# Do emerging market economies still constitute a homogenous asset class?

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The fundamentals of emerging market economies (EMEs) have improved significantly over the past few years and their integration into the global economy and international financial markets has strengthened. In 2005, net inflows of foreign private capital to EMEs reached a record level of USD 400 billion. Outstandings of government securities issued by EMEs on international markets increased six-fold between 1994 and 2005, rising from less than USD 50 billion to over USD 300 billion. Over the same period, their bank loan outstandings were more than halved, falling from USD 250 billion to USD 100 billion.

This considerable surge in market financing has been underpinned by substantial efforts to modernise the financial sector, which has enabled EMEs to offer investors an increasingly wide and sophisticated range of financial instruments and thus to attract new types of investors. Overall, EMEs are tending to put in place financial structures similar to those in advanced countries (1).

At the same time, several recent indices suggest that investors no longer necessarily regard emerging assets as a homogenous bloc in their portfolio choices. Their wariness vis-à-vis these markets and their attendant risks appears to be shifting towards greater discrimination between EMEs on the basis of their specific characteristics, or the type of financial instrument offered (2).

Nevertheless, these trends do not prevent emerging markets from being subject to occasional disruptions, especially if the economic and financial environment were to become less favourable. The narrowness of these markets, the dependence on the decisions of non-resident investors, and the low level of risk premia maintain uncertainty as to their reaction in the event of large-scale unforeseen shocks (3).

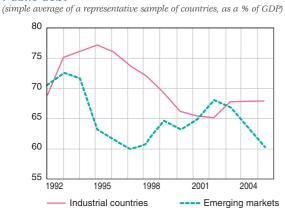
Against this backdrop, market participants are justified in basing their investment and financing decisions on a range of criteria assessed over the whole economic cycle.

## 1 AT COUNTRY LEVEL CONVERGENCE AND FINANCIAL MARKET DEVELOPMENT

Over the past few years, the macroeconomic performance of most EMEs has improved significantly. The room for manoeuvre thus created has been used to undertake major efforts to modernise the financial sector, which have tended to bring the financial structures of EMEs more in line with those of advanced countries in various respects: composition of public debt; range of financial markets; types of investors.

## 1|1 Improvement in the structure of public debt

Public debt-to-GDP ratios have tended to fall over the past 15 years, notably as a result of more restrictive fiscal policies, at least during a number of years, under pressure from the International Monetary Fund (IMF) or other multilateral institutions. In some cases, revenues from privatisations or exports of commodities have been used to repay public debt.



Source: IMF (Global Financial Stability Review).

At the same time, since the mid-1990s, the financing of emerging sovereigns has increasingly taken the form of securities issuance and less and less that of syndicated loans extended by banks.

In the long run, the aim of these countries would be to comply with OECD best practices, which recommend financing in the form of fixed rate, long-term local currency denominated debt underpinned by a broad base of domestic investors. Accordingly, the share of long-term issues has increased, the government securities market now comprises a wider range of maturities, and the average maturity of debt may be lengthened still further.

Over the recent period, a trend towards the issuance of inflation-indexed bonds has been observed, which often allows countries that have experienced episodes of high inflation to issue longer-term debt. In addition, this debt is increasingly fixed rate, even if variable rate public debt remains predominant in some cases.

Lastly, public debt is more often issued in domestic currency, which reduces currency mismatches and makes sovereign solvency less dependent on exchange rate fluctuations.

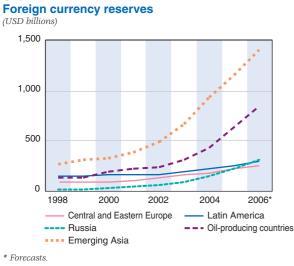
Overall, according to an IMF estimate at the end of 2004,<sup>1</sup> foreign currency denominated debt now only accounts for an average 16% of EMEs' negotiable public debt (compared with 6% in OECD countries) and short-term debt for 11% (compared with 16% in the OECD).

