup> <http://www.shcp.gob.mx/english/docs/pr0310028.pdf>, Mexico's Ministry of Finance.



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Table 1: The Price of Flexibility: Implications of Credit Quality and Market Volatility

Panel A

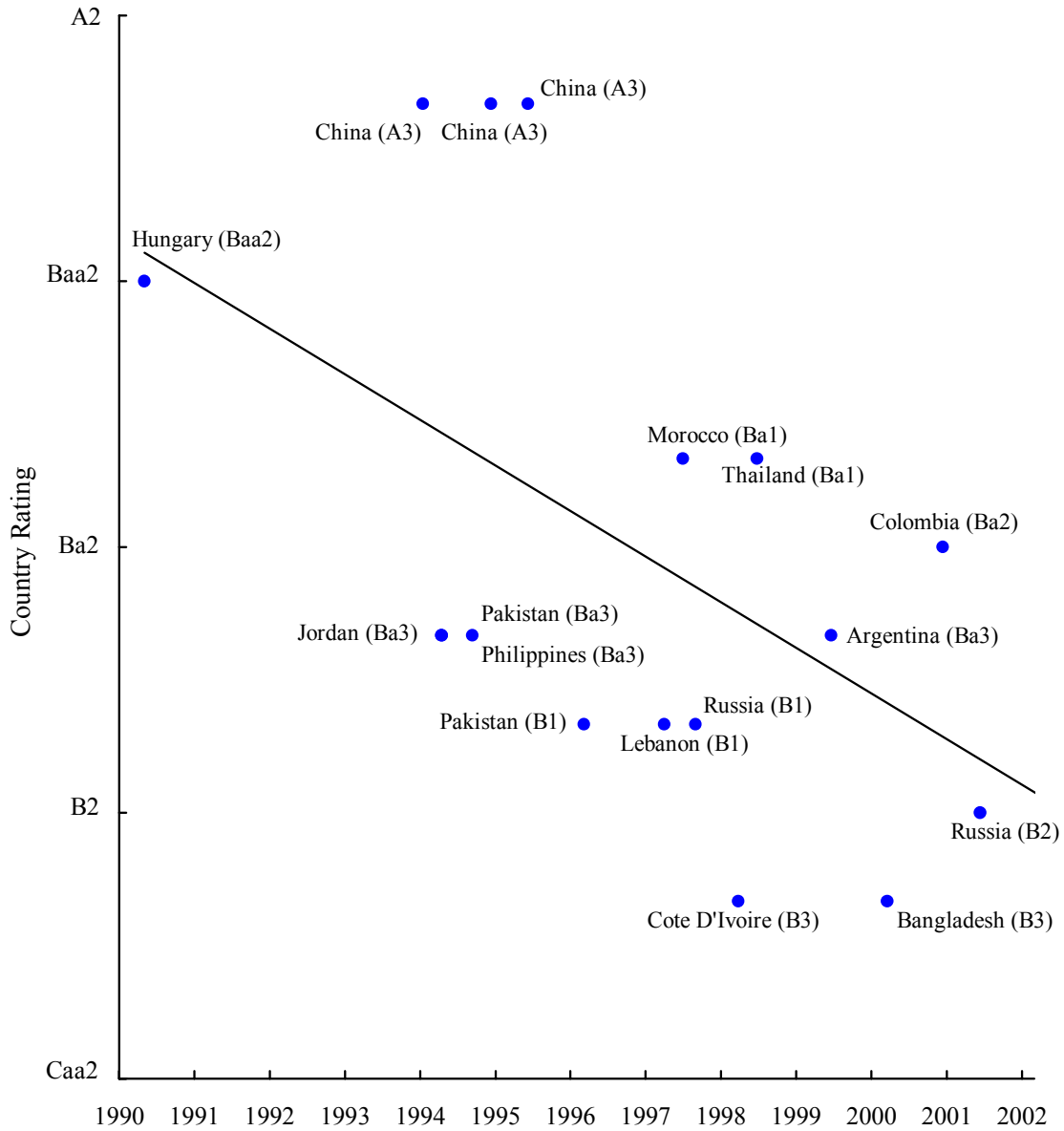
Sample	EMBI Volatility (percent)	Coefficient on U.K. Governing Law		Rho ( $\rho$ )	Standard Error of residual ( $\sigma$ )	Number of Bonds	Number of Observations
		0-35 Rated Issuers	36-50 Rated Issuers				
1991:1-2002:4	2.17	0.62 (7.01)	0.15 (1.61)	-0.42	0.44	921	3236
1991:1-2002:4	2.17		0.23 (2.22)	-0.49	0.44	740	1690
1991:1-1995:2	2.62	0.72 (4.46)	0.12 (0.66)	-0.79	0.40	202	1042
1995:3-1997:2	1.65	0.59 (3.10)	-0.19 (-0.95)	-0.33	0.33	206	555
1997:3-1998:4	2.70	0.95 (5.32)	0.37 (2.30)	-0.87	0.48	252	777
1999:1-2002:4	1.70	0.65 (4.39)	0.22 (1.33)	-0.64	0.38	261	862

