New financing trends in Latin America¹

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1. Introduction

The transformation of financing, the changing nature of financial risks and the resulting policy challenges were the main topics of a meeting on "New financing trends in Latin America: a bumpy ride towards stability" held in Mexico City on May 26–27, 2007 and jointly organised by the Bank for International Settlements and the Federal Reserve Bank of Atlanta. This introduction is an overview of selected issues discussed by central banks, finance ministries, multilateral institutions, academics and private sector participants.

Financial markets in Latin America have experienced a major transformation during the past 15 years. One of the most noticeable changes has been the shift from cross-border towards domestic financing. This has allowed domestic capital markets to expand, deepen and diversify and therefore become less dependent on bank financing. The first part of the meeting thus looked into the changes in financing and the factors driving them. The second and third parts discussed the development of domestic bond markets. Specifically, the second part of the meeting raised questions regarding the benefits for sovereigns of issuing in local currency, the pros and cons of doing so in domestic vis-à-vis international markets, the status of private markets, the role of structured finance and the extent to which developing these markets remains a policy objective for de-dollarising the economies in the region. The third part focused on policy challenges arising from developing domestic bond markets, such as those arising as a result of the emergence of new instruments or investors in the market, or the scope for a regional bond market.

The fourth part of the meeting discussed the implications of new financial markets for the transmission of monetary policy and the role that authorities play in developing these markets. Lastly, the financial stability implications of the new financing channels were discussed.

The remainder of this introductory article offers a brief account of the topics discussed at the meeting while highlighting their connexion with the papers published in this volume.

2. What has changed in financing in recent years?

In this volume, two papers analyse the recent transformation of financing in more detail. Quispe and Vilan (2008) describe the evolution of financial markets, portfolio flows, foreign direct investment (FDI), domestic banking sectors and workers' remittances during the period 1990–2005. Jeanneau and Tovar (2008a) provide an overview of bond markets in local currency. Some of the key features highlighted in these studies are the following. First, domestic financing has expanded vis-à-vis external financing. Second, bond markets in local currency have become an alternative source of financing, relative to external dollar-denominated securities and bank financing. Third, FDI and workers' remittances to the region

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The views expressed by the authors do not necessarily reflect those of the BIS, the FRB Atlanta or participant institutions at the meeting. We thank Alejandro Jara, Serge Jeanneau and Philip Turner for their comments and Alejandra Gonzalez for editorial support.

have become the main source of financing. These developments should make the structure of capital flows less volatile than in the past and make local borrowers less exposed to exchange rate risk.

The role of foreign and domestic factors

The changes recently observed in the structure of financing across the region reflect both external and domestic influences. In the first part of the current decade a benign **external environment** characterised by low real interest rates worldwide and decreased levels of risk aversion compressed the sovereign spreads on the region's external debt to historically low levels.² In addition, high commodity prices have led to very favourable terms of trade for the region and a significant expansion of exports.

Domestic policies have also improved, allowing a higher marginal propensity to save out of increased income than in the past. This is evident in the reduction of debt ratios, the unprecedented current account surpluses and the increased levels of international reserves. Some of the relevant changes in policies include: the shift toward moderately countercyclical fiscal positions (achieved by saving a large part of the increased revenues and generating significant primary surpluses); new government debt management policies aimed at improving sovereign debt profiles and reducing currency and maturity mismatches; more credible monetary and exchange rate frameworks; and better supervisory frameworks.

The role of external factors: a sustainable external environment?

How sustainable is this favourable external environment and what are the implications for the dynamics of capital flows? Clearly, the favourable terms of trade observed in the region during the past few years will not last forever and global imbalances will have to adjust at some point. The issue is the degree to which this will affect the economies in the region and whether it will induce a reversal in the development of capital markets. It seems unlikely that a reversal would have a significant impact in Latin American economies. In fact, the region has weathered recent large shocks in financial markets rather well (eg May–June 2006, February–March 2007 and most recently the one that began in July 2007). That said, four worries are often mentioned: (i) asset prices can become overvalued; (ii) an important share of flows seems speculative in nature, especially those associated with "carry trades"; (iii) financial markets in the region are still immature and investors are just discovering how these markets work; and, finally, (iv) in some countries the favourable external environment may have reduced the incentives to pursue deeper reforms, in particular at the microeconomic level (eg legal and regulatory regimes).

The role of domestic factors: have policies improved the resilience of the economies?

There was a consensus that better macroeconomic policies had improved the resilience of the region to adverse shocks. Indeed, sound fiscal positions are considered to be a key factor in such improvement. Several countries have implemented fiscal responsibility laws (eg Brazil, Chile and Peru) which should reduce the procyclicality of fiscal policies. This, together with new debt management practices aimed at improving debt profiles, has contributed towards reducing macroeconomic vulnerabilities. In addition, the new monetary frameworks adopted in most countries have led, not just to lower inflation, but also to lower and less volatile interest rates. This has helped in creating a more stable environment for

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² Financial innovation and the possibility of diversifying risk in financial markets were also cited as important factors behind lower risk premia and aversion.

growth and investment. Finally, more credible exchange rate regimes appear to have played an additional supporting role.

