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THE SUBPRIME CRISIS:
POTENTIAL IMPLICATIONS ON EMERGING MARKET COUNTRIES

LA CRISE DES *SUBPRIME* :
LES CONSÉQUENCES POSSIBLES POUR LES ÉCONOMIES ÉMERGENTES

Silvia Iorgova and Ceyla Pazarbasioglu[1]

"The US banking industry's aggregate loan-loss provision for 2007 will top the previous high-water mark from 1987 when banks finally owned up to their losses from the Latin American debt crisis and the subsequent sovereign-debt defaults." American Banker, February 1, 2008

1. Introduction

Until mid-2007, the global financial markets were characterized by low premia on financial assets which emboldened investors to venture down the "credit ladder" in search of higher returns. The contributing factors included robust and diverse growth opportunities and the opening of economies to foreign investors, rapid growth of assets under management of institutional investors, as well as windfall gains accruing to commodity producers and overall benign global monetary and financial conditions.

Since then, global financial markets have been hit by common dynamics as in previous episodes of significant financial innovation: the confluence of an abrupt increase in counterparty risk perception, maturity mismatches and the subsequent actions taken by financial institutions and investors to limit their exposures to losses. Differently from previous episodes, however, systemic banking risk has taken an entirely new scale.

A consensus is emerging on several factors having contributed directly to the most recent episode of turmoil in the structured products markets:

- Lax underwriting standards, risk management failures and compensation schemes that may have permitted excessive risk taking;

- Weaknesses in structured product design, including lack of transparency about underlying risks of structured products, and shortcomings in modeling and valuation of such products;

- Lack of investor due diligence, including weaknesses due to the inability to assess risks based on experience accumulated during good times.

All this raises legitimate questions regarding the role of accounting standards, regulations and disclosure practices in conveying information on a financial entity's risk profile and thus the ability of stakeholders and supervisors to take timely corrective action. Another important issue is the implication of the subprime crisis on broader asset classes. This note provides a summary analysis of the potential risks to emerging market countries.

2. Capital Flows to Emerging Market Countries

Global capital markets have seen unprecedented growth in recent years. The size of the global securities market has increased from US$68 trillion at end-2000 to over US$120 trillion at end-2006. Emerging bond and equity markets, though only about 12 percent of global markets, have grown twice as fast as mature markets.

Global cross-border capital flows – foreign purchases of debt and equity, cross-border lending and deposits, and foreign direct investment (FDI) – increased dramatically over the decade prior to 2006, reaching a record level of US$7.9 trillion at end-2006[2] (Figure 1).

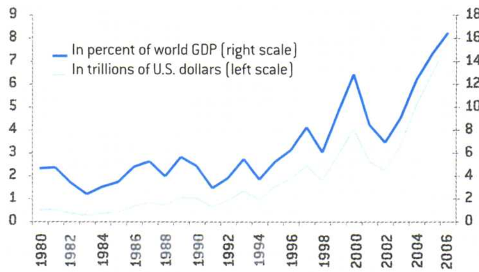
NOTES

1 | Monetary and Capital Markets Department, International Monetary Fund. The views expressed in this note are those of the authors and do not necessarily represent those of the IMF or IMF policy.

2 | These issues are discussed in detail in Global Financial Stability Report, IMF, April and September 2007.

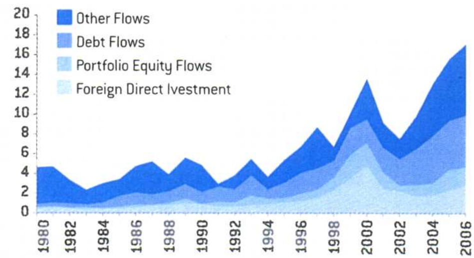
The most sizeable growth occurred in portfolio debt flows and cross-border banking, which jointly accounted for two thirds of capital flows (Figure 2). Overall, the robust growth of cross-border flows reflected both cyclical and structural factors. Part of the increase was attributable to "pull factors" such as strong growth opportunities and the opening of emerging market economies to foreign investors, and part to "push factors" such as low levels of interest rates in many mature markets.