Panel B

Sample	Coefficient on U.K. Governing Law		U.K. law interacted with EMBI volatility	Rho ( $\rho$ )	Standard Error of residual ( $\sigma$ )	Number of Bonds	Number of Observations
	0-50 Rated Issuers	36-50 Rated Issuers					
1991:1-2002:4	0.16 (1.14)		14.67 (3.00)	-0.27	0.43	921	3236
1991:1-2002:4		-0.17 (-1.07)	17.53 (3.53)	-0.45	0.44	740	1690

Note: The regressions presented in Panel A are based on Eichengreen and Mody (2004). All regressions, estimate the determinants of log (spread) at the time of bond issuance, relating it features of the bond (e.g., amount, maturity, currency of issue), global characteristics at the time (including U.S. interest rates, U.S. high-yield spreads, and EMBI volatility), and several country characteristics (e.g., political risk, debt-GDP ratio). In addition, dummy variables for U.K. governing law and “other law” are included (with the U.S. law as the benchmark, which is excluded). Because there is the possibility that laws and spreads are jointly determined, the law is “instrumented” based on a multinomial logit that predicts the choice of laws. Finally, the regression is estimated using a “heckman” procedure in STATA to allow for the possibility of sample selection bias. Thus, the column with the title of “number of observations” reflects a lower bound on the number of bonds that could have been issued during the period.

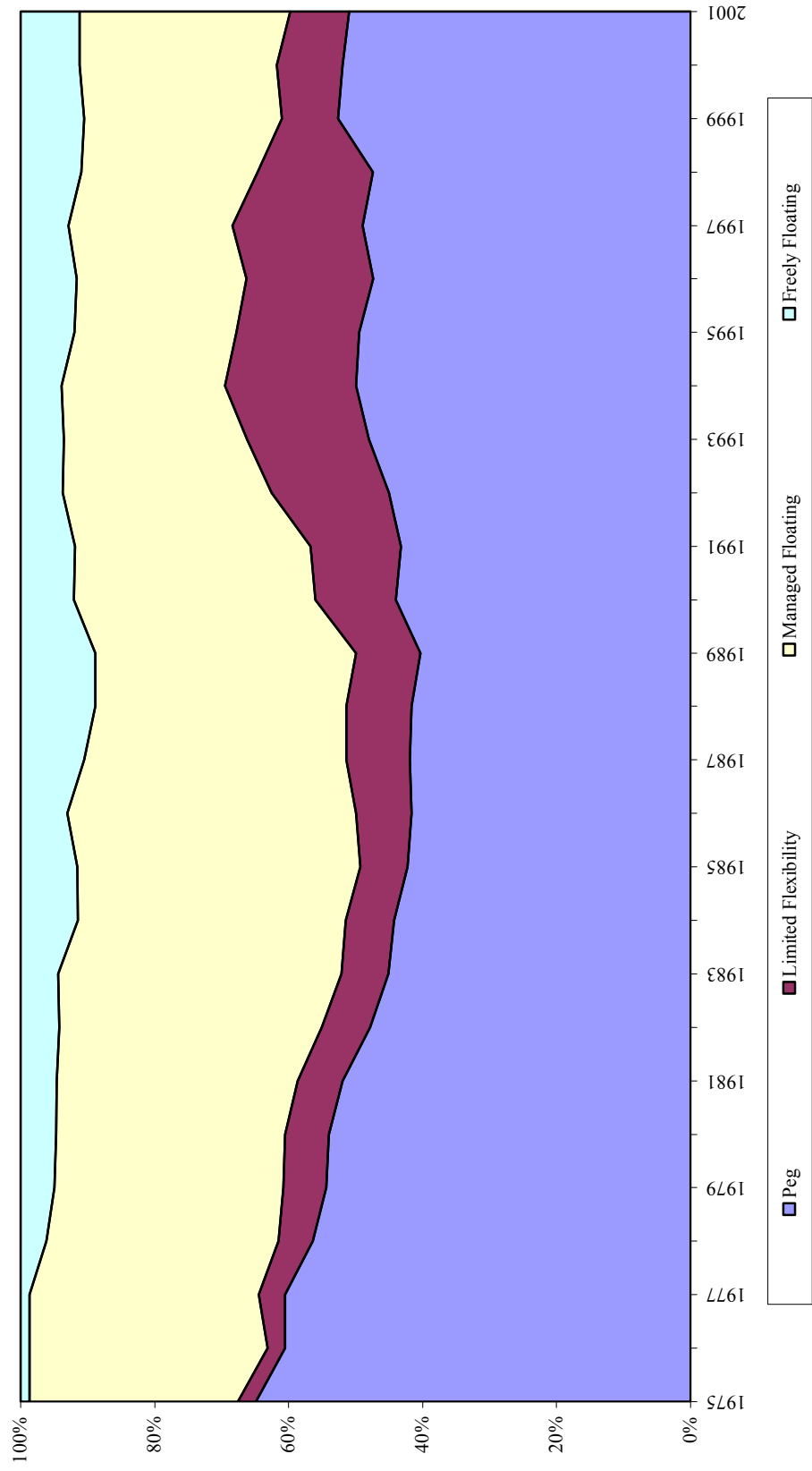
Figure 1. Graduating from World Bank Guarantees



