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## PROSPECTS FOR EMERGING-MARKET FLOWS AMID INVESTOR CONCERNS ABOUT CORPORATE GOVERNANCE

by

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Research programme on:  
Governing Finance and Enterprises: Global, Regional and National

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## PREFACE

Improving corporate governance in emerging-market economies is widely recognised as necessary to boost private capital inflows and to stimulate domestic investment. High standards of corporate governance reduce capital cost and encourage entrepreneurial risk taking, thereby potentially contributing to development. So far, investors have been prepared to pay a premium for corporate assets in developed countries, partly because of expectations of higher quality of earnings reporting. On the contrary, concerns about corporate governance standards often centred on emerging markets, especially after the 1997-98 Asian crisis. In the wake of tumbling stock market prices and rising corporate debt spreads, repeated corporate scandals in the United States resulted in higher risk premiums for developed-country corporate equity and debt assets by mid-2002. Yet, this higher premium failed to trigger a shift of investment away from asset classes with rising risk to emerging-market debt and equity where risks were already high. In this Paper, Helmut Reisen shows that flows to emerging markets are vulnerable to negative repercussion of lower asset prices in the developed markets and to increased global risk aversion. The effect of bad corporate governance practices in the developed countries can, therefore, be felt to varying degrees by all peripheral asset classes, including those in emerging markets.

The question is of major interest both to emerging and developing countries wishing to attract corporate and private investment. Other work at the OECD and its Development Centre has already identified corporate governance in developing countries as an important element in attracting FDI and portfolio flows.

Issues similar to the ones raised in this Paper were to be studied by the World Economic Forum, the Wharton School of Business and INSEAD, and will appear in a forthcoming book for which Helmut Reisen has been invited to write the introductory chapter. The book aims to improve institutional and legal analysis to increase the flow of capital to emerging capitals by enhancing corporate government policies. This aim fits closely with the objectives of the 2000-02 project "Governing Finance and Enterprises: Global, Regional and National", of which this paper is a product, and the objective of disseminating Development Centre work.

Jorge Braga de Macedo  
President  
OECD Development Centre  
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## RÉSUMÉ

Les préoccupations suscitées par les modalités de gouvernance des entreprises se sont focalisées le plus souvent sur les marchés émergents, surtout après la crise asiatique de 1997-98. Mais aujourd'hui, après une série de scandales, les investisseurs s'interrogent sur la qualité des bénéfices d'exploitation des entreprises et sur l'opacité de leurs bilans comptables, aux États-Unis comme dans d'autres pays développés. Ce Document technique évalue l'impact qu'aurait une hausse du niveau de risque des actifs financiers des entreprises des pays développés sur les mouvements de capitaux privés à destination des économies émergentes, ainsi que sur leur composition. Jusque-là, les investisseurs ont accepté de payer une surcote sur les actifs américains (*via* des ratios coût/bénéfice supérieurs et des taux d'intérêt inférieurs), notamment du fait de la plus grande qualité supposée des résultats d'exploitation. Désormais, on peut s'attendre à ce que les investisseurs se désengagent de classes d'actifs dont le risque est croissant pour se tourner vers des actifs dont le risque est déjà élevé — les actions et obligations des marchés émergents, par exemple. Toutefois, cet accroissement des flux vers les marchés émergents pourrait être freiné par les conséquences négatives sur l'économie réelle d'une baisse de la valeur des actifs des marchés développés. De même, si l'on voit apparaître une plus grande aversion pour le risque au niveau mondial, les classes d'actifs périphériques, y compris dans les pays émergents, en pâtiront de façon disproportionnée. Ce Document technique propose une estimation des futurs flux de capitaux à destination des économies émergentes et examine plus particulièrement les fluctuations du coût relatif du capital observées entre le 1er avril et le 30 juillet 2002, au moment de l'adoption de la loi Sarbanes-Oxley aux États-Unis.

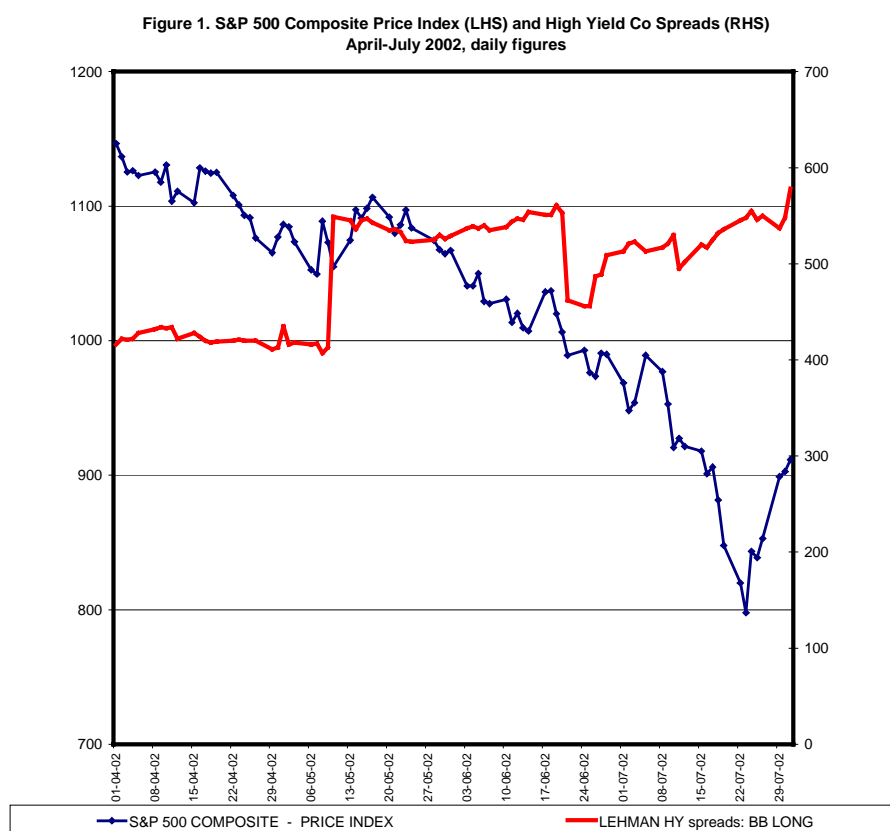
## SUMMARY

Concerns about corporate governance standards have often centred on emerging markets, notably after the 1997-98 Asian crisis. A series of corporate scandals have now raised investor concerns over the quality of earnings and opaque balance sheet structures in the US and other developed countries. The paper assesses the impact of higher risk on developed-country corporate assets on the prospects for private capital flows and their composition to emerging-market economies. While investors have been paying a higher premium (in terms of higher price/earning ratios and lower interest rates) for US assets partly because of the perceived superiority in the quality of their earnings reporting, one could expect a shift away from asset classes with rising risk to assets where risks were already high — emerging-market debt and equity, for example. Higher flows to emerging markets, however, can be impeded by the negative repercussion of lower asset prices in the developed markets on the real economy as well as by a rise in global risk aversion which would hit all peripheral asset classes, including emerging markets, disproportionately. The paper weighs the prospects for emerging-market flows, with a focus on shifts in relative capital cost that occurred during 1<sup>st</sup> April and 30 July 2002, when the Sarbanes-Oxley Act was signed into law in the United States.