Figure 1. Total Global Capital Inflows



Source: IMF staff calculations based on IFS and WEO

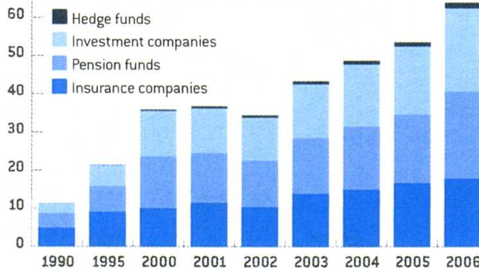
Figure 2. Total Global Capital Inflows
(In percent of world GDP)



Source: IMF staff calculations based on IFS and WEO

Reflecting demographic trends and increased international liquidity, assets under management of mature market institutional investors tripled in a little over decade, reaching about US$64 trillion in 2006 (Figure 3). The most important implication of such robust growth in mature market institutional investor assets was that, even if the share of international portfolio allocations had remained unchanged, the absolute level of cross-border claims would have increased sizably. The growth in institutional investor assets, however, was accompanied by a shift in their investment strategies, as mature market investors were increasingly willing to diversify their holdings outside their home countries. The trend decline in the portfolio allocation bias towards home country assets, also known as home bias, led to increasing geographic diversification of the asset management industry to significant flows to emerging local debt and equity markets.

Figure 3. Assets Under Management of Institutional Investors in Mature Markets
(In trillions of U.S. dollars)



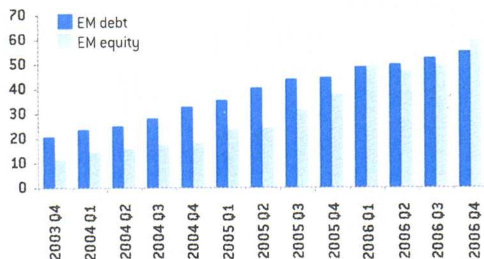
Sources: International Financial Services, London; OECD; and IMF staff estimates

Figure 4. EM Strategic Flows
(In billions of U.S. dollars)

Source: JP Morgan

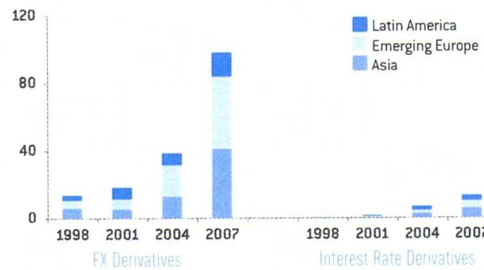
The rise of global liquidity and the shift in institutional investment patterns fostered structural changes in emerging local capital markets. Strategic investors' exposures increased sizably, as these investors showed increasing preference in allocating funds to local emerging markets (Figure 4). Institutional investors increasingly rely on hedge funds as a preferred vehicle for achieving higher risk-adjusted returns. Hedge fund allocations to emerging markets increased sizably, rising from US$32bn at end-2003 to US$114bn at end-2006 (Figure 5). Investors are increasingly accessing emerging local markets, including the use of complex instruments, such as derivatives (Figure 6).

Figure 5. Emerging Market Hedge Fund Allocations
(In billions of U.S. dollars)



Source: Hedgefund.net

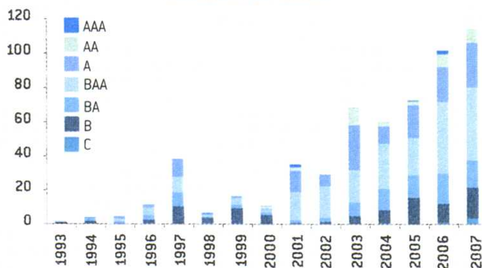
Figure 6. EM OTC Derivatives Turnover
(Daily averages, in billions of U.S. dollars)



Source: BIS

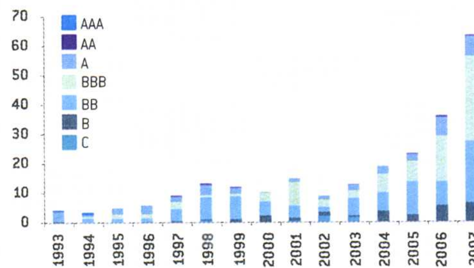
Overall, the significant rise in global liquidity and the search for higher returns also induced global investors to take on new risks. Pension and investment funds that previously invested largely in blue-chip equity and investment securities increasingly shifted their portfolio allocation to different asset classes. Robust levels of economic growth in most of the world, and resulting lower premia on risky assets, emboldened many investors to venture down the "credit ladder" in search of higher returns. A clear example of the trend could be found in the international corporate bond and syndicated loan markets, where the average credit quality of traded non-sovereign debt securities and underwriting standards of syndicated loans declined noticeably (Figures 7, 8). This trend was first observed in the late 1990s, however it accelerated markedly in 2003-07. Over the five years prior to 2007, the issuance of new non-investment grade emerging market corporate debt, excluding non-rated issues, more than tripled to close to US$64bn in 2007. These developments are indicative of the accumulation of higher levels of investment risks and raise questions about the ability of investors to assess risks based on limited experience.