Nevertheless, some participants considered that in some countries macroeconomic policies need to be improved, for instance by reducing procyclicality or avoiding significant exchange rate appreciation. The latter was considered undesirable as it created vulnerabilities, which called for a more active policy. The source of exchange rate overvaluation was seen in terms of trade above the long-run equilibrium level or in capital flows that had a large speculative component, say, as a result of "carry trade" activities associated with low interest rates in some developed economies (eg Japan and Switzerland).

Certainly, controversies do remain in the region regarding macroeconomic policies. The article by Ocampo and Vos in this volume argues for a broader view of macroeconomic policies in developing countries, one with a more developmental and growth-friendly approach, that takes steps towards mitigating possible procyclical effects associated with the workings of financial markets, provides more stable aid inflows, deepens financial markets and strengthens domestic financial governance structures. The authors argue that, in an environment of volatile capital flows, exchange rate fluctuations generate additional difficulties. Although they recognise the weaknesses associated with fixed exchange rate regimes, they consider that free floating regimes are not desirable as they tend to induce significant overvaluations in good times, downward overshooting in bad times, excess volatility in financial markets and distortion in a country's international specialisation pattern.

However, others disagreed with the views expressed above and doubted that countries should avoid large real exchange rate appreciations: they viewed the recent exchange rate trends as being the result of a normal equilibrium response to stronger fundamentals in line with the improved policy credibility. This last element was stressed, as it meant that agents should expect better policy reactions to different economic developments and shocks. A similar argument was made regarding the development of domestic markets. As markets mature, they should improve the economies' capacity to cope with shocks and other structural changes.

How is the current period of expansion different from the past?

What is different about the current expansionary episode? Several factors were highlighted: countries in the region are now running current account surpluses rather than deficits; fiscal policy is generally more disciplined; consumption growth is not so prominent; and most borrowing is being undertaken by the private rather than by the public sector. In addition, capital flows are taking place against the backdrop of stronger financial systems and increasing investor sophistication.

In this context, transparency has a greater value. For this reason, bad policies appear to be more heavily penalised by the markets today than in previous decades. In addition, economies seem to be more disciplined, which is a required element for currencies to mature and for markets in local currency to develop.³

What can policy makers do to deal with capital flows? The answer is not obvious as many trade-offs continue to arise. For instance, the tightening of monetary policy to curb excess demand could trigger an increase of capital inflows. In contrast, lowering interest rates could have inflationary effects. Fiscal tightening would work but further tightening might be politically difficult to implement. Higher bank liquidity and reserve requirements do not appear to be an option in most countries due to the development of domestic capital markets. With

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Some participants indicated that market discipline should not be overvalued as it has proven to be procyclical, ie inexistent during booms, and excessively present during crises.

the new financial market structure, financial funds are likely to flow through channels other than the banking system. For the same reason, it is unlikely that capital controls or Tobin-type regulations would work, although the region has seen some recourse to such controls in a number of countries (eg Argentina or Colombia).

3. The development of domestic bond markets

The rapid expansion of domestic bond markets is among the most notable financial developments seen in emerging market economies (EMEs) in recent years (see CGFS (2007)). Jeanneau and Tovar (2008a) offer a detailed characterisation of such markets in Latin America. Much of the meeting was devoted to the analysis of issues and policy implications associated with these markets. In particular, several issues were raised aimed at: (i) drawing attention to lessons learnt by sovereigns over a decade of issuance; (ii) discussing the pros and cons of issuing global bonds in local currency and finally; (iii) disentangling the factors behind the relatively slow progress made in developing domestic corporate bond markets. The remainder of this section offers a more detailed overview of these topics.

Lessons from sovereign financing

Sovereign financing in domestic bond markets offers important potential benefits as it can help to avoid currency mismatches, strengthen the domestic financial system, and allow other associated markets to develop, such as the corporate bond market or the derivatives markets. Furthermore, macroeconomic stability is strengthened and vulnerability to external shocks reduced.

At the meeting, several lessons arising from developing government debt markets were mentioned. First was the importance of a diversified investor base to ensure the sustainability of the process (also see Section 4). In this respect pension fund reform was considered a key element for encouraging the development of these markets, and the presence of both domestic and foreign investors essential for a resilient market. Given the Mexican experience, the presence of foreign investors in domestic markets was thought to offer diversification gains while at the same time helping extend the duration of debt in local currency.