## I. INTRODUCTION

Since the 1994-95 Mexican crisis and reinforced by the emerging-market crises 1997-98, the “international community” has attached increasing importance to the design, agreement, implementation and assessment of standards and codes as a core element of *crisis prevention*. The Financial Stability Forum, itself established in April 1999 as part of the effort to strengthen financial systems and improve co-ordination among the agencies responsible for them, posts on its web site the *Compendium of Standards*. Of these, twelve have been highlighted as key for sound financial systems, among them the *OECD Principles of Corporate Governance*. Given the importance attached by multilateral organisations to the observance of standards and codes, the International Monetary Fund (IMF) initiated in 1999 the preparation of *Reports on the Observance of Standards and Codes (ROSCs)*, which summarise the extent to which countries observe certain internationally recognised standards and codes. By June 2002, eleven developing and emerging countries had been assessed in the ROSC modules for corporate governance, but no developed country. This might have to change.

While investor concerns have in the past focused on corporate governance practices in emerging markets, these concerns are now redirected to the United States and other developed countries, which are the core of the world financial system. During the 1990s, the US and other countries’ economic performance had suggested that capital-market driven corporate governance generated higher productivity growth, finance for entrepreneurs and dynamic competition<sup>1</sup>. The problem of *asymmetric information*, the unique knowledge possessed by management, and the *principal-agent* dilemma, that minority shareholders must rely on somebody else to act in their interest, seemed solved by the concept of shareholder value and stock-related incentives for managers. With corporate governance pegged to and measured by share prices, there were massive incentives to raise them at any cost<sup>2</sup>. The string of scandals publicised almost daily especially in the US — accounting irregularities, colluding auditors, distorted incentives for investment analysts, to name a few (for more, see Bank of England, 2002) — has finally raised the risk premium on corporate equity and debt in developed countries by mid-2002. They also underlined liquidity risk faced by companies whose debt is downgraded to sub-investment grade level or may be subject to collateral calls (see Figure 1).



The paper assesses the impact of higher risk on developed-country corporate assets on the prospects for private capital flows and their composition to emerging-market economies. While investors have been paying a higher premium (in terms of higher price/earning ratios and lower interest rates) for US assets partly because of the perceived superiority in the quality of their earnings reporting, one could expect a shift away from asset classes with rising risk to assets where risks were already high — emerging-market debt and equity, for example. Such a shift, according to the nascent theory of capital-flow composition, would also impact on the mix of flows: lower FDI flows to emerging markets as relative capital cost start to balance, compensated by higher portfolio debt and equity flows to emerging markets.

Higher flows to emerging markets, however, can be impeded by the negative repercussion of lower asset prices in the developed markets on the real economy as well as by a rise in global risk aversion which would hit all peripheral asset classes, including emerging markets, disproportionately. Apart from event risk, there is also regulatory and policy risk (Basel II, private-sector involvement, international bail-outs) hanging over the prospects for emerging-market flows.

These issues will be discussed in turn. The paper will first set a framework based on the literature on the determinants of the magnitude and mix of emerging-market flows, and the relative role of corporate governance under asymmetric information will be highlighted. Then, two global scenarios (cyclical recovery vs. structural slump in the

wake of the IT boom) will be discussed with the implications that are likely to ensue on important flow determinants, such as raw material prices, chip prices, the dollar and absorptive capacity of the developed countries. Finally, the paper weighs the prospects for emerging-market flows, with a focus on shifts in relative capital cost that occurred during 1<sup>st</sup> April and 30 July 2002, when the Sarbanes-Oxley Act<sup>3</sup> was signed into law in the United States. It appears that corporates in emerging markets have not benefited from a general portfolio shift as a result of a lower perception of corporate standards in developed markets. However, rising risk aversion has not generally translated into higher capital cost for emerging markets, pointing to investors' ability to differentiate between low- and high-quality credits in the emerging-market sphere.



## II. DETERMINANTS OF EMERGING-MARKET FLOWS

After the Brady Plan helped solve the Latin American debt crisis of the 1980s and Asian capital markets opened up to foreign investors, emerging markets have been receiving massive private inflows during the first half of the 1990s. This rise has been mirrored by an effort in the literature to explain the determinants of emerging-market flows. An early concern was whether the new flows were driven by *push* (i.e. global) or by *pull* (domestic) factors. With the majority of emerging markets on a sub-investment grade rating today, their assets are credit-rationed, whence the importance of global factors that determine the overall supply of global funds to the emerging-market asset class. The relative importance of external or domestic factors in driving capital flows has important implications for policy, too. If capital flows were driven largely by domestic factors, developing countries could attract a steady and predictable flow of foreign capital and minimise cycles by adopting sound macroeconomic and financial policies. However, as capital mobility to emerging markets remains limited, developing countries are vulnerable to unexpected external shocks even if they maintain prudent policies.

Research suggests that both external and domestic factors contribute to capital flows, but their relative importance appears to vary over time. Most research assumed a loosely specified framework of push and pull factors and estimated a reduced-form equation which had elements of both. Calvo *et al.* (1993) found that cyclical declines in US interest rates and asset returns were correlated with increases in proxies for capital inflows (foreign reserve accumulation and real exchange rate appreciation) to Latin America in the early 1990s, suggesting that external factors were the primary determinant of capital inflows to developing countries in that period. Fernandez-Arias (1996) studied a broader sample of emerging markets and estimated that global interest rates accounted for nearly 90 per cent of the increase in portfolio investment flows for the “average” emerging market in 1989-93. Taking a longer perspective, Milesi-Ferretti and Razin (1998) studied sudden reversals in capital inflows in 86 countries from 1971-92 and found that both external and domestic factors, particularly those affecting the sustainability of external borrowing, play a role in explaining sudden reversals of capital inflows (as measured by an increase in the current account of a recipient country). External factors that increase the likelihood of capital flow reversals include worsening terms of trade (the ratio of export to import prices), high US interest rates, and low official transfers to the developing country. Among the domestic factors likely to be associated with a reversal in capital inflows are larger current account deficits, a smaller ratio of exports plus imports to GDP, lower foreign reserves, and a smaller proportion of concessional debt.

