

Emerging Challenges in Financial Markets

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Abstract:

Emerging markets have long posed a challenge for finance. Standard models are often ill suited to deal with the specific circumstances arising in these markets. However, the interest in emerging markets has provided impetus for both the adaptation of current models to new circumstances in these markets and the development of new models. The model of market integration and segmentation is our starting point. Next, we emphasize the distinction between market liberalization and integration. We explore the financial effects of market integration as well as the impact on the real economy. We also consider a host of other issues such as contagion, corporate finance, market microstructure and stock selection in emerging markets. Apart from surveying the literature, this article contains new results regarding political risk and liberalization, the volatility of capital flows and the performance of emerging market investments.

Keywords: *Market integration, financial liberalization*

I. INTRODUCTION

In the early 1990s, developing countries regained access to foreign capital after a decade lost in the aftermath of the debt crisis of the mid-1980's. Not only did capital flows to emerging markets increase dramatically, but their composition changed substantially well. Portfolio flows (fixed income and equity) and foreign direct investment replaced commercial bank debt as the dominant sources of foreign capital. This could not have happened without these countries embarking on a financial liberalization process, relaxing restrictions on foreign ownership of assets, and taking other measures to develop their capital markets, often in tandem with macroeconomic and trade reforms. New capital markets emerged as a result, and the consequences were dramatic. For example, in 1985, Mexico's equity market capitalization was 0.7% of gross domestic product (gdp) and the market was only accessible by foreigners through the Mexico Fund that traded on the New York Stock Exchange. In 2000, equity market capitalization had risen to 21.8% of gdp and U.S. investors alone were holding through a variety of channels about 25% of the market.

These developments raise a number of intriguing questions. From the perspective of investors in developed markets, what are the diversification benefits of investing in these newly available emerging markets? And from the perspective of the developing countries themselves, what are the effects of increased foreign capital on domestic financial markets and ultimately on economic growth?

II. MARKET INTEGRATION

Market integration is central to both questions. In finance, markets are considered integrated when assets of identical risk command the same expected return irrespective of their domicile. In theory, liberalization should bring about emerging market integration with the global capital market, and its effects on emerging equity markets are then clear. Foreign investors will bid up the prices of local stocks with diversification potential while all investors will shun inefficient sectors. Overall, the cost of equity capital should go down, which in turn may increase investment and ultimately increase economic welfare. Foreign investment can also have adverse effects, as the 1994 Mexican and 1997 South Asian crises illustrated. For example, foreign capital flows may complicate monetary policy, drive up real exchange rates and increase the volatility of local equity markets. Moreover, in diversifying their portfolios toward emerging markets, rational international investors should consider that the integration process might lower expected returns and increase correlations between emerging market and world market returns. To the extent that the benefits of diversification are severely reduced by the liberalization process, there may be less of an increase in the original equity price. Ultimately, all of these questions require empirical answers, which a growing body of research on emerging markets has attempted to provide. Of course, it is unlikely that liberalization will lead to the full integration of any emerging market into the global capital market. After all, the phenomenon of home asset preference leads many international economists to believe that even developed markets are not well integrated. In fact, much of the literature has proceeded to compute the benefits of full market integration in the context of theoretical models of market integration and international risk sharing. The results of these counterfactual exercises depend very much on the model assumptions (see Lewis, 1996; Van Wincoop, 1999). The liberalization process in emerging markets offers an ideal laboratory to test

directly some of the predictions of the market integration and risk sharing theoretical literature.

In this article, we start in Section 2 by focusing on market integration and how it is related to the liberalization process in emerging markets. We discuss the theoretical effects of financial market liberalization and the problems in measuring when market integration has effectively taken place. Section 3 surveys the financial effects of market integration, from the cost of capital and equity return volatility to diversification benefits. We also present some new results that examine the volatility of capital flows, the impact of financial liberalizations on country risk, and the performance of emerging market investments. Some of these results challenge conventional wisdom. For example, we find that capital flows to emerging markets as a group are less volatile than capital flows to developed countries as a group. We also find that despite growing reports on the irrational behaviour of foreign investors in emerging markets, the emerging market portfolios of U.S. investors outperform a number of natural benchmarks. Freewheeling capital has had through severe currency, equity and banking crises in Mexico in 1995, Asia in 1997 and Russia in 1998. Section 4 shifts attention to the real sector. We examine the effects of the liberalization process on economic growth, real exchange rates and income inequality. We present empirical evidence that suggests that for equity market liberalizations, there is a positive average effect. Nevertheless, a large literature stresses the disastrous effects comprehensive review of this evidence is beyond the scope of this article; however, in Section 5, we do offer a brief survey and suggest a somewhat different perspective on the rapidly growing contagion literature. In Section 6, we briefly review the important aspects of emerging market finance we do not discuss elsewhere in detail, including corporate finance and governance issues, the microstructure of emerging equity markets, the emerging fixed income markets and individual security analysis in emerging markets. Some concluding remarks are offered in Section 7.