Note: Country ratings correspond to Moody's foreign-currency long-term country ratings. Moody's did not assign any ratings to Bangladesh, Cote D'Ivoire, and Mozambique at the given dates. For these countries, ratings shown were obtained by comparing with their Moody's-rated peer country that had the closest Institutional Investor rating.

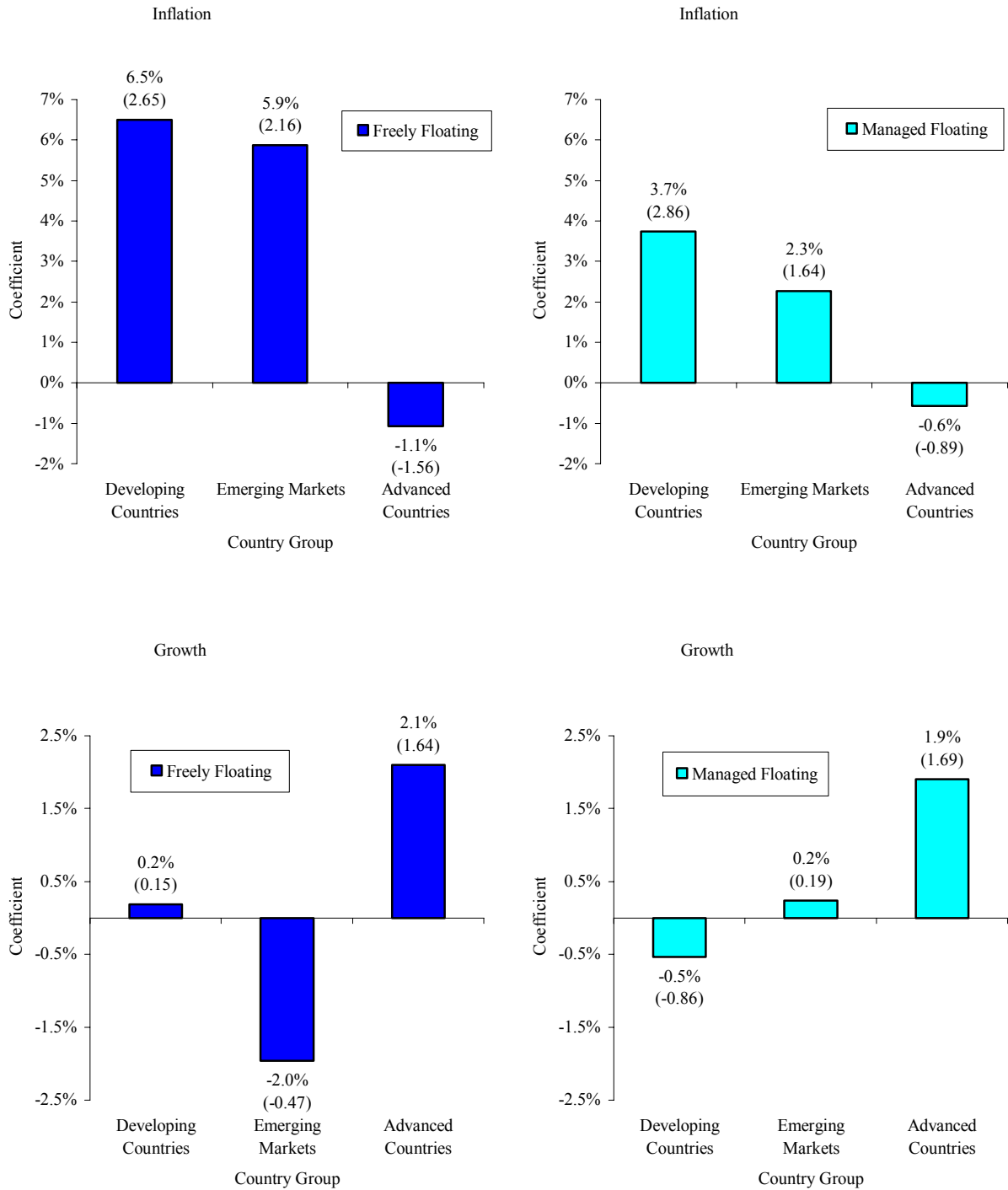
Sources: World Bank and Moody's.