Different types of flows are not determined in a uniform way, as they belong to different asset classes and are handled by different actors. Despite the remarkable rise of private cross-border capital flows over the past decade, their composition remains ill-explained. The potential return of studies in that area is considerable. A model recently advanced by Hull and Tesar (2000) predicts that firms with good credit risks will prefer to raise capital through the bond market, that medium risk firms unable to tap the bond market will rely on bank loans and/or equity and that firms with poor credit ratings rely on equity finance. The basic assumptions that underlie these predictions are that bondholders have priority claims over shareholders, that equity finance includes a risk premium to account for “lemon” firms (which are assumed to be undistinguishable to prospective investors) and that bank finance comes with the flexibility of restructuring and the possibility of information-sharing between the firm and the bank, but entails a monitoring cost reflected by the intermediation spread. Translated for the purpose of cross-border trade, countries populated with high-growth firms and characterised by a relatively high degree of corporate transparency will show a pecking order of bonds, then bank loans and finally equity investment in their capital account. This pattern should hold for most OECD countries. For developing countries, by contrast, we should observe a higher degree of FDI finance, which minimises information risks relative to other capital flows.

Razin *et al.* (1995) use the cost of financing argument to explain different forms of capital flows, finding “green field” FDI to be least costly, followed by debt flows and then by portfolio equity flows. FDI is less costly as the participation in the management reduces the asymmetric information problem. Chen and Khan (1997) derive their results from the inefficiency of the domestic financial market in the recipient country, which is modelled as a result of asymmetric information between outside investors who rely on information in the domestic financial market and insiders of the firms. Their analysis allows predictions to be made on the mix of flows based on a host country’s growth potential and financial market development. Countries where the growth potential dominates the degree of financial market development will receive more FDI than portfolio equity flows; countries with suitable parameter values for both growth potential and financial markets will see relatively more equity inflows. The Chen-Khan model allows for sudden reversals of capital flows for economies experiencing changes in the perceived growth potential or financial market integrity, or both<sup>4</sup>.

*Foreign direct investment* flows are generally held to be driven by longer-term considerations. The fact that FDI displays little reversibility and even acts as the predominant form of foreign savings to liquidity-constrained developing countries during financial crises has been explained by their sunk-cost nature (Sarno and Taylor, 1999) and by the absence of asymmetric information between borrowers and lenders that plague other forms of capital flows and generate herd effects (Razin *et al.*, 1999). As more and more countries compete to attract foreign direct investment (FDI) — through, for example, the liberalisation of FDI policies, privatisation and promotion programmes including the granting of incentives — their regulatory frameworks for FDI are becoming similar. As a result, the appeal of any particular host country to potential investors is increasingly determined by factors other than FDI regimes. These include the nature of its macroeconomic environment, the size and growth of its market, the quality of its physical infrastructure and the skill composition of its human resources (UNCTAD, 2000).

*Changes in relative capital costs* for companies based in industrial versus developing countries may go a long way in explaining the rise in global mergers and acquisitions and the resulting rise of FDI to the emerging markets up to recently (Reisen, 2001a). Corporate capital costs are the sum of equity costs and debt costs weighted by the relative share of equity and debt in total capital invested in the company. Equity costs are the sum of real risk-free interest rates, expected inflation (or devaluation if expressed in dollars) and the equity-risk premium that investors require to buy and hold a stock; the premium is, among others, determined by the stock's volatility. Debt costs are the sum of real risk-free interest rates, expected inflation or devaluation<sup>5</sup>, the corporate bond yield spread over risk-free assets and the country's sovereign yield spread over US treasuries.

The tremendous stock market boom in Europe and the US during the late 1990s, in particular for the technology, media and telecommunication industries, lowered equity costs for companies listed there; the introduction of the euro created a vibrant and liquid debt market, lowering debt costs especially for European companies. While the drop in capital costs in industrial countries stimulated global expansion plans — with hindsight excessive expansion in some cases — potential acquisition targets in developing countries were hit by rising capital cost in the wake of repeated financial crises. Rising sovereign risk spreads on emerging-market bonds, credit starvation (hence prohibitive debt costs) as local banking systems collapsed, nominal exchange-rate depreciations and a rising equity risk premium for emerging markets all contributed to higher capital cost in emerging markets. This turned emerging-market based companies into attractively priced acquisition targets. It follows from the above analysis that the recent rise in FDI flows had a temporary element and could probably not continue at these levels, despite the ongoing trend towards globalised production structures.

The global investor base for *emerging-market equities* includes dedicated funds, global funds that track regional or global equity indices and “crossover” investors in search of high absolute returns. As for equities, investor decisions are mainly driven by risk-adjusted returns and the potential portfolio diversification benefits, which in turn are based on the degree of correlation of emerging-market equities with developed stock markets. Differences with respect to the exposure to country-specific shocks, the stage of economic and demographic maturity and the (lack of) harmonisation of economic policies would suggest that the diversification gains will not disappear quickly.

Meanwhile, the wave of mergers and acquisitions has hollowed out *emerging stock markets*. This has strongly reduced their liquidity, and as illiquid markets are more volatile than liquid markets, investors require a higher risk premium before they invest in them. Some stock markets are now so small in terms of market capitalisation and turnover that they have faded away from institutional investors' radar screen, despite low prospective valuation levels. Until the mid-1990s, emerging-market assets have delivered superior returns to investors but subsequently have suffered from a series of financial crises. The poor performance of emerging markets since the post-Mexican crisis period has often been attributed to weak local banking systems, lack of transparency and poor corporate governance practices. This has prompted the current international effort to codify best practices and to disseminate them widely. Institutional investors are starting to pay attention to standards and codes. In early 2002, the California Public Employees' Retirement System (CalPERS), the biggest public pension plan in the US with an

investment portfolio of \$151 billion, decided to adopt a new model for investing in emerging markets. Market liquidity and volatility, market regulation and investor protection, capital market openness, settlement proficiency and transaction costs account for 50 per cent of the scores. Political stability, financial transparency and labour standards account for the remaining 50 per cent. Only 13 emerging markets have been defined as “permissible”<sup>6</sup> (Reisen, 2002a).

Country-specific investment criteria may provide a catalyst for changes in governance, openness and transparency practices. The authorities of those countries on the radar screen of institutional investors that are close to making it onto the list of investible countries may be enticed to carry out final steps, for example in bank regulation or market openness, to push them into the investible-market league. A recent investor opinion survey (McKinsey, 2002) finds that a majority of institutional investors are prepared to pay a premium (in terms of higher price-earning ratios) for companies exhibiting high governance standards, with the premium rising the less this was assumed to be the case. The premiums averaged 12-14 per cent in North America and Western Europe, 20-25 per cent in Asia and Latin America; and over 30 per cent in Eastern Europe and Africa. Strengthening the quality of accounting procedures was listed by investors as the greatest concern.