A second element highlighted was the need for a gradual process. It is important to allow the market time to adjust as the yield curve develops, with the authorities making adjustments as necessary.

Finally, some participants said that local currency bond issuance was not always necessary, particularly if the government was a small issuer, as this could fragment the investor base and delay market development. This raised another issue: should countries denominate all their debt in local currency or not? In general, some currency diversification appeared desirable. Nonetheless, some governments with a history in the region of excessive foreign currency debt have announced in recent years that they would not issue more debt in foreign currency. Obviously, in discussing these issues the need to identify whether currency or maturity risk was more relevant became necessary. As shown by Jeanneau and Tovar (2008a) *long-term foreign currency* denominated debt has sometimes been exchanged for *shorter-term domestic currency* denominated debt, thus increasing maturity risk. Although this can be a source of concern, there was consensus that, in most recent crisis episodes, currency exposures were more relevant than maturity exposures.

Global bonds denominated in local currency

Colombia, Brazil, Peru and Uruguay have all issued global bonds in local currency. This development has raised two questions: what are the advantages or disadvantages of such issuance, and what lessons does this experience offer to smaller economies or economies moving out from turbulent times?

Global bonds denominated in local currency can attract those who wish to avoid the idiosyncrasies of investing in local markets; such bonds avoid currency mismatches and allow an extension of the longer part of the yield curve in local currency (as in Brazil and Peru). Nevertheless, global bonds could limit liquidity in domestic markets if they segmented the investor base.

As for the second question, these bonds were seen as having been useful for smaller economies needing to reconstruct financial markets following a crisis. For example, the use of these bonds after the 2002 Uruguay crisis left benefits in three areas: (i) fiscal sustainability; (ii) deepening private debt markets; and (iii) monetary policy.

Foreign currency denominated debt can aggravate procyclical fiscal pressures: in good times when the exchange rate is appreciated debt ratios fall. However, in bad times when the currency depreciates debt ratios increase (see the discussion in Section 6). Therefore, by reducing dollar-denominated debt, bonds in local currency reduce the procyclicality of debt and improve its sustainability.

Global bonds in local currency made available in both nominal and inflation-indexed terms allow a better measurement of expected inflation. In addition, when issued, agents in both domestic and international markets track the behaviour of the monetary authority more closely, thus creating a sort of "disciplinary effect".

Nevertheless, global bonds are in general a second-best or temporary substitute for a liquid domestic bond market. In particular, it is unclear whether such bonds in the hands of foreign investors reduce the external vulnerabilities of economies that issue them.

Private sector issuance

The expansion of local currency bond markets in the region has been dominated by the public sector. Corporate bond markets remain small and their development lags the progress seen in other regions of the world (eq Asia). Why?

One aspect, addressed by Ananchotikul and Eichengreen (2008), is corporate governance. The article discusses why progress in corporate governance in the region has not been faster; and how capital markets would benefit from further reform in this area. The authors argue that improvements in corporate governance have taken place in countries with stable governments prepared to pay the "upfront" cost of reform and where foreign investors are ready to lobby for reform. They also argue that in Latin America corporate governance reform is incomplete. Based on their econometric analysis, the authors conclude that specific actions can contribute towards its promotion, such as maintaining a stable macroeconomic environment, opening to foreign investment and ensuring a stable political environment. Such elements provide the incentive for investors and governments to invest in the future.

Participants at the meeting indicated that the underdevelopment of corporate bond markets in the region could also be attributed to a number of factors. The first of these was the segmentation of corporate markets in terms of size and creditworthiness. Large and creditworthy companies have access to a number of credit markets (eg banking, public, or international); while medium-sized companies in general lack access to markets. Equally important, the regulations on pension funds only allow investment in domestic securities with a minimum rating, thus limiting the type of companies in which to invest. Second, prevailing fiscal frameworks may weaken the attractiveness of these markets. For instance, in Mexico income from government securities is tax-free, but this is not the case for corporate debt.

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Third, governments in most countries have focused on increasing the liquidity of the secondary government debt markets rather than enhancing that of corporate bond markets. For instance, in most countries in the region repurchase agreement (repo) transactions with central banks exclude private sector bonds or structured securities as collateral. In Mexico, the central bank allows repo transactions for highly rated debt. However, even there an efficient secondary market for private sector securities is still non-existent. Finally, some argued that the development of corporate bond markets could be hampered by the lack of foreign investors in the domestic markets.

Domestic versus cross-border issuance

Has the reduction in the issuance of sovereign bonds in international markets "left room" for corporate issuance abroad? And how do companies choose between international and domestic issuance?