A number of countries are particularly illustrative with respect to these developments. In Mexico, since the crisis in 1994, the share of long-term public debt has grown (from 62% of total public debt in 1996 to 77% in 2005) as has that of fixed rate public debt (from 5% in 2000 to 40% in 2005). In addition, the share of foreign currency denominated debt has fallen significantly (from 73% in 1996 to 32% in 2005), thanks to the use of innovative asset and liability management techniques such as the warrants issued in November 2005, which enabled dollar-denominated debt to be converted into pesos.

1 On a sample of 18 EMEs representing 90% of the capitalisation of the EMBIG bond index.

Chart 1

**Public debt** 



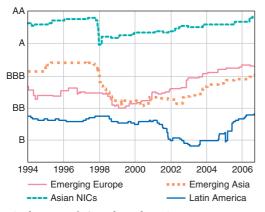
Source: IMF (World Economic Outlook).

Chart 2

Other countries such as Brazil, Colombia, Venezuela, Turkey and Panama have decided to repay all or part of their external foreign currency denominated debt in the form of Brady bonds or more generally debts to the Paris Club, thereby reducing their debt-servicing by a corresponding amount.

Combined with the often very large-scale accumulation of foreign currency reserves, efforts to consolidate public finances have resulted in an improvement in the ratings of sovereign bonds, enabling a return to levels seen before the Asian crisis in 1997. This trend has continued more recently. It undoubtedly reflects an improvement in the quality of EME public debt.





Source: Simple average of S&P and Moody's ratings.

The risk premia on emerging bonds thus fell up to early 2006 to reach historical lows.

# 1|2 Broadening of the range of financial markets

The types of public and private financing in EMEs have also increased, with a broadening of the range of financial markets, alongside growth in financing raised on markets, notably in local currency.

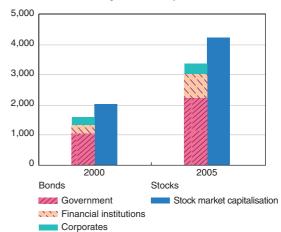
In response to the banking crises during the 1997-2001 period, the structural reforms implemented have allowed banking sectors to be restructured and consolidated, financial systems to be opened up to foreign investors and supervision to be reinforced.

In parallel, the share of market finance has increased *via* the emergence of new financial instruments. Not only has there been growth in local currency denominated sovereign bond issuance (see above), but also, to a lesser extent, in private sector bond issuance, notably by financial institutions. Moreover, domestic stock exchanges have played an increasingly important role in the financing of resident companies.

#### Chart 4

# Local currency denominated bond and stock market capitalisation of the major EMEs

(sum of a sample of 12 emerging market countries from Asia, Latin America and Central and Eastern Europe, USD billions)



Sources: BIS and World Federation of Stock Exchanges.

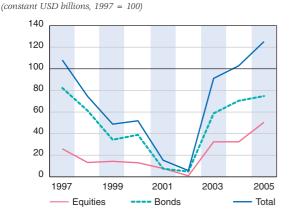
## 1|3 Diversification of investors

In this favourable climate, since 2002, international investors have turned back to emerging assets, having tended to shun them after the financial crises of the 1990s. Portfolio investment flows by non-residents into EMEs now exceed the amounts reached before the Asian financial crisis in 1997. The globalisation of financial markets and investment strategies together with the concern to diversify portfolios have also contributed to this trend.

The low level of interest rates over the past four years has also encouraged institutional investors in developed economies (insurance companies, pension funds, mutual funds, etc.) to position themselves on emerging markets with a view to garnering additional yield enabling them to meet their commitments.

While it is not possible to measure their precise impact,<sup>2</sup> all of these factors have probably encouraged the arrival on financial markets of players whose behaviour is more stable and who are likely to hold securities for longer periods. For example, the largest US public pension fund, Calpers, has increased its share of emerging assets in the funds under its management from 0.6% to 2.3% between 2002 and end-2005. The proportion of EME equities in the portfolio of the Swedish public pension fund AP2 rose from 3% to 5% in early 2006.