III. MARKET INTEGRATION AND LIBERALIZATION

The theory of market integration. It is important to be clear by what we mean by financial liberalization. In the development literature, it often refers to domestic financial liberalization (see Gelos and Werner, 2001; Beim and Calomiris, 2001 for example), which may include banking sector reforms or even privatizations. By financial liberalization, we mean allowing inward and outward foreign equity investment. In a liberalized equity market, foreign investors can, without restriction, purchase or sell domestic securities. In addition, domestic investors can purchase or sell foreign securities. There are other forms of financial openness regarding bond market, banking sector and foreign exchange reforms. The popular International Monetary Fund (IMF) capital account openness measure lumps all of these together in a 0/1 variable. Even with our limited focus, the liberalization process is extremely complex and there is no established economic model that adequately describes the dynamics of the process.

That is, while there are general equilibrium models of economies in integrated states and segmented states, there is no model that specifies the economic mechanism that moves a country from segmented to integrated status.² To gain some intuition, we consider a simple model that traces the impact of market integration on security prices from the perspective of an emerging market. The model is a straight forward extension of the standard static integration/segmentation model; (see Errunza and Losq (1985), Eun and Janakiramanan (1986), Alexander, Eun and Janakiramanan and Errunza, Senbet and Hogan (1998), and Martin and Rey (2000)). Within the context of a simple quadratic utility specification, we examine a three-period problem for the world market and an emerging market. We assume that there is one share outstanding of each asset. In period three, dividends are paid out and, hence, there are only two trading periods. In period two, the government in the developing/emerging country may integrate the market with the world market or it may not. Each market has a price-taking agent, who only consumes in the third period. In period one, agents attach a probability, k , to the government integrating the market with the world market in the second period.

IV. MEASURING MARKET INTEGRATION

Once we leave the pristine world of theory, it soon becomes clear that the degree of market integration is very difficult to measure. Investment restrictions may not be binding, or there may be indirect ways to access local equity markets for example, through country funds or American Depositary Receipts (ADRs). For example, the Korea Fund was launched in 1986, well before the liberalization of the Korean equity market. Also, there are many kinds of investment barriers, and the liberalization process is typically a complex and gradual one. Bekaert (1995) distinguishes between three different kinds of barriers. First are legal barriers arising from the different legal status of foreign and domestic investors with regard to, for example, foreign ownership restrictions and taxes on foreign investment. Second are indirect barriers arising from differences in available information, accounting standards, and investor protection. Third are barriers arising from emerging market specific risks (EMSRs) that discourage foreign investment and lead to de facto segmentation. EMSRs include liquidity risk, political risk, economic policy risk, and perhaps currency. ⁸ G. Bekaert, C.R. Harvey / *Journal of Empirical Finance* 10 (2003) 3–55 risk. Nishiotis (2002) uses country fund data to examine the differential pricing effects of these types of barriers and

finds indirect barriers and EMSRs to have often more important pricing effects than direct barriers. Some might argue that these risks, are in fact, diversifiable and not priced; however, World Bank surveys of institutional investors in developed markets found that liquidity problems were seen as major impediments to investing in emerging markets. Moreover, Bekaert, Erb, Harvey and Viskanta (1997) find political risk to be priced in emerging market securities. When Bekaert (1995) measures the three types of broadly defined investment barriers for nine emerging markets, he finds that direct barriers to investment are not significantly related to a return-based quantitative measure of market integration. However, indirect barriers, such as poor credit ratings and the lack of a high-quality regulatory and accounting framework, are strongly related cross-sectionally with the integration measure.

These results reveal the danger in measuring market integration purely by investigating the market's regulatory framework. Nevertheless, many researchers have tried this, including Kim and Singal (2000), Henry (2000a) and Bekaert and Harvey (2000a). Bekaert and

Harvey provide an Internet site with detailed time lines for 45 emerging markets that provided the basis for the dates in Bekaert and Harvey (2000a).³ Bekaert (1995) and more recently, Edison and Warnock (2001) have proposed to use the ratio of market capitalization represented by the International Finance Corporation (IFC) Investable Indices, which correct for foreign ownership, to the market capitalization represented by the IFC Global Indices. This ratio has the advantage that it captures gradual liberalizations, as in South Korea where foreign ownership restrictions were relaxed gradually over time.⁴ There are a number of potential solutions to the problems posed in trying to date regulatory reforms. First, Bekaert and Harvey (1995) measure the degree of integration directly from equity return data using a parameterized model of integration versus segmentation (a regime switching model). The model yields a time-varying measure of the extent of integration between 0 and 1. Importantly, the model allows for the possibility of gradual integration, as in Korea where foreign ownership restrictions were gradually relaxed. In many countries, with Thailand as a stark example, variation in the integration measure coincides with capital market reforms. In contrast to general perceptions at the time of this article was written, its results suggest that some countries became less integrated over time.⁵