The implications for the private sector associated with lower sovereign debt issuance in international markets vary significantly across the region. In Mexico, the most creditworthy private companies enjoy access to domestic financing at low spreads over the sovereign benchmark. The only private sector issuers that tap international markets are those with low ratings, which cannot issue domestically or those that look for long tenors for their bonds. Therefore, while in Mexico there appear to be plenty of opportunities for corporate issuance abroad, this is not the case in other countries in the region. For instance, in Brazil the complications of financing in the domestic market for private companies seem to favour cross-border financing. This is thought to be the case because the government still refinances large portions of short-term foreign currency debt in the domestic market and real interest rates remain high. As a result, markets demand a substantial premium even from the government.

For companies with the ability to issue locally, the manner in which they choose between domestic or foreign financing is thought to depend on two main factors. If a window of opportunity appears in domestic markets with respect to cost, companies will normally issue domestically. However, with the exception of Mexico and Chile, if low-cost and long-term financing is required (eg at 15–20 years), then financing abroad is easier.

The asset-backed securities (ABS) market

The ABS market in Latin America, which has expanded rapidly during the past few years, is still in its infancy (see Scatigna and Tovar (2007)). Furthermore, Mexico and Brazil account for nearly two-thirds of the regional activity in this market. Given its implications for corporate bond markets, participants were asked about the prospects for increased ABS issuance, their contribution to improving local capital markets and, finally, whether they have widened access to bank credit. Since the Mexican market has developed more rapidly than markets in other countries of the region, special attention was given to this market.

In Mexico, different assets are pooled for securitisation. However, mortgage-backed securities (MBSs) are the dominant transactions. Sofoles (non-banking institutions) which provide loans for different credit segments, including mortgage credit, dominate the market. Banks have not securitised much, partly because of much reduced credit extension after the 1994 crisis. However, some banks are slowly issuing plain vanilla bonds and issuing structured transactions, mainly against residential mortgages.

⁴ However, it was considered just a matter of time before these companies, which can only find long-term financing abroad, begin accessing the long-term domestic market.

Securitisation can help spread risk, but it can also create risks. For this reason, the Mexican authorities indicated that they have worked on enhancing the securitisation framework in areas such as the monitoring of credit provisions.

At the time of the meeting, the prospects for ABS growth in the region appeared to be positive. However, participants indicated that this optimism did not necessarily reflect fundamental changes in the underlying market. In particular, it was mentioned that these positive prospects often reflect expectations of growth associated with regulatory bottlenecks that need to be removed. In Mexico, for example, pension fund regulators initially adopted very tight controls, thus forcing pension funds to invest only in government securities. However, with time, the supply of government paper became insufficient for pension fund needs, thus prompting regulatory changes that led to greater investment in highly rated companies. Markets today are facing similar phenomena as regulatory restrictions limit the investment in lower-rated companies.

Structured transactions were also said to be helping smaller companies tap the markets. At the same time, however, it was believed that the process was likely to develop differently than in developed countries. In Europe or the US, companies sell their own risk and then issue structured transactions. In Latin America, the process appears to be operating the other way round, which might imply a lengthy and expensive process.

Does de-dollarisation remain an objective of policy in some countries?

The favourable external environment in recent years has created a window of opportunity to reduce the degree of dollarisation in the region: for a recent in-depth review, see Armas et al (2006). Participants in this meeting were asked about the extent to which this remains a policy objective and the role that new tools, such as local currency bond markets, could play in this area.

Highly dollarised countries (eg Bolivia, Peru or Uruguay) have issued local currency debt. This appears to be stimulating and strengthening the de-dollarisation process. However, participants indicated that the policy objective of issuing such debt is not de-dollarisation per se, but reducing financial fragility. As a result, the strategy has implied changing the regulatory frameworks so that financial institutions internalise the risk of dollarisation. In countries like Uruguay, the strategy has been aimed at inducing a shift in banks' balance sheets towards local currency denominated securities.

Participants felt that for local currency bond markets to support the de-dollarising process, it is necessary to determine, at least for the short and medium run, whether to develop a fully nominal market or whether to adopt an inflation-indexed framework. Although indexation may create difficulties in the longer run by limiting the central bank's capacity to lower inflation, it may at the same time offer benefits in the short run if there are concerns about the sustainability of the process, say, because of concerns regarding fiscal policies.

4. Policy challenges: instruments and the investor base

The development of local currency bond markets raises important policy challenges. Three specific ones were discussed at the meeting. The first had to do with the variety of instruments available in the markets. The second covered how to induce foreign investment in local currency bonds so as to promote risk dispersal. Finally, measures to broaden the investor base were discussed.

Variety of instruments available in domestic bond markets

A wider variety of debt instruments complete markets and provide hedges for various risks. How should sovereign debt managers, in framing issuance strategies, strike a balance between market completeness and liquidity?