A recent Bank for International Settlements paper analyses the determinants of *international bank lending* to the largest countries in Asia and Latin America through a framework based on “push”/“pull” factors (Jeanneau and Micu, 2002). The results show that both types of factors determine international bank lending. However, they differ from those of the early 1990s’ literature in that aggregate lending to emerging-market countries appears to have been procyclical to growth in lending countries rather than countercyclical. Moreover, the sharp increase in short-term lending during the early 1990s seems to have been largely a pull phenomenon. Additionally, there is evidence that fixed-rate regimes encouraged international bank lending, while bandwagon and contagion effects were also present.

As is seen below, bank lending to emerging markets has collapsed since the 1998 financial crises. While there has been less demand for bank loans by the emerging-market economies as they realised their vulnerability to massive reversals of bank loans, the major reason has to be seen in regulatory risk that the banks now face under the evolving global financial architecture. As the G7 countries have been trying to exorcise moral hazard in international bank lending since the Russian 1998 crisis through stricter rules on crisis lending and through greater private-sector involvement in crisis resolution, international banks’ risk aversion towards emerging-market lending has been on the rise. Regulatory risk, therefore, will shape very much the future of bank lending to poor countries.

Table 1. International Banks' Involvement with Developing Countries

	June 1998 (\$ billion)	December 2000 (\$ billion)	(% change) (at annual rate)
All developing countries			
Loans outstanding	924	739	- 8.8
Other assets <sup>a</sup>	110	155	14.7
Loans by subsidiaries in local currency	248	435	25.2

a) Includes holding of debt securities, some derivative positions and equities.

Source: BIS consolidated banking statistics, from Griffith-Jones (2002).

International banks have been significantly increasing lending via domestic subsidiaries in local currency as a result of higher foreign ownership by international banks of bank subsidiaries in developing countries. The series of financial crises in emerging markets has significantly reduced the entry costs for foreign banks, not only through currency devaluations, but because crises led to an erosion of the net worth of banks. From the perspective of international banks, lending through subsidiaries has the advantage of allowing better credit screening from lending officers located in specific emerging economies. However, the main advantages for the bank is avoiding currency mismatches, and thus exchange rate risk (Griffith-Jones, 2002).

The Brady bonds (resulting from transformation of bank credit claims into bonds in countries suffering from a debt overhang in the late 1980s and early 1990s) established the basis for the development of an *emerging bond market*, but failed to build safeguards to avoid widespread collapse as happened at the Russian crisis in 1998. To investors, emerging-market bond spreads (over G7 government bonds) offer potential return enhancement and diversification benefits in fixed income portfolios. To emerging-market borrowers, bond spreads determine the capital cost at which they can tap world financial markets. Yield spreads on bonds (of the same currency and maturity) are above all a borrower-specific proxy for the probability of default, and to a lesser extent, for recovery rates in case of default and for trading illiquidity. Global liquidity, the related investor appetite for risk and raw material prices have also been shown to impact on spread movements of emerging-market bonds. Emerging-market dollar bond spreads have been extremely volatile as the underlying assets are illiquid, defaultable instruments, and times series short. This provides formidable challenges for quantifying credit risk.

The influence of credit ratings on the terms (and magnitude) at which developing countries can tap world *bond markets* has become primordial over the last decade. Since the bond markets are effectively unregulated, credit rating agencies have become the markets' *de facto* regulators. Indeed, unlike for industrial countries for which capital market access is usually taken for granted, sovereign ratings play a critical role for developing countries as their access to capital markets is precarious and variable.

Sovereign spreads and ratings are jointly determined by qualitative and quantitative factors. Measures of economic and financial performance are used in the quantitative assessment while political developments, especially those which bear on fiscal flexibility, form the core of the qualitative evaluation. On average, around three-quarters of the variance in sovereign-rating notches can be explained by indicators of debt burden (debt service/exports, public sector borrowing/GDP, external debt/GDP,

domestic debt/GDP), investment (domestic credit growth, investment/GNP, capital investment growth), balance of payments flexibility (exports/GDP, export growth), economic strength (per capita GDP, real GDP growth, consumer price inflation, unemployment, foreign direct investment/GDP, reserves/GDP) and liquidity (short-term debt/exports, short-term debt/reserves, reserves/imports, short-term debt/reserves). Note that some of the rating determinants identified above, such as GDP growth and credit growth, are to a certain degree endogenous to capital inflows (Reisen, 2002b).

Global credit cycles have been shown to impact importantly on the volatility in default rates. Global and regional contagion of financial crises can also lead to considerable deviations of spreads from underlying credit fundamentals. During the period 1970-99, one-year default rates for speculative-grade issuers in *Moody's Global Database* oscillated between roughly 1 per cent in tranquil times and 10 per cent in crisis years. Spreads on sub-investment bonds move disproportionately to the underlying credit risk: they push to extreme levels during crisis episodes and in their immediate aftermath, unlike investment-grade bond spreads which move by far less. The subsequent potential to reap high benefits from investing in distressed assets is often exploited when risk-free returns are low and investor appetite for risk high. The link between industrial country interest rates and emerging-market bond spreads is not straightforward, however. To the extent that lower industrial country rates lead to greater capital flows to emerging-market countries, they cause increases in exposure to emerging-market borrowers that can cause spreads to rise, offsetting the higher appetite for risk that normally emanates from lower rates.

Emerging-market bond spreads do not only reflect credit risk, but also varying degrees of *risk aversion* by global investors. In a recent study, Kumar and Persaud (2001) find a close correlation between their risk appetite index and EMBI+ spreads; the correlation is quite close in times of systemic crises (such as the second half of 1998), with the risk appetite index leading the turning point in EMBI+ spreads.

### III. POTENTIAL EFFECTS OF THE CRISIS IN CORPORATE GOVERNANCE ON FLOWS

On 22 April 2002, the Institute for International Finance (IIF, 2002), assuming a gradual improvement of global economic conditions, still saw “Signs of Recovery in Private Capital Flows” to the 29 emerging-market economies it currently covers<sup>7</sup>. The institute forecast that net private capital flows to these economies would pick up from \$132 billion in 2001 to \$160 billion in 2002 (Table 2). However, only a quarter later, there must be concerns both about the pace of global recovery and the fall-out of the US corporate confidence crisis on emerging-market flows. Private market economists currently distinct two views on the state of global economic affairs.

Table 2. IIF Forecasts for Emerging-Market Flows  
(\$ billion)

	2000	2001e	2002f
Private flows, net	173.1	131.9	159.0
-Direct equity, net	134.8	139.0	117.0
-Portfolio equity, net	14.4	9.5	21.3
-Bank credit, net	-12.7	-22.8	-5.6
-Bonds, net <sup>a</sup>	36.6	6.2	26.4

a) Includes other non-bank private creditors.

Source: Institute for International Finance, *Capital Flows to Emerging-Market Economies*, April 22, 2002.