#### Chart 5

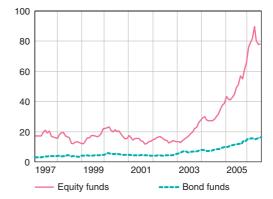


Portfolio investment flows to EMEs



<sup>2</sup> In the absence of comprehensive detailed data on holdings of EME bonds.

#### Chart 6 Net assets of US mutual funds specialising in EMEs (USD billions)



Note: Developments incorporate a price effect linked to the strong rise in emerging stock markets between 2003 and 2006. Source: Investment Company Institute.

Regarded as more volatile, the investment flows of mutual funds specialising in EMEs also recorded very strong growth between 2002 and 2006, even if they only account for 1.5% of funds under management in the United States.

Lastly, the participation of hedge funds specialising in emerging markets has increased both in terms of their number and the amounts invested. According to The Barclays Group, quoted by IXIS (2006), outstandings managed by hedge funds specialising in emerging markets have grown twice as fast as total hedge fund outstandings, rising from 6% of the total in 2002 to over 12% in the first quarter of 2006.

The geographical origin of investors participating in EMEs has also diversified. According to the IMF (2006), investors from Asia and the Middle East have begun to allocate part of their portfolios to assets from other EMEs, which appears to be a new phenomenon. In particular, central banks are, in a limited manner, taking part in this movement, thus seeking to diversify their reserves and to increase their returns. Regional initiatives, such as the Asian Bond Fund, are likely to contribute to this. Financed by the foreign currency reserves of the Asia-Pacific central banks, the Asian Bond Funds 1 and 2 (ABF1 and ABF2) were set up in 2003 and 2004. These funds are designed to invest in sovereign and quasi-sovereign bonds issued by eight members of the Executives' Meeting of East Asia Pacific Central

Banks (EMEAP) denominated in US dollars in the case of the ABF1 and in local currencies for the ABF2. $^3$ 

This development was made possible by the partial lifting of barriers to investment by non-residents, in particular fiscal ones, an easing of regulations and the beginnings of an improvement in transparency, which in some countries (such as Brazil) appears to have triggered a virtuous spiral between increasing investment from non-residents and the acceleration of domestic reforms.<sup>4</sup>

However, in order to meet their financing requirements, EMEs still need to develop a base of domestic institutional investors, such as mutual funds, insurance companies and pension funds that is sufficiently broad to significantly and durably reduce their external vulnerability. In some countries, this development is already under way, in part due to the introduction of pension systems based on capitalisation, such as in Chile, where pension fund assets represent 56% of GDP, or Mexico, where private pension funds, which were introduced in 1997, hold USD 50 billion worth of peso-denominated government bonds.

# 2 AT INVESTOR LEVEL: GREATER DISCRIMINATION BETWEEN COUNTRIES

The overall improvement in the fundamentals of EMEs masks a great dispersion regarding most of the benchmark indicators (notably GDP growth, inflation, balance of payments, foreign currency reserves and public finances). Thus, assessing emerging risk entails taking account of the specific situation in each emerging region, or even each country.

## 2|1 A diversity of situations...

The trend towards the consolidation of public finances and the improvement of the macroeconomic environment in EMEs should not lead to a hasty assessment of the resilience of their financial systems. In reality, financial stability should be gauged against a set of variables that require constant monitoring on the part of the competent authorities and that vary depending on the country or geographical region in question. A non-exhaustive list of these would be:

- non-performing loans;
- GDP growth;
- the current account balance;
- the level of foreign currency reserves.

Qualitative aspects should not be overlooked either, notably the quality of governance and banking supervision and the effectiveness of risk assessment systems put in place by financial institutions.