Carrieri et al. (2002) study eight emerging markets over the period 1976–2000. Their results suggest that although local risk is the most relevant factor in explaining time variation in emerging market expected returns, global risk is also conditionally priced for three countries, while for two countries it exhibits marginal significance. Further, there are substantial cross-market differences in the degree of integration. More interestingly, they observe evolution towards more integrated financial markets. This conforms to our a priori expectations based on the reduction in barriers to portfolio flows, the general liberalization of capital markets, the increased availability of ADRs and country funds, better information and investor awareness. Finally, their results strongly suggest the impropriety of using correlations of market-wide index returns as a measure of market integration.

Laeven and Perotti (2001) argue that credibility of liberalizations evolves over time. Their evidence suggests that the positive impact of privatizations occurs during the actual privatization rather than the announcement period. This is consistent with the importance of allowing for gradual integration. Second, Bekaert and Harvey (2000a,b) use bilateral capital flow data in conjunction with IFC index returns to construct measures of U.S. holdings of the emerging market equities as a percentage of local market capitalization. The use of more liquid securities represented in the IFC indices to compute the returns of foreign investors is consistent with Kang and Stulz (1997) who show that foreign investors in Japan mostly buy large and liquid stocks. Bekaert and Harvey then determine the time at which capital flows experienced a structural break as a proxy for when foreign investors may have become marginal investors in these markets. Although this measure avoids the necessity of having to specify an asset-pricing model and avoids noisy return data, the capital flow data that they use are complicated by the existence of financial intermediary centres (e.g. large flows to the UK are channelled to other countries), and by the fact that the United States is the only country for which we have detailed data on bilateral monthly flows with emerging markets.⁶ We contrast its value in the 1980s versus the 1990s and pre- and post liberalization, where the liberalization date is the Official Liberalization date from Bekaert and Harvey (2000a). The message here is simple on average; liberalizations are associated with increased capital flows. In dollar terms, U.S. holdings increase 10-fold in the 5-years post liberalization versus the 5-years pre-liberalization, but in percent of market capitalization, the increase is much more modest, but still quite substantial (from 6.2% to 9.4%).

This modest percentage increase is influenced by the steep drop in holdings in the Philippines, where American capital was substantially present before the official liberalization.

Also the dating of the liberalization may be incorrect. Finally the results are influenced by the fact that, comparing the 1980s to the 1990s, the U.S. share of the IFC market capitalization increased from 6.6% to 12.9%.

Third, Bekaert, Harvey, and Lumsdaine (2002b) exploit the idea that market integration is an all-encompassing event that should change the return-generating process, and with it the stochastic process governing other economic variables. They use a novel methodology both to detect breaks and to “date” them, looking at a wide set of financial and economic variables. The resulting break dates are mostly within 2 years of one of four alternative

measures of a liberalization event: a major regulatory reform liberalizing foreign equity investments; the announcement of the first ADR issue; the first country fund launching; and a large increase in capital flows.⁷

V. CONCLUSION

Most of our research on emerging equity markets has tried to draw inferences from a somewhat reluctant data set. Emerging market returns are highly non-normal (see Bekaert, Erb, Harvey and Viskanta, 1998; Susmel, 2001) and highly volatile, and the samples are short. Moreover, a dominating characteristic of the data is a potentially gradual, structural break. Although it is generally difficult to make inferences in such a setting, a few robust findings emerge: the liberalization process has led to a very small increase in correlations with the world market and a small decrease in dividend yields. This decrease could represent a decrease in the cost of capital or an improvement in growth opportunities; Bekaert, Harvey and Lundblad (2001, 2002c) find that economic growth increases post liberalization by about 1% per year on average over a 5-year period. Bekaert and Harvey (2000a), Henry (2000a), and Bekaert, Harvey and Lundblad (2002c) all find that aggregate investment increases significantly after liberalizations, providing one channel for this increased growth. Das and Mohapatra (2003) not only confirm the growth effect, but also investigate whether and how the reforms shifted the income distribution. They find an upward shift in the income share accruing to the top quintile of the income distribution at the expense of the middle class. The lowest income share remained unchanged. Such research counsels against drawing hasty inferences between economic growth and economic welfare.

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We here that above information about the finance title Emerging Challenges in Financial Markets is truth full from various research books & Articles.

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