One is *cyclical*: the US is coming out of recession and clawing back to potential output path (which is 3.5 per cent) despite current governance problems, the outfall from the attacks on the World Trade Center and the negative wealth effect on consumption arising from the strong fall in stock markets. Supported by continuing productivity growth, which keeps inflation in check and the Federal Reserve on hold, equity levels will come gradually back to normal, with the Dow in 9500-10500 range. Dollar strength would be revived, while government bond prices would suffer.

The other view, to which economists have recently more and more subscribed, is *structural (boom-bust)*: according to this view, the US economy is digesting the massive IT boom of the late 1990s, triggering first FDI flows into the US information technology industry, then portfolio equity inflows, then purchases of US credit instruments. The dollar appreciated, as net inflows exceeded a current account deficit worth 4.5 per cent of GDP. US household savings fell to zero. Now — in the bust phase — we witness net capital outflows from the US, and equity prices are being driven down back to fundamentals, which see the Dow in the 7500-8500 range, the dollar in the range of 1.15-1.20/euro. Corporate and household balance sheets are being repaired, with less

corporate borrowings and higher household savings. This adjustment exerts a dampening effect on economic activity, with expected 0 per cent growth during next quarters and a significant risk of outright recession. Real estate has softened the bust so far, but for how long? Moreover, Japan stays in deflation, with little hope for reform, and a stronger euro will be detrimental to Europe's only source of growth, i.e. exports. Morgan Stanley's Stephen Roach, who has long stressed the post-bubble risks, places a 60-65 per cent on such a scenario, implying a double-dip recession in the US.

Meanwhile, as analysed by Graham *et al.* (2002), the less than sanguine global outlook is further darkened by a series of US financial scandals, which have discredited the initial belief that the Enron fraud was an isolated event. While investor concerns about corporate practices have led to a strongly increased risk premium on US corporate assets during the second quarter of 2002 (see below), corporate governance standards in emerging markets have been perceived as improved by global institutional investors (McKinsey, 2002)<sup>8</sup>.

Even before the US accounting scandals broke, evidence presented in the table below indicated that blue-chip Asian companies now seem to keep more transparent accounts than their US counterparts, while investors have been paying a premium (in terms of higher price/earning ratios) for US stocks partly because of the perceived superiority in the quality of their earnings reporting. Last year, the gap between pro forma earnings, which exclude many expenses (such as stock options<sup>9</sup>), and actual earnings, reported according to Generally Accepted Accounting Principles (US-GAAP), was considerable in blue-chip US firms while even mildly negative in the top Asian firms.

Table 3. **Accounting Transparency in Top US and Asian Companies, 2001**

	Nasdaq Top Five <sup>a</sup>	S&P 500 Top Five <sup>b</sup>	Asia Top Five <sup>c</sup>
GAAP P/E Ratio	159	37	8
Pro Forma P/E Ratio	52	31	9
Earnings gap, in %	-206	-19	+3

a) Microsoft; Cisco Systems; Intel Corp.; Dell Computer Corp.; Oracle Corp.

b) General Electric Co.; Exxon Mobile Corp.; Microsoft; Wal-Mart Stores Inc; Intel Corp.

c) China Mobile Ltd, Taiwan Semiconductor Manufacturing Co.; Hutchison Whampoa Ltd; PetroChina Corp.; Cheung Kong (Holdings) Ltd.

Source: Credit Lyonnais Securities Asia; SmartStockInvestor.com.

It would be simplistic, however, to conclude that the changed perception of corporate governance standards in the US relative to the emerging markets would lead to a portfolio shift from asset classes with rising risk — US equity and corporate debt — to assets where the perceived risks were already high but slightly falling — emerging-market debt and equity. If this was the case, portfolio flows to emerging markets could be expected to rise, while foreign direct investment would be dampened by rising capital cost in the US and other developed home countries. The main channels through which the perspectives on capitals flow to the emerging markets can be affected by the fallout from the US corporate crisis are:



- the *impact of rising capital cost* on investment demand in developed countries;
- the *wealth effect* of tumbling equity markets (and possibly other asset values) on consumer demand in the developed countries;
- higher *credit and liquidity risk*, notably resulting from a lower/no growth scenario;
- higher *risk aversion* of global investors; and
- a lower dollar against major key currencies.

The current situation of rising uncertainty will give way to one where risk premia will stabilise; therefore, any forecast at this stage must be preliminary. It would seem today, however, that the bulk of financial market adjustment has taken place from early April, when a series of scandals based in fraudulent corporate practices was released, to July 2002, when the US administration and the US Securities and Exchange Commission had started with corrective measures. The effect of lower investor confidence in corporate governance standards, however, can hardly be isolated. Apart from the market sentiment that the odds for a US double-dip recession had risen, political uncertainties surrounding two emerging-market heavyweights, Brazil and Turkey, intensified amid exploding debt dynamics. On the other hand, double-dip concerns and emerging-market debt concerns were to a certain degree endogenous to the higher risk aversion in that resulted from the US corporate scandals. Table 4 provides the key parameters for that period.

Capital costs have indeed increased quite strongly in the United States from early April to end July, despite the drop in risk-free interest rates. Equity cost for Standard & Poor's 500 firms increased from 6.5 to 7.6 per cent, thanks to a rise in the equity risk premium — the difference of the sum of dividend yield plus expected dividend growth minus the inflation-adjusted risk-free interest rate — from 1 to 3 per cent<sup>10</sup>. Corporate debt cost rose from 9.6 to 10.3 per cent on high-yield corporate debt (BB rated), as the rise in spreads exceeded the drop in risk-free interest rates; high-grade corporate debt (AA rated), by contrast, experienced a slight drop in interest rates, from 7.1 to 6.7 per cent, despite rising spreads as the yield on risk-free US Treasury bonds (10-year maturity) tumbled 5.4 to 4.6 during the observation period. The monthly US portfolio flow monitor provided by Mellon Financial did not indicate a net portfolio outflow during April and July 2002, as foreign demand for US government bonds outweighed the rise in portfolio equity outflows. Overall, data suggest private-sector outflows from the US over that period. During the four months, the dollar weakened against other key currencies; against the yen, the greenback lost ca. 10 per cent (Table 4).

**Table 4. Key Determinants of US Capital Cost**  
April 2002 vs. July 2002

	1 April 2002	31 July 2002
US Treasury 10 yr. Yield, % p.a.	5.43	4.58
US CPI inflation, expected, % p.a.	1.4	1.7
High-grade corporate spread, basis points (AA rated)	167	213
High-yield corporate spread, basis points (BB rated)	416	567
S&P 500, at open	1 147	902
S&P 500 dividend yield, %	1.38	1.88
US GDP growth 2002, % p.a. consensus forecast	2.30	2.30
Dividend growth,% p.a.	3.70	4.00
Equity risk premium, %	1.05	3.00
\$ / Yen	132	120

Source: Primark Datastream.