This multicriteria approach is all the more necessary given that EMEs exhibit very diverse characteristics to investors, whether in terms of country size, the size of bond markets, energy dependence, the level of foreign currency reserves, sovereign debt ratings or, more generally, macroeconomic performances. Thus, not all EMEs display the same degree of exposure to hazards likely to affect the development of the global economy. For example, further interest rate rises could bring about a widening of emerging spreads along with a decline in foreign private capital inflows and would particularly affect the most-indebted countries. If energy prices continue to rise, this would have a greater impact on the domestic demand of economies that have an energy deficit. A slowdown in the US economy would particularly undermine those EMEs whose growth is strongly dependent on exports to the United States while their domestic demand is weak. The persistence of large fiscal imbalances in some EMEs is also a specific source of vulnerability for those countries.

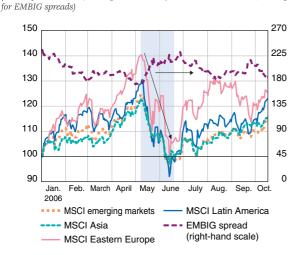
# 2|2 ...increasingly reflected in valuations

As the share of EME assets in their portfolios increases, investors are encouraged to develop and refine their analysis of idiosyncratic valuation factors specific to each market and country. In this respect, the correction that occurred on financial markets

<sup>3</sup> See Guérin and Sa (2006).

<sup>4</sup> See Banque de France (2006), "Proactive debt management in emerging countries: the case of Brazil», Financial Stability Review, No. 8, May, Box 3, p. 25.

#### Chart 7 Change in EMBIG sovereign spreads and MSCI emerging stock market indices (USD equivalent; 1<sup>st</sup> January 2006 = 100 for stock market indices; basis points



Sources: JP Morgan, Morgan Stanley, Bloomberg.

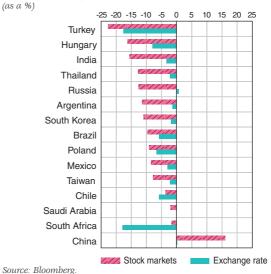
in May 2006, including on emerging markets, might be a sign that investors have stopped assessing emerging risk in a uniform fashion irrespective of the region concerned, unlike the trend witnessed in the 1990s.

First, the relative stability displayed by EME credit risk premia while stock prices were falling sharply and their volatility was increasing showed bond markets' autonomy *vis-à-vis* stock markets.

Second, the correction affected most EME stock markets negatively, but to varying degrees depending on their fundamentals. Indeed, the correction affected countries that are most fragile in macroeconomic terms more markedly, which seems to confirm the start of a more refined and discriminating analysis of markets by investors. In the European zone, the impact was felt above all on the Turkish and Hungarian markets and there was no regional contagion, for example to other emerging European countries.

Lastly, investors appear to have taken particular account of the determinants that specifically underlie the valuation of local equity markets. Thus, the emerging stock markets that had risen most during the previous year but where valuations appeared the most uncertain recorded the largest falls

## Chart 8 Variation in EME stock markets and exchange rates between 1 May and 30 June 2006



(*e.g.* the Middle East). Meanwhile, other stock markets such China's continued to grow.

All in all, by enabling investors to better manage their risks, enhanced market transparency probably fostered this differentiated reaction.

# 3 FACTORS OF VULNERABILITY IN THE EVENT OF SHOCKS

## 3|1 Narrow financial markets

In spite of the progress made over the past few years, financial markets in EMEs still display some shortcomings linked to different kinds of factors: lack of domestic institutional investors; difficulty in channelling household savings in economies where the banking sector is often very underdeveloped; regulatory constraints; continuing limited transparency; governance mechanisms that provide little protection.

In particular, corporate bond markets in these countries remain small as a percentage of national income, but also in comparison to stock markets. They are based on young structures, which do not vet satisfy all of the requirements already in place in advanced economies, in particular:

• the creation of a benchmark liquid bond yield curve, notably by establishing the role of market maker:

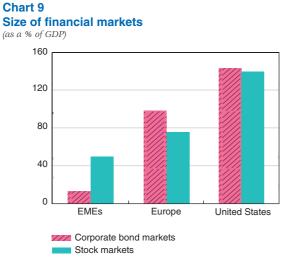
• smoothly functioning market infrastructures;

• the presence of a sufficiently broad base of domestic institutional investors;

• genuine opening up to non-resident investors.