Figure 2. Worldwide Composition of Exchange Rate Regimes



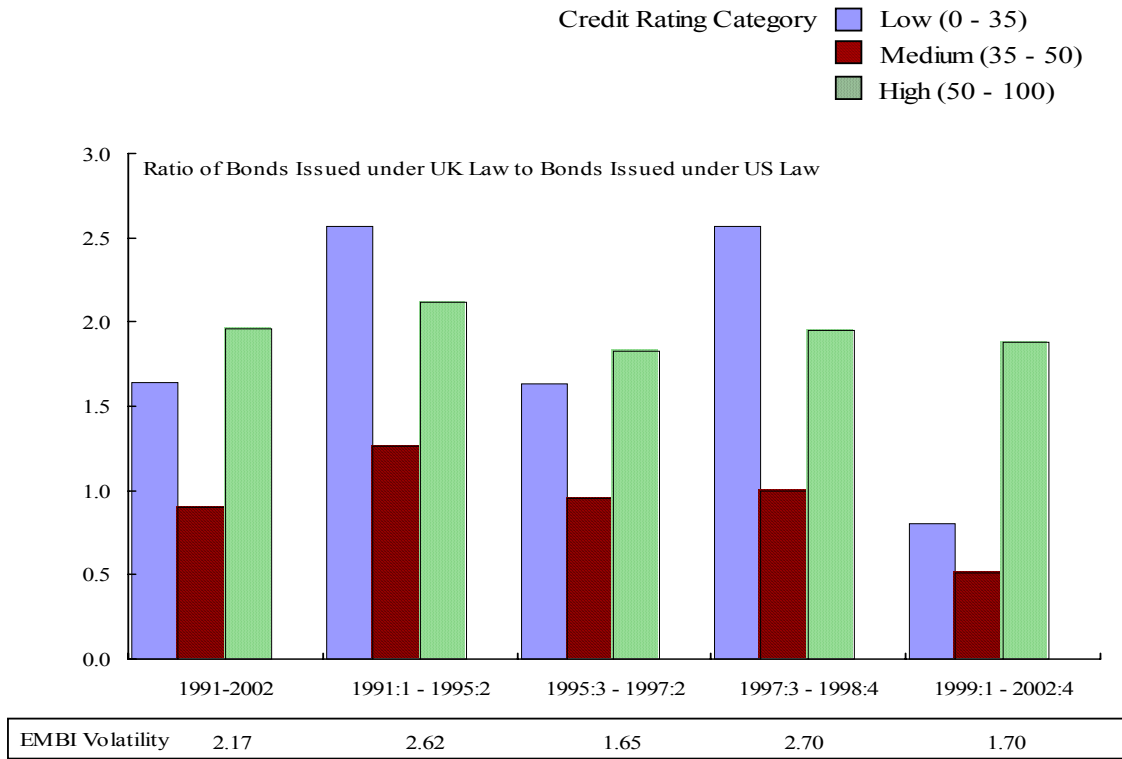
Source: Rogoff, Kenneth, et. al.: *Evolution and Performance of Exchange Rate Regimes (2003)*.

Figure 3. Performance of Floating Regimes Relative to Pegs



Source: Rogoff, Kenneth, et. al.: *Evolution and Performance of Exchange Rate Regimes* (2003).

Figure 4. Commitment and Flexibility in Bond Contracts



Sources: Governing law data by BondWare; credit ratings by Institutional Investor; EMBI volatility based on authors' calculations based on JP Morgan's Emerging Market Bond Index.