As the S&P 500 dropped more than 20 per cent during the four months — from 1 147 to 902 — the drop may have intensified the negative wealth already weighing on consumption from a two-year bear market. Private US consumption had withstood large stock market wealth losses during 2000 and 2001 because monetary policy helped to produce a very robust housing market. But by mid-2002 there were signs that the housing market had reached a peak while wealth losses in the equity market had been increasing<sup>11</sup>. Graham *et al.* (2002) adopt the estimate used by the US Federal Reserve Board, which suggests that over a period of 12 months an extra dollar of stock market wealth increases spending an average of 3.5 cents. The Fed model assumes that investment would fall 0.8 per cent per year in response to a 20 per cent decline in stock market wealth (ignoring any feedback effects). The calibration yields an estimate that if the S&P 500 index stays roughly at levels reached on 19<sup>th</sup> July — 850 — the confidence crisis will lower US GDP by \$35 billion (ca. 0.35 per cent) in the first year in the base case scenario.

**Table 5. Emerging-Market Sovereign Bond Spreads**  
April 2002 vs. July 2002  
(spreads in basis points over 10-year US Treasury bonds)

	1 April 2002	31 July 2002
Emerging Asia	363	470
Emerging America	510	1 158
Emerging Europe	481	707

Source: Lehman Brothers.

**Table 6. Emerging-Market Stock Market Indices**  
April 2002 vs. July 2002  
(MSCI Dollar Price Indices Rebased)

	1 April 2002	31 July 2002
Emerging Asia	100	90.2
Emerging America	100	65.3
Emerging Europe	100	85.0

Source: Morgan Stanley.

It seems from Tables 5 and 6, that capital cost in emerging markets reacted to the US corporate crisis quite differently during April and July 2002. Least affected was emerging Asia where sovereign spreads rose by ca. 100 basis points, somewhat less than the rise recorded for high-yield corporates in the US during the same period (150 bp). Asian stock market values dropped by 10 per cent, but less than the S&P 500 (minus 21 per cent). Emerging Europe saw its sovereign spreads rise by more than 220 basis points over that period, but this rise must be partly attributed to rising doubts about the speed of EU enlargement and political uncertainties in Turkey; stock markets fell somewhat less than did the S&P 500. Latin America saw its capital cost shoot up during April and July 2002, as investor confidence was hit by the presidential elections looming in Brazil and most Latin American borrowers were shut out of capital markets.

For the immediate effects of deteriorated perceptions of US corporate standards, it would seem that any portfolio shift out of US corporate assets did not produce a net benefit to emerging-market assets. Higher US capital cost, lower growth prospects as a result of lower prospective consumption and possibly corporate investment in the United States and other developed countries, and higher risk aversion by global investors have contributed to increased capital cost in emerging markets as well.

How does this all add up for the prospective capital supply to emerging markets in the short term? We can only speculate, and in doing so explicitly focus on the intermediate impact that can be derived from (relatively) lowered confidence in corporate governance standards in the major home countries. The major determinants to observe thus are lowered growth prospects resulting from a negative wealth effect and a drop in investment, the change in corporate capital cost and in risk aversion, and price effects on products that prominently shape emerging markets' terms of trade. As for the latter, while commodity chips have tumbled, raw material prices have stayed fairly even from early April to end July (Table 7).

**Table 7. Terms-of-Trade Determinants**  
April 2002 vs. July 2002  
(in dollars)

	1 April 2002	31 July 2002
Chips, DDR 128Mb16Mx8 266MHz	3.40	2.47
Industrial Commodities, Economist Commodities Index	69.4	68.0

Source: Datastream.

Foreign direct investment from developed countries will remain the most important form of inflows to emerging markets, but will stay constrained by lowered recovery prospects, higher capital cost and tightened bank credit in the developed world. These factors impact above all on mergers and acquisitions and on greenfield investment by companies that either carry lower ratings or are dependent on bank credit, while new direct investments in raw materials should be less affected. Lower growth prospects in the developed world translate into lower exports from developing countries and lower ability to service foreign debt. But the FDI outlook is not entirely bleak: very big emerging markets, such as China and India, command a growing consumer base, virtually unlimited supply of labour and are less dependent on world markets than small open economies. They should remain attractive FDI hosts. Smaller Asian economies may

once again benefit from Japanese FDI inflows, stimulated by a stronger yen relative to the dollar. Moreover, where financial crises and tumbling ratings have brought asset prices to very low levels on a dollar basis, such as in Argentina and Brazil recently, mergers and acquisitions may be stimulated despite higher corporate capital cost in the US and other developed countries.

Table 8. **S&P Rating Changes**, 2002 2Q  
(number of bond issuers)

	Sovereign		Corporate	
	Down	Up	Down	Up
Asia / Pacific	2	0	11	11
Eastern Europe / Middle East / Africa	4	2	3	2
Latin America	1	0	15	2

Source: Standard & Poor's, Global Credit Market Trends, Second Quarter 2002.

Bond finance for emerging markets is set to be burdened, apart from policy risk (see below), by an overhang of rating downgrades over upgrades and an outlook for credit quality that remains tilted towards the negative (Standard & Poor's, 2002). However, Table 8 reveals strong regional divergence. The credit ratio — the ratio of downgrades per upgrade — stood during the second quarter 2002 at a fairly balanced 13:11 in Asia, at 7:4 in the Eastern Europe/Middle East/Africa (EEMEA) region, but showed a strongly negative reading of 16:2 in Latin America. Should the global recovery materialise, EEMEA and Asian bonds would benefit from higher corporate profitability, better macroeconomic prospects and an improved rating outlook. If, on the other hand, equity-market sentiment in the developed countries stays depressed, this would hamper bond market access by emerging-market borrowers, particularly for those looking to tap dollar — or euro — dominated debt markets.

Latin America still remains most vulnerable to the risk of further rating downgrades, mainly due to volatility in Brazil leading up to the October 2002 elections. This is the region where the number of issuers with negative outlooks has been highest by mid-2002. At the opposite end, the EEMEA region is best placed to benefit from potential upgrades with the highest share of bond issuers under positive rating outlook; notably, the recent sovereign upgrade of Russia has provided positive market sentiment. To a lesser extent, this holds for Asia as well where a number of banks have been put on positive rating outlook recently. It is noteworthy that the ratings of some corporate issuers have recently improved thanks to the fact that the emerging-market issuer had been acquired by better-rated companies from developed countries. In this way, past FDI flows can also improve future bond flows to emerging markets.