This explains the low liquidity of many emerging markets (measured by the relation between transaction flows and outstandings held), which can lead to sharp fluctuations in the volatility of EME asset prices in the event of even slight portfolio reallocations by international investors.

Moreover, access to local currency denominated assets exposes foreign institutional investors not only to interest rate and credit risk, but also exchange rate risk. Their losses could therefore multiply when episodes of tension lead them to simultaneously revise their positions on all asset classes in one country or region, as was the case on Turkish markets in May 2006.



Source: IMF (Global Financial Stability Review).

## 3|2 Growth in foreign currency denominated private debt

Emerging sovereigns' currency mismatches have tended to diminish (see 1/1 above). However, those pertaining to the private sector (companies, households) have grown in some countries, reflecting the financial deepening of the economy. This may raise questions about the effects of the "euroisation" of household credit in new European Union Member States. In Poland, for example, the share of loans denominated in foreign currencies (euro, Swiss franc) in total housing loans stood at 75% in March 2006, of which a large proportion were variable rate loans.

The borrowing households in question may consider that, in the future they will have natural protection from exchange rate risk given that they are borrowing at a much longer time horizon than the date by which they expect their country to join the euro area. However, pending this hypothetical entry into the euro area, they remain highly exposed to exchange rate risk, with their foreign currency denominated assets (net of their liabilities) having been strongly negative since end-2004. This development could lead to financial difficulties given that it is likely to increase borrowers' probability of default.



3 mid-exposure

countries

3 highest-exposure

countries



20

10

0



countries National sources

3 lowest-exposure

A detailed analysis covering several Central and Eastern European countries would probably be necessary to assess the overall magnitude of the risks linked to foreign currency denominated household debt.

## **3|3** More complex distribution of risk

The development of credit risk transfer mechanisms facilitates the holding of EME assets. However, these mechanisms increase uncertainty regarding the actual risk holders and developments on emerging markets during periods of stress. They might also complicate further processes for restructuring sovereign debt.<sup>5</sup> Thus, if certain emerging sovereigns defaulted in the current environment, their creditors would not necessarily bear the credit risk on account of the use of derivatives and might therefore have less incentive to reach an agreement rapidly.

Moreover, while the growing participation of hedge funds on emerging markets appears to have increased their liquidity, it could also complicate the assessment of risk. Indeed, these funds, some of which employ leverage (between 20% and 50% of hedge funds specialising in emerging markets, according to Tremont Capital Management), may be obliged to rapidly unwind their positions in the event of difficulty in satisfying margin calls or other financial obligations.<sup>6</sup> Certain factors may also lead them to underestimate market risk: insufficient country diversification, misjudgement as to their ability to unwind their positions at reasonable prices, especially since several hedge funds may have the same positions (crowded trades).

## 3|4 A potential upside pressure on risk premia

Risk premia on emerging bond markets have fallen significantly over the past three years, with

JP Morgan's benchmark EMBIG index dropping from over 1200 basis points in November 2001 to around 200 basis points in autumn 2006. How should this narrowing of risk premia be interpreted?7 Is it linked to the improvement in the economic fundamentals ("pull factors") or to external factors such as the abundance of liquidity at a global level and a decline in international investors' risk aversion<sup>8</sup> ("push factors")? If the fall in risk premia were not caused by sound fundamentals but rather were explained by exogenous factors linked to international financial conditions, the future of cheap capital flows would not be guaranteed. In this regard, recent empirical studies carried out by the Bank of England (2005) and Goldman Sachs (2005) encourage caution as they show that "push" factors appear to have played a significant role in the narrowing of risk premia. The Bank of England indicates that economic fundamentals explain less than 20% of the fall between January 2001 and end-2005 while Goldman Sachs attributes 45% of the narrowing of spreads to risk aversion.