Figure 7. International Emerging Market Corporate Bond Issuance, by Credit Rating
(In billions of U.S. dollars)



Source: Dealogic

Figure 8. International Syndicated Loans to Emerging Market Corporates, by Credit Rating
(In billions of U.S. dollars)



Source: Dealogic

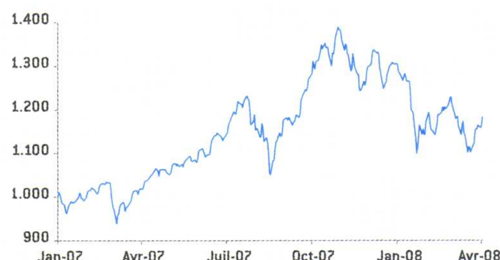
3. Potential implications of the recent credit crisis for emerging market countries

Financing conditions for emerging market countries have deteriorated as a result of the crisis; however the emerging market asset class has remained largely resilient. EMBIG spreads have expanded by approximately 125 bps points between July 2007-March 2008, in line with the trends for high grade U.S. debt, and less than VIX and global high yield debt (Figure 9). Movements of local emerging market sovereign debt spreads have been largely consistent with those in the international market. However, it can not be ruled out that the deleveraging in international markets may start to affect a wider spectrum of emerging market assets, as investors seek to reduce risk across the board. For example, the decrease of equity prices since the beginning of this year (Figure 10) has led to a significant slowdown of emerging market equity inflows.

Figure 9. EM Sovereign and U.S. High Yield Spreads (In basis points)

Source: Bloomberg

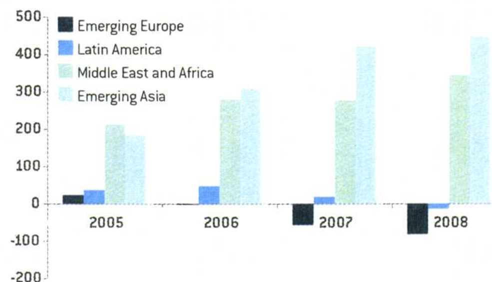
Figure 10. Emerging Market Equity Index, January 2007 = 1000



Source: Bloomberg

There is considerable differentiation in the degree of vulnerability across emerging market countries. Countries facing re-pricing risks related to their external positions, and those with large current account deficits and resulting dependence on foreign inflows appear to be particularly vulnerable to poorer financing conditions in the international markets[3] (Figure 11). In the corporate sector, entities with large near-term financing requirements and highly leveraged financing structures are also more prone to vulnerabilities. Some of the immediate concerns stemming from the transmission risks to emerging markets relate to the impact of the crisis on emerging market corporate and bank debt, both through the widening of financing costs in the international markets and through the potential direct effect on the ability of parent banks to finance their emerging market subsidiaries, as well as the impact of the crisis on the volatility of the foreign exchange markets.

Figure 11. Current Account Balances (In billions of U.S. dollars)



Source: WEO

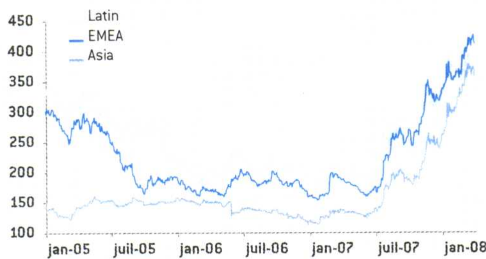
NOTES

3 | See Chapter 1 of IMF Global Financial Stability Report, April 2008.

Emerging corporate bond markets

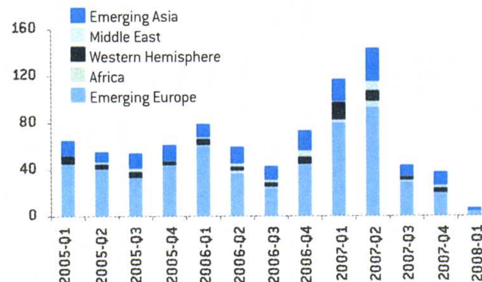
The onset of the recent credit crisis and the ensuing risk-aversion in global capital markets have led to a sharp increase of international corporate financing costs. Emerging market international corporate spreads have expanded as much as those of similarly rated mature market corporates and are currently on the average 220 bps wider than in the beginning of August 2007 (Figure 12). The rising costs have resulted in a sharp decline in the issuance of international emerging market corporate debt securities (see Figure 13) and have largely shunned mid- and small-cap corporates from the international bond markets. International corporate issuance for the six months ending at end-February 2008 amounted to US$17bn, down from close to US$38bn for the same period a year earlier. Strong domestic macroeconomic fundamentals and corporate performance have turned into an increasingly important determinant of placement, allowing some high-potential companies to come back to the market successfully in October and November 2007. However, many emerging market companies have rescheduled their planned borrowings until later in 2008, while others have resorted to securing replacement financing in the local equity or syndicated loan markets, and in some cases through private placements.