Figure 2. Lehman Emerging Market Sovereign Bond Spreads , April - July 2002  
vs 10 yr US Treasury Bills

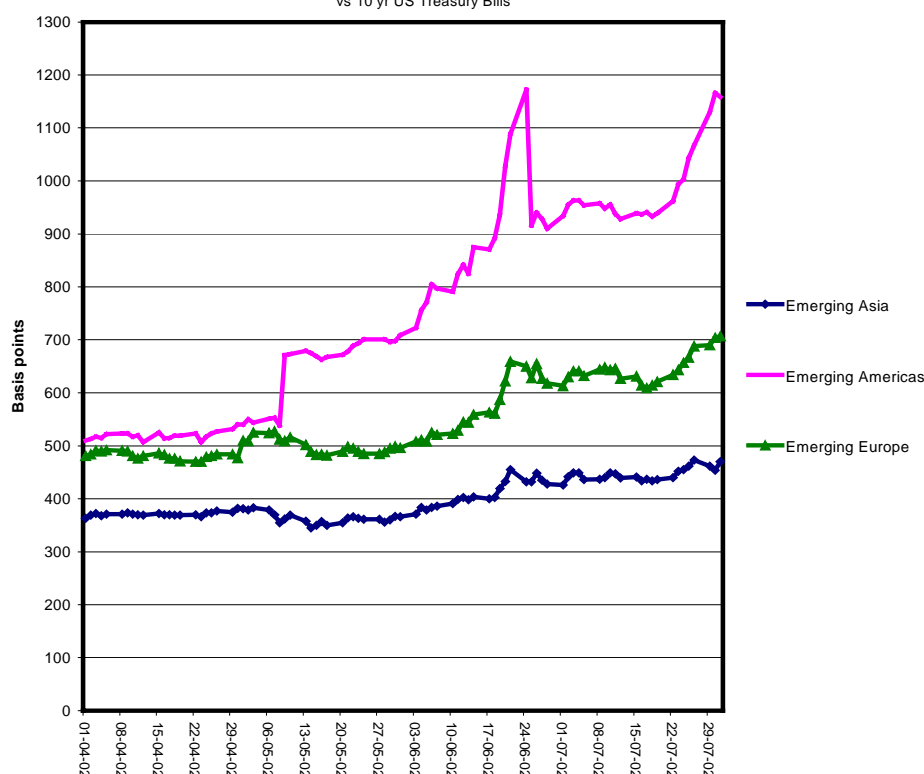


Table 9. Real Bond Yields and Equity Risk Premia, 2002 latest  
(%)

	Emerging Asia	Emerging Europe	Emerging Latin America
Dividend Yield	1.6	2.0	3.7
+ Dividend Growth, % p.a.	5.9	3.0	0.7
- Real Bond Yield Region	5.9	3.3	3.4
(- Real Bond Yield US)	(2.9)	(2.9)	(2.9)
= Equity Risk Premium Region	1.6	1.7	1.0
(= Equity Risk Premium Global)	(4.6)	(2.1)	(1.5)

Source: Datastream; dividend growth equals GDP forecasts.

In principle, a relative deterioration of perceived developed-country corporate governance standards relative to the emerging markets should benefit the equity flows to the latter. Moreover, simple valuation measures such as price-earning ratios and price-to-book ratios might suggest that emerging-market equities are considerably cheaper than those in developed countries (IMF, 2002). Relative valuation measures such as the equity risk premium (the premium required by investors to hold the riskier asset class equities rather than bonds), by contrast, suggest that emerging-market stocks are not unequivocally cheap. Table 9 provides two snapshots of the current equity risk premium in three emerging-market regions.

The first computes the equity risk premium by subtracting *local* real government bond yields (10-year maturity) from the sum of dividend yield and assumed earnings growth. The calculation finds the equity risk premium actually very low (hovering above 1 per cent only) compared to the current equity risk premium in developed stock markets. Hence, emerging-market equities should be unattractive relative to emerging-market bonds at the moment, at least for local investors. This suggests that only if and when sovereign risk premia embedded in emerging-market bond yields have declined to levels considerably lower than those witnessed by mid-2002, should emerging-market equity valuations become attractive.

The second snapshot (Table 9 numbers in brackets) calculates the equity risk premium from a global investor perspective by comparing it to the real 10-year US Treasury yield. This procedure generates a better perspective for emerging-market equity flows. Asian markets appear particularly attractive, while the calibration yields the least favourable outlook for Latin America, not least for the assumed depressed earnings growth. Note, however, that the emerging-market equity risk premium has been *negative* over the period 1990–2001, the return on the IFCI Composite being almost 2 percentage points lower on average than that from holding the 10-year US Treasury bond. Seen from this angle, therefore, emerging equity markets might well attract some foreign money as valuation measures have improved<sup>12</sup>.

As for bank credit flows to emerging markets, the corporate confidence crisis in the developed world generates a short-term perspective of severe lending constraints, although the mid-term outlook may have improved recently due to important policy changes. Higher default risk, notably in sub-investment grade corporate borrowers and Latin American borrowers has burdened US and European, notably Spanish, banks as reflected in depressed banking sector stock prices. Recent BIS data indicate that banks have continued to retrench aggressively from Latin America, while borrowers from other emerging markets maintained favourable access to the syndicated loan market during the second quarter of 2002. While there was a pronounced global slowdown in credit growth during in the first half of 2002, aggregate lending to emerging markets was little affected with the exception of Latin America.

On a longer-term perspective the outlook for bank credit flows has improved recently, with a \$30 billion package provided by the IMF to Brazil in August 2002 and with amendments made in November 2001 to the initial proposals by the Basel Committee on Banking Supervision to the Basel Capital Accord (Basel II). The decision to offer such a large package to Brazil has been interpreted by market observers as a major U-turn in official policy which had increasingly emphasised the moral-hazard cost of large bail-outs, and as representing a break with the tradition of supporting large aid programmes only for countries with US military bases or a common border (Hale, 2002). Just as the decision *not* to bail out Russia in 1998 had triggered a retrenchment of bank credit to emerging markets, it is therefore envisageable that the Brazil support might help restore bankers' sentiment in the longer term *if* (and the *if* is still big) Brazil's unpleasant debt dynamics (Williamson, 2002) can be improved by currency appreciation, restoration of growth and lower interest spreads.

Basel II has been drafted from a supervisory perspective, in particular with the aim that banks carry capital charges that are better aligned with underlying credit risk than under Basel I, the 1988 Basel Accord. But how might Basel II affect the supply of private finance to developing countries? Initial analysis (Reisen, 2001*b*) fed the concern that it would raise capital cost and the volatility of credit supply to sub-investment grade borrowers, the bulk of the developing and emerging markets<sup>13</sup>. In a forthcoming analysis for the OECD Development Centre, Weder and Wedow (2002) explore the consequences of Basel II for international capital flows to emerging markets. The paper shows that the magnitude of effects depends critically on a number of assumptions, including: the mapping of risk weights to ratings, assumptions about required return on capital, assumptions about competition and diversion effects and the assumption that minimum capital requirements are binding constraints. Overall the results suggest that Basel II — taking into account the “Potential Modifications” of November 2001 — will have only a moderate impact on international capital flows. The November 2001 calibration yields a much less dramatic increase in regulatory capital requirements than the January 2001 proposals. This is a result of the assumption of a lower asset correlation for higher risks. While Basel II will not be implemented before 2006, lending behaviour might be impacted already now, with the November 2001 modifications providing relief for the regulatory capital required on bank lending to most emerging markets compared to the initial January 2001 proposals.