As a result, we may assume that a tightening of monetary policies would probably be accompanied by greater investor risk aversion and contribute to increasing risk premia.

#### Chart 11 EMBI\* sovereign credit





\* EMBI: emerging market bond index Source: JP Morgan.

5 Bearing in mind that these have already had to take account of the increasing disintermediation of financing, with, notably, the introduction of collective action clauses (CAC), see Weber (2005).

- 6 See ECB (2006).
- 7 We may also question the relevance of conventional measures of these premia, such as yield spreads between issuers, given that benchmark issuers (United States, Germany) have appeared less than virtuous over the past few years. Other indicators such as swap spreads or CDS premia are already used by market participants.
- 8 See Coudert and Gex (2006).

In EMEs, the 1990s were characterised by the proliferation of crises of investor confidence, their rapid spread between economic sectors and countries and, as a consequence, erratic capital movements and exchange rate fluctuations.

By contrast, over the more recent period, the spillover of economic and financial shocks has been limited, as in the case of Argentina's default in 2001, even though the trade and financial integration of EMEs into the global economy has increased significantly.

Indeed, EMEs have undertaken substantial efforts to consolidate and modernise their financial sectors, which in part explains their strong economic growth and the fall in their financing costs. Their financial systems have also moved more in line with those in advanced economies. In addition, market participants appear to be seeking to better discriminate between EMEs on the basis on their specific situations. Lastly, it is possible that these countries have improved their capacity to prevent crises. Nonetheless, it is probable that this nascent immunity to shocks has been fostered by an extremely favourable economic and financial environment.

The recent nature of these developments should therefore caution us against concluding that contagion mechanisms have disappeared and encourage us to remain prudent in the presence of several factors of vulnerability: insufficient size and liquidity of markets, a still narrow domestic investor base, strong dependence on decisions of international investors, and a large exposure to exchange rate and credit risk. Thus, periods of sudden fluctuations in the price volatility of EME assets cannot be excluded, particularly in the event of an unforeseen large-scale shock. The current low level of risk premia reduces the protection afforded to investors, whereas the presence of global operators that are creditors vis-à-vis several EMEs simultaneously may constitute an additional factor in the propagation of shocks.

Against this backdrop, it is legitimate that investors and creditors pay greater attention over the medium term not only to the fundamental macroeconomic variables but also to the quality of financial structures, in order to base their investment and financing decisions on a multicriteria approach (supervision, regulation, transparency and infrastructure).

## **BIBLIOGRAPHY**

### Bank of England (2005)

"Capital flows to emerging markets: recent trends and potential financial stability implications", *Financial Stability Review*, December

## Coudert (V.) and Gex (M.) (2006)

"Can risk aversion indicators anticipate financial crises?", Banque de France, *Financial Stability Review* No. 9, December

## Didier (T.), Mauro (P.) and Schmukler (S.) (2006)

"Vanishing contagion?", International Monetary Fund, Policy Discussion Paper, January

#### **European Central Bank (2006)**

"Hedge funds: developments and policy implications", Monthly Bulletin, January

## Goldman Sachs (2005)

"Emerging markets and the global economy – Hysteresis not hysteria", *Global Economics Weekly*, No. 05/40, November

## Guérin (J.) and Sa (S.) (2006)

"Recent developments in monetary and financial integration in Asia", Banque de France, *Financial Stability Review* No. 8, May

### **International Monetary Fund (2006)**

"Structural changes in emerging sovereign debt and implications for financial stability", *Global Financial Stability Review*, April

## **IXIS CIB (2006)**

"Hedge funds trends", July

## Jeanne (O.) and Guscina (A.) (2006)

"Government debt in emerging market countries: a new data set", International Monetary Fund, Working Paper 06/98, April

## **PIMCO (2006)**

"It's the economy, stupid...", Emerging Markets Watch, March

## Weber (P. F.) (2005)

"Sovereign debt (re)structuring: where do we stand?", Banque de France, *Financial Stability Review* No. 7, November