Figure 12. Emerging Market Corporate Spreads
(In basis points)



Source: Bloomberg

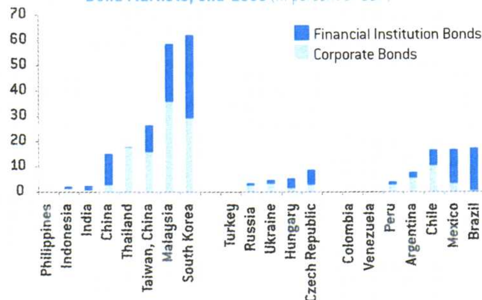
Figure 13. EM Private Sector External Bond Issuance
(In billions of U.S. dollars)



Source: Dealogic

The constrained access to international markets raises questions about the ability of local markets to absorb the financing requirements of domestic corporates. Despite the rapid growth of some EM corporate bond markets in recent years, in absolute terms, these markets remain smaller and more liquidity-constrained than the equivalent international markets. With the exception of some Asian markets, such as Korea, China, Taiwan and Malaysia, local corporate bond markets remain relatively small (see Figure 14) and provide a less significant portion of corporate financing. Overall, local bond issuance remains only a fraction of international issuance and cannot compensate for shocks in international financing conditions (Figure 15).

Figure 14. Size of EM Corporate and Financial Institution Bond Markets, end-2006 (In percent of GDP)



Sources: BIS; Cbonds and IMF estimates

Figure 15. Emerging Markets: Local Corporate Bond Issuance
(In billions of U.S. dollars)

Source: Bloomberg

The limited size and the illiquidity of the local corporate bond markets, particularly in Latin America and Emerging Europe, has induced domestic corporates to resort to alternative sources of financing, such as private placements or syndicated loans, in addition to financing from the banking sector. The level of syndicated loans almost doubled over the course of the year, rising from US$35.5 billion at end-2006 to US$68.3 billion at end-2007, with the preponderance initiated in September and October 2007.

While benchmark blue-chip names continue to maintain sufficient access to bond and loan markets, the environment for small- and mid-cap companies in some countries may be more challenging. Also, with potential supply constraints in the domestic bond and alternative financing markets, given pending required refinancing of bonds later this year, the domestic corporate sector, and especially small- and mid-cap companies, may encounter difficulties in securing adequate local market financing. Asia has already largely completed the process of refinancing and many markets in the region, particularly Korea, China, Taiwan and Malaysia, tend to have larger corporate segments, suggesting relative stability for local corporate financing. In most other countries, widening of domestic credit spreads are likely to deter corporates from issuing in capital markets and lead them to try to secure bank financing instead. In Latin America, the availability of alternative financing is relatively high, and may provide a viable channel for adequate corporate financing.

Bank financing

The current crisis raises the potential risk that mature market banks, with strong exposures to the subprime or other structured credit products, may cut back capital allocation to emerging market local subsidiaries. This risk appears to be particularly high for countries where most domestic banks are owned by parent entities and external imbalances are high[4]. In some emerging market countries, foreign banks constitute two-thirds to 90 percent of domestic banking system and the high level of dependence of parent banks on the wholesale financing markets makes them particularly vulnerable to further financial turbulence. With robust credit growth throughout emerging market countries in recent years, domestic banks have maintained large negative foreign positions of vis-à-vis parent banks and international lenders. Thus, a potential sharp contraction of parent bank credit may contribute to a soft landing. However, the severity of a potential contraction remain largely dependent on country-specific macroeconomic conditions, as most parent banks have conceivably taken long-term views in the region and will likely sustain their cross-border lending to maintain the value of their franchises.

4. Policy implications

The key challenge for emerging market countries going forward is to ensure that the pace of financial innovation, while desirable, is consistent with the underlying macroeconomic, prudential, and institutional infrastructure to avoid costly credit boom-bust cycles. In some emerging market countries, financial institutions' skills in originating and monitoring credit and liquidity risks are at an early stage of development, and excessive competition may lead to poorly understood risks. Infrastructure is often inadequate, and collateral enforcement is frequently expensive or ineffective. The legal framework for securitization of consumer loans is also weak and inadequate in many of these countries. Frequently, the emerging market regulators' capacity to monitor excesses and their macroeconomic or systemic impact is limited by availability of data and analytical capacity. Such limitations may also constrain policymakers from conducting appropriate interest or exchange rate policies. Therefore, policymakers should act in four key areas to prevent a buildup of associated vulnerabilities. These include prudent macroeconomic management to minimize income, exchange rate, and interest rate shocks; introduce sound prudential norms for credit and encourage sound origination standards by banks; develop a comprehensive, consistent and stable legal and regulatory framework and infrastructure; and improve the availability of information that enables better assessment of systemic risks.

NOTES

4 | See Chapter 1 of IMF Global Financial Stability Report, April 2008.