#### IV. SUMMING UP

Investor perceptions of corporate governance have moved to the forefront of financial markets; the drop in confidence in corporate governance standards in developed countries has resulted in higher corporate capital cost. While corporate governance practices in Asia and Eastern Europe have lately been perceived as slightly improved, this catch up has failed to produce a tangible portfolio shift towards emerging-market assets. Unlike in the early 1990s, the drop of investment returns in developed markets has failed to “push” capital flows to the emerging markets.

The major channels through which capital flows have been prospected here are changes in absolute and relative capital (debt and equity) cost, the wealth effect resulting from asset markets, changes in credit risk and changes in risk aversion. The immediate effects of deteriorated perceptions of US corporate standards — higher capital cost, lower growth prospects as a result of lower prospective consumption and possibly corporate investment in the United States and other developed countries, and higher risk aversion by global investors — have contributed to increased capital cost in emerging markets as well.

As for the prospective capital supply to the emerging markets over the next twelve months, foreign direct investment will remain constrained by lowered recovery prospects, higher capital cost and tightened bank credit in the developed world. Bond finance for emerging markets is set to be burdened by an overhang of rating downgrades over upgrades and an outlook for credit quality that remains tilted towards the negative. Should, however, a global recovery materialise, European and Asian bonds stand to benefit most from higher corporate profitability, better macroeconomic prospects and an improved rating outlook. While *simple* valuation measures — the price-earning and price-to-book ratios — suggest that emerging-market equities are considerably cheaper than those in developed markets, a *relative* valuation measure — the equity risk premium — would suggest that emerging-market stocks are not unequivocally cheap. Only if and when sovereign risk premia embedded in emerging-market bond yields have declined to levels considerably lower than those witnessed by mid-2002, should emerging-market equity flows pick up again. The outlook for bank credit flows has improved recently, notably as a result of a \$30 billion package provided by the IMF to Brazil in August 2002 and with amendments made in November 2001 to the initial proposals by the Basel Committee on Banking Supervision to the Basel Capital Accord.



## NOTES

1. The exuberance of the late 1990s also managed to overwhelm seasoned economists. The late Rudi Dornbusch wrote in June 1998 in the Wall Street Journal: "The US economy likely will not see a recession for years to come. We don't want one, we don't need one, and, as we have the tools to keep the current expansion going, we don't have one. This expansion will run forever."
2. Curiously, the debate on corporate governance has focused on shareholder value, while neglecting the impact of corporate governance on corporate bond prices.
3. The Sarbanes-Oxley Act represents a response to the series of accounting irregularities that have shaken the confidence of investors in US corporate financial markets. The Act aims at ensuring the provision of timely and reliable information, improving the accountability of corporate officers and promoting the independence of auditors.
4. However, theory and evidence presented in a recent paper by Shang-Jin Wei (2000) for the OECD Development Centre seems to contradict the predictions of the information-asymmetry approach presented above, including those by Hull and Tesar, if you accept that local information and corruption problems are correlated. Wei presents strong empirical evidence that countries with high corruption indices have a relatively low share of FDI in their capital imports while bank and portfolio flows are unaffected by corruption levels in the host country. International direct investors are more likely to have repeated interactions with local officials (for permits, taxes, health inspection and so forth) than foreign banks or portfolio investors, raising the need to pay bribes and to deal with extortion by local bureaucrats. Second, direct investment involves greater sunk cost than bank loans or portfolio investment. This puts direct investors in a weaker bargaining position than investors in more liquid assets. This *ex post* disadvantage of FDI would make international direct investors more cautious than international portfolio investors *ex ante* to raise their claims on a host country with low standards of corporate governance.
5. Goldberg and Klein (1998) find that a depreciation in the domestic real exchange rate relative to the yen increases direct investment from Japan to Asia, while the depreciation relative to the yen "crowds out" direct investment from the United States to Asia. No relationship is found between the real exchange rate and direct investment to Latin America.
6. Of these, curiously, Argentina (currently rated by Moody's and other agencies in "selective default") scores best according to the investment criteria.
7. The Institute for International Finance (IIF) assumed that "despite Argentina's deepening crisis, and concerns over corporate profits and the quality of financial reporting in the United States, market perceptions of risk have abated" (IIF, 2002, p. 1).
8. From 2000 to 2002, the premium that investors would pay for a well-governed company fell from 24-27 to 20-25 per cent in East Asia, on average by 3 percentage points.

9. According to Prof. Jeremy Siegel of Wharton, a new more conservative definition of core earnings proposed by Standard & Poor's produces profits 17 per cent below those in conventionally reported accounts. Options expenses accounted for most of the difference as the net effect of other adjustments (such as pension fund gains) offset each other.
10. A recent survey among institutional investors reported in the Financial Times found that the majority still found the US stock market to be overvalued until the equity premium reverted to the historical average of ca. 3.5 per cent (a level which would imply a further drop of almost 20 per cent with other parameters constant).
11. The Michigan survey of consumer confidence fell sharply during early July 2002. It noted, "Although interviews conducted in late July were not as negative as earlier in the month, the loss in confidence for the month as a whole was still substantial. The July decline reversed all the gains recorded during the past six months, with *widespread concerns among consumers about the potential economic impact from the accounting scandals and declines in stock prices*". Quoted from Hale, 2002.
12. Another potential benefit of emerging equity markets resides in their contribution to global portfolio diversification, but this benefit has receded over the last five years as the correlation between changes in the Nasdaq index and emerging-market equity prices has increased. It is open to what extent the US corporate governance problem might bring that correlation down again and thus restore potential diversification benefits. Recent indications of a reduction in US investment home bias via an upward shift in American Depository Receipts investment will further cointegrate capital markets, importing foreign market volatility to the United States and extending the influence of US market events to foreign stock markets.
13. Under the draft proposals, the rigid capital ratio of 8 per cent introduced in the 1988 Basel Accord will be maintained; new is how the risk weights to the capital ratio would be determined. The Committee is proposing two main approaches to the calculation of risk weights: a "standardised" and an "internal ratings-based" (IRB) approach. One major change compared to the 1988 Basel Accord is that for sovereign and bank exposures, membership in the OECD will no longer provide the benchmark for risk weights. Risk weights determine the banks' loan supply and funding costs, because banks have to acquire a corresponding amount of capital relative to their risk-weighted assets. A 20 per cent risk weight for a given borrower, for example, implies that the bank has to acquire \$1.60 for \$100 lent.

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