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Securitisation in Latin America[1]

Securitisation can transform ordinarily illiquid or risky assets into more liquid or less risky ones. Despite the recent rapid growth of securitisation, the Latin American market remains in its infancy, as reflected in the size and type of assets involved in transactions. Because of its benefits, further encouragement should be given to promoting this financing technique in the region. However, careful attention should also be paid to the associated risks.

JEL classification: G150, G180, G210, O160.

Securitisation in Latin America has expanded rapidly in the last five years. However, the small average size of issues and their lack of secondary market liquidity suggest that the market for securitised assets remains in its infancy. Furthermore, there has been a high degree of heterogeneity in this regional development. Just two countries, Brazil and Mexico, accounted for three quarters of all domestic securitised issues launched in 2006. Although this partly reflects differences in the size of the economies and in the degree of development of regional financial systems, it may also be indicative of the relative novelty of the legal frameworks governing securitisation in some countries.

Structured finance can have a positive influence on the financial system because it can transform ordinarily illiquid or risky assets into more liquid or less risky ones. It thus offers an alternative source of long-term funding in both domestic and cross-border markets, and can foster the development of domestic bond markets. In turn, this could promote greater bank and financial market efficiency, as it implies greater competition to meet customer financing needs.

The securitisation process in Latin America has already contributed to enhancing the liquidity of domestic residential mortgages and consumer loans. This is similar to the experience in other regions of the world, such as Asia. However, the process has differed in various respects. First, the crises of the

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late 1990s and early 2000s delayed and in some cases interrupted the introduction of new laws to improve the legal structure required for the securitisation process. In Asia, such crises had the opposite effect as they seemed to encourage new legislation. Second, some instruments aimed at transforming credit risk, such as collateralised debt obligations (CDOs), are rather underdeveloped in the Latin American market. This contrasts with the experience in Asia, where these instruments have expanded rapidly (Gyntelberg et al (2007)).

This special feature analyses the key features of the securitisation process in Latin America. It starts with a brief description of how the process works. An assessment of the development of the market in the region in both the cross-border and the domestic segments follows. The next two sections highlight the main benefits derived from this financing technique and discuss some of the challenges and risks associated with it. A final section concludes.

The process of securitisation

Securitisation transforms illiquid or risky assets into liquid or less risky ones

The securitisation process allows institutions to pool non-marketable assets or cash flows into a larger marketable asset, which is then sold to investors in the form of securities. These are secured by the underlying pool of assets and its associated cash flow.[2]

Securitisation usually encompasses the issuance of securities through an off-balance sheet process involving a special purpose vehicle (SPV) or trust. In particular, once the originator has selected a pool of assets from its portfolio, these are then sold to the SPV.[3] This entity legally separates the underlying assets from the originator and finances the purchase of the assets by issuing securities to investors, while holding the assets in trust.[4] Once the securities are issued, the interest and principal of the underlying assets are collected and managed by a "servicer" and rechannelled to investors through the SPV. Often, the SPV also insures the pool of assets against default, thus improving the quality of the underlying assets through a process known as *credit enhancement*. This can take several forms, including overcollateralisation (according to which the value of the assets exceeds the value of the securities issued), insurance contracts, letters of credit, subordination of tranches that absorb losses first and the use of sponsor agencies (eg governments or multilaterals) to guarantee payments or reserve funds.

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2 Different securitisation and more complex techniques exist today which can be applied to different asset classes and institutions. In developed markets, financial derivatives have allowed the introduction of synthetic securitisation in which the credit risk of the pool of securitised assets is transferred to a third party using credit derivatives rather than the direct transfer of ownership of assets.

3 Usually homogeneous assets