Developing bond markets was said to require careful coordination at different levels. On the demand side, participants highlighted the need to know who would demand the securities, to have an open dialogue with investors and to listen to their needs. This was well illustrated by the Mexican experience, where an open dialogue with foreign investors was key for introducing new securities (they are the largest purchasers of long-term securities). Conversations with institutional investors, eg pension funds, were also considered necessary in ensuring a solid demand for securities. Finally, the market makers programme run by the Finance Ministry was said to be a useful tool for getting banks interested in securities.

On the supply side, participants highlighted the importance of having transparent and clear communication with the market; for instance, informing market participants as to what would be supplied. For this reason issuance calendars were said to be useful, as investors learned in advance about the type of instruments to be issued, their amounts and maturities. This also helped avoid market segmentation among different securities. Finally, it was said that issuers could help the pricing of securities with bond re-openings rather than issuing new securities.

New financial instruments and risk management capabilities

Have risk management tools and practices evolved rapidly enough to keep pace with the development of new financial instruments? While new instruments help complete markets and provide opportunities to hedge or increase exposure to specific risks, they also have implications for financial stability which are not fully understood. Discussion at the meeting focused on the four main pillars of risk management: *identification*, *quantification*, *mitigation* and *control*. ⁵

Risk identification and quantification

Participants indicated that large international banks are up to date with respect to the tools available for identifying and measuring risk and that their capacity to handle them has improved over the past few years. In fact, as discussed by Jeanneau and Tovar (2008b) in this volume, countries with more open financial systems should benefit from the transfer of know-how from such institutions. Nevertheless, it was also said that the need for transparent and liquid markets to feed risk models and the establishment of an adequate financial and legal infrastructure constitute a major challenge for risk management in the region.

Risk mitigation

It was argued that financial instruments were just one way to manage risk, and that their development was sometimes related to their ability to provide a hedge or financial speculation. Participants therefore indicated that developments had to be evaluated in the context of the needs of domestic agents and the availability of alternative cost-effective ways to manage risks. For instance, a freely floating exchange rate creates the need for effective instruments and for prudential regulations to manage currency risk. Nonetheless, it was said that it was not uncommon for users to be unable to assess the risks of new instruments and that a more gradual or slower development of the market might be safer. Finally, it was

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⁵ It should be kept in mind that the pace at which countries introduce new financial instruments differs significantly across the region, so the implications for risk management differ from country to country.

recalled that implementing sophisticated risk management tools in the region was sometimes costly, partly because financial crises still linger in the memory of agents.

Risk control

Risk control was considered as posing the greatest challenge for financial agents and regulators. In particular, regulators did not always have the capacity to assess the adequacy of risk management systems. For this reason, it was stated that tools and practices may not have developed enough to keep up with the development of financial markets. Financial instruments rapidly introduced in the developed world may be harder to digest in the EMEs. This creates challenges for risk control. There is no doubt that financial innovation provides global rating agencies with a significant advantage over local agencies which may lack the capacity to evaluate sophisticated new instruments or transactions. Recent events have shown how difficult this is, even for the major international agencies. Many participants were worried that local banks would copy sophisticated instruments developed abroad without fully understanding their functioning. Finally, some considered that risk control weaknesses were magnified by a shortage of well trained financial analysts in banks or institutional investment companies.

The role of foreign investors

The presence of foreign investors in domestic bond markets has been expanding. Available statistics on debt holdings (mainly local government securities) show that foreign investment went from less than \$15 billion at the beginning of 2003 to \$200 billion by the end of 2006. This trend is likely to continue and hedge funds are likely to gain prominence. Their presence raises two main issues: (i) what form does non-resident exposure to local currency bonds take? and (ii) do foreign and domestic investors react differently in episodes of volatility (eg May–June 2006 or February–March 2007)?

It is difficult to generalise about the form in which non-resident exposures are held, because each country has different dynamics and regulations. Participants did agree that foreign participation in local debt markets offers important benefits (see also Section 3): increased risk sharing, greater liquidity, and the possibility of issuing longer maturities. For instance, it was said that in Brazil the banking system was the counterpart to net long foreign positions in exchange-traded derivatives and that banks were thus laying off duration risk to non-resident investors. This eased to some extent the concerns about the large amount of public debt being held by the local financial system. However, position-taking through derivatives was felt to be complex and often lacking in transparency. Furthermore, it was thought that these instruments might be double-edged in effect; they improve risk management but also permit greater leverage. This creates challenges not just for financial authorities but also for those trying to assess country risk and for counterparties involved in the related transactions.

Foreign investors usually take indirect or hedged exposures. However, it was considered that the possibilities for taking direct *credit exposure* to government or local securities were limited. For instance, there is no credit default swap (CDS) market for local securities. Participants considered that in Mexico there is a preliminary framework, but regulations have not allowed the market to develop fully. Although Mexico is a particular case in the region given that it is a very open market allowing foreign investors to acquire exposures to local government debt easily and to buy and sell with plenty of liquidity, it was thought to have weaknesses on the operational side and regarding withholding taxes. Participants also considered that there was no homogeneous group of foreign investors. Domestic investors are also heterogeneous and the various players have different investing horizons. Such heterogeneity entails quite diverse reactions during episodes of volatility, making it difficult to determine whether domestic investors actually behave differently to foreign ones. Some participants nevertheless argued that foreign investors may have played a stabilising role

thanks mainly to their longer investment horizons, their contribution to domestic liquidity and their capacity to help complete markets.

Broadening the institutional investor base

Institutional investors have played a fundamental role in developing bond markets. As such, it is natural to ask two questions: (i) to what extent have countries succeeded in broadening the investor base?; and (ii) what has been the impact of regulations on investment in local currency bonds?

Participants indicated that it was unclear what the benchmark was for a successful experience in broadening the institutional investor base. In the region, Chile is often taken as the benchmark. There, institutional investors hold assets equivalent to almost 90% of GDP, of which 70% are held by pension funds, and the rest by insurance companies and mutual funds. Such concentration of the investor base weakens Chile's position as a benchmark. Nevertheless, it is true that mutual funds have increased their presence in the capital markets, in particular in short-term fixed income markets, while corporate bonds are mainly dominated by pension funds and life insurance companies.

Pension funds are a captive investor class for local currency bond markets. Their dominance in these markets has implications for market performance and the manner in which these markets operate. In Latin America, a large proportion of government bonds are held by institutional investors. This raises the question of whether this is the result of regulation or other factors. It appears that pension funds have not necessarily taken advantage of some recent relaxations of regulation that have allowed investment abroad. For instance, earlier limits in Chile on cross-border investments forced pension funds to increase positions in government bonds. Once regulations were eliminated, however, positions abroad began to increase while holdings of government bonds declined. In this case, regulatory changes acted to stimulate institutional investment overseas.

Is there scope for a regional bond fund?

If size limits the expansion of investment into domestic bond markets, then a regional bond fund may constitute an alternative option. A few years ago Asian central banks, in collaboration with the Bank for International Settlements (BIS), started to introduce regional bond market initiatives. Two funds have been launched: the Asian Bond Fund (ABF) 1 and ABF2. ABF2 is an initiative aimed at supporting the development of local currency bonds, creating a critical scale to set up a number of elements required for these markets to develop, such as the costly infrastructure (eg trading platform clearing services, rating agencies, etc). As to whether a similar effort to develop a regional bond fund in Latin America was desirable, participants at the meeting indicated that the financial cooperation framework in Latin America has been dominated by sub-regional development banks, mainly serving medium-sized and small economies. However, beyond these regional institutions, no one saw any scope for regional cooperation that would lead to something along the lines of ABF2. Nevertheless, it was also clear that multilateral development banks, such as the Inter-American Development Bank (IADB) and the World Bank, have introduced initiatives to promote domestic bond markets.

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⁶ Nevertheless, tight regulations remain on the type of assets that pension funds are allowed to hold.

Possibly the only regional initiative allowing something along these lines is the Latin American Reserve Fund (FLAR), an Andean effort which has recently been extended to include Costa Rica and Uruguay.

In general, it was considered that local markets in Latin America are so diverse (eg in regulation, taxation, currencies and size) that in practice it seems difficult to implement a regional initiative. However, some participants indicated that a lesson derived from the ABFs is that they forced countries to look into the peculiarities of their own national bond markets which were creating barriers for foreign investors and, therefore, it seemed that a regional effort could help in harmonising bond market practices and so stimulate foreign investment. Nonetheless, not all participants shared such view, partly because many saw such an initiative as a "drop in the bucket", given their small size.

5. Implications for the transmission of monetary policy

Monetary policy transmission mechanisms in EMEs have changed radically over the past decade: see BIS (2008) for a comprehensive review. Nowadays central banks in Latin America rely less on direct means of monetary control (eg credit ceilings, interest rate controls) and more on market-based instruments. The development of long-term debt markets is one instance of how financial markets have grown. As such, more developed and efficient financial markets are required for monetary policy to operate effectively. The linkages between financial markets and monetary policy frameworks raise an important issue: how do incomplete and imperfect financial markets influence the transmission mechanism of monetary policy? Jeanneau and Tovar (2008c) in this volume look into this matter.

Financial markets and the transmission mechanism

The degree of financial market development influences the transmission of monetary policy. Two questions that arise here, therefore, are: (i) how has the development of local markets (at the short-term and long-term ends) changed the transmission mechanism of monetary policy? and (ii) what implications can be derived for inflation targeting (IT) countries?

The impact on the transmission mechanism

Participants found it hard to disentangle the various impacts of developing financial markets on the transmission of monetary policy. Nevertheless, several views were expressed. For instance, it was said that the development of securities markets meant that monetary policy could have larger balance sheet and asset price effects than in the past. The interest rate channel has been strengthened. At the same time, the bank lending channel may have been widened and perhaps modified, as bank lending to new market segments such as households or medium-sized firms has expanded. In fact, tight constraints on credit (characteristic across the region in the past) have slowly been loosened, thus improving credit access.

In the region, monetary control by indirect means has been hampered historically by the absence of the medium- and long-term ends of the nominal yield curve. The development of domestic bond markets should therefore strengthen the interest channel. However, participants also indicated that for some of the smaller economies in the region (eg Bolivia, Costa Rica, or Uruguay) the challenge is to make this operational.

Fixed or semi-fixed exchange rates no longer dominate monetary regimes. A de-dollarisation process in some countries has helped this trend. In addition, the adoption of IT combined with more flexible exchange regimes has reduced the information contained in the exchange rate regarding inflation expectations. Exchange rate appreciation when a central bank raises interest rates more than in major financial centres can create monetary policy dilemmas and lead to some difficulty in communicating that monetary policy has no commitment to the

exchange rate. Excess liquidity globally has complicated the conduct of monetary policy in several economies.

Implications for inflation targeting

Participants saw in the progress of domestic financial markets a positive development for IT countries. These markets provide a transparent and inexpensive mechanism for the central bank to enforce its interest rate decisions through open market operations based on repurchase agreements on public debt securities. The expansion of the yield curve was also said to provide a more reliable tool for extracting agents' expectations regarding policy decisions. Furthermore, it was agreed that anchoring expectations is essential for the success of IT and that this requires a public debt market.

However, difficulties in managing IT were also highlighted. In particular, these came about when central banks incorporated financial stability considerations in a context in which the transmission mechanism is not fully operational and/or in which financial markets are underdeveloped. Some reasons adduced for this were: (i) public debt market considerations may have to be considered in taking monetary policy decisions rather than just simply focusing the discussion on meeting the inflation target; (ii) bond markets may also alter or eliminate the transmission of monetary policy, particularly if they allow banks to manage their portfolios to minimise the impact of policy rate changes: for instance, in 2006–2007 in Colombia banks were able to bypass central bank interest rate increases; after a 225 bps increase in policy rates, credit market rates had remained virtually unchanged; finally, (iii) policy rates may have a greater impact on sensitive markets such as the housing market (which in turn is also more sensitive to sovereign spreads).

In other countries with more developed bond markets (eg Mexico), the challenges have been different. The good degree of liquidity along the yield curve up to 20 years has allowed the central bank to begin extracting the information contained in the yield curve and to analyse its implications. However, as in developed countries, puzzles have emerged, such as the well known US "conundrum". Indeed, it is hard to understand the low levels of interest rates at the long end of the curve. What does this imply? Well anchored inflation expectations? Weak economic prospects? Or is the answer more technical?

Central banks, finance ministries and bond markets

What role do central banks play in developing bond markets? In particular, how far can central bank actions aimed at improving liquidity and transparency of short-term money markets contribute to the development of bond markets? Also, given the prominent role of finance ministries in developing financial markets, how should they coordinate debt management strategies with central banks (eg regarding maturity and liquidity)?

Central banks can play an essential role in helping develop bond markets, for instance, by helping create markets (either in nominal or indexed terms), or building up liquidity eg via repo markets. However, many central banks in the region have found it difficult to develop repo markets, partly as a result of excess liquidity or because commercial banks have sought to avoid the stigma of borrowing from the central bank, a problem that can be particularly severe in countries with a history of crisis. In general, it appears that developing such markets will require a greater effort on the side of central banks, such as going down to issues related to the regulation of the payment system.

A good dialogue between central banks, finance ministries and market participants was considered essential for developing domestic financial markets; in particular, discussing public debt management plans with central banks and getting their feedback. However, it was also stressed that functions must be well defined among these institutions and, hopefully, separated.

6. Implications for financial stability

Has capital market development improved the stability of the economies in the region? Acevedo et al's article in this volume asks how changes in the currency composition of public debt have affected the nature of financial risk in a number of EMEs, including Brazil, Colombia and Uruguay. They find that given the exchange rate appreciation observed in recent years, debt ratios would have been smaller had there been no changes in the composition of public debt structures. This is illustrative of how governments in the region (and broadly speaking in EMEs) have taken advantage of the benign international environment to transform debt structures even at the expense of such short-term costs. The authors also perform counterfactual exercises for financial turbulence scenarios (similar to those seen in recent crisis episodes) finding reductions in the debt vulnerability of these economies, even once the short-term costs associated with the transformation of debt structures are taken into account. However, such reductions are not uniform: while gains are notorious for Brazil, where debt structures have been biased toward foreign currency denominated debt, they are less so for Colombia or Uruguay. Overall the paper highlights that changing the currency composition of debt requires balancing possible short-term costs with long-term gains arising from a structure less dependent on foreign currency debt.

Participants agreed that financial stability had improved as the mechanisms amplifying the effects of exchange rate fluctuations on balance sheets had been mitigated eg currency mismatches (see evidence in Jeanneau and Tovar (2008b)). However, concerns were raised regarding the transitory or permanent features of the development of domestic markets. Others also warned that markets may disappear at times of stress.

Another issue highlighted was that the impact of capital market integration on financial stability may depend on the efficiency with which the market allocates resources and on the instrument availability for distributing risk. Therefore, weaknesses in these areas were thought to increase vulnerability to sudden shifts in capital flows.

Dual objectives of price stability and financial stability were also considered an area of tension and an obstacle to a free floating exchange rate. In this regard, participants indicated that restricting exchange fluctuations should be seen not as a countercyclical monetary policy measure but rather as an element of risk management in a context of incomplete markets that leads to excessive risk taking. In such a context, central bank measures dealing with capital flows, such as intervening in the foreign exchange (FX) market, would be justified. However, there was no consensus on how to determine the correct strategy for FX intervention. For instance, some said the focus should be on the real rather than on the nominal exchange rate, that the expected time horizon of capital flows should be taken into account and/or the capacity to sterilise interventions without compromising the inflation target had to be assessed. Nevertheless, the arguments supporting active intervention in FX markets were not shared by all, mainly due to its counterproductive side effects. Those on this side of the debate indicated that FX interventions often led to one-sided bets, thus fuelling more capital inflows and exchange rate pressures. For this reason, by placing two-sided bets, freely floating regimes were said to be superior alternatives, which endogenously trigger stabilising mechanisms to avoid snowball effects on exchange rates or capital flows as seen in the past. Another argument against interventions was that an implicit quarantee for stability often creates an implicit one for bailing out investors in bad times, thus distorting the incentives for developing adequate risk management instruments. As discussed in Section 2, the lack of agreement on exchange rate management seemed to be related to the fact that, for some participants, exchange rates play a dual role: for financial stability and for the competitiveness of the real economy, while for others, the focus of monetary policy is exclusively price stability. Nonetheless, most agreed that creating the incentives for financial markets to develop risk management instruments is fundamental.

7. Vulnerabilities and remaining challenges

The current favourable financing conditions for Latin America are partly the result of a combination of high commodity prices and a very benign international financial environment. The belief among most participants that the current external environment was unsustainable led to cautious views about the medium-term prospects for the region, in particular given that a scenario like this was last seen in the 1970s and ended up in a boom-bust cycle. Certainly, the extent to which one should be concerned about a bust in the region is unclear. For sure, global financial conditions have been changing recently, thus key questions that remain unanswered are: (i) how the crisis that began in the US subprime market will unfold; and (ii) how EMEs, and particularly Latin America, would adjust in the face of a major correction in financial markets.

Despite the uncertainties surrounding the global financial system, it appears that Latin American economies are now more resilient to adverse conditions than in the past. As summarised here, the development of bond markets, debt management tools and practices, and regulatory policies are all elements supporting such optimism. Most countries in the region are also progressing in terms of fiscal, monetary and exchange rate policies. Nevertheless, policy makers must continue to be alert for possible financial weaknesses, as many do remain. For this reason, meeting participants stressed the need to avoid any complacency with regard to the progress made so far. Financial markets still need to be further developed and strengthened.

References

Acevedo, P, E Alberola and C Broto (2008): "Local debt expansion and vulnerability reduction: an assessment of six crises-prone countries", in this volume.

Ananchotikul, S and B Eichengreen (2008): "Plumbing for Latin American capital markets", in this volume.

Armas, A, A Ize and E Levy-Yeyati (2006): *Financial dollarization: the policy agenda*, Palgrave Macmillan [In Spanish: *Dolarización Financiera: la Agenda de Política*, Banco Central de Reserva del Peru].

Bank for International Settlements (2007): "Financial stability and local currency bond markets", CGFS Publications, no 28.

——— (2008): "Transmission mechanisms for monetary policy in emerging market economies", *BIS Papers Series*, no 35.

Jeanneau, S and C Tovar (2008a): "Latin America's local currency bond markets: an overview", in this volume.

——— (2008b): "Financial stability implications of local currency bond markets: an overview of the risks", in this volume.

——— (2008c): "Domestic securities markets and monetary policy in Latin America: overview and implications", in this volume.

Ocampo, J and R Vos (2008): "Policy space and the changing paradigm in conducting macroeconomic policies in developing countries", in this volume.

Quispe, M and D Vilan (2008): "Financing trends in Latin America", in this volume.

Scatigna, M and C Tovar (2007): "Securitisation in Latin America", *BIS Quarterly Review*, September, pp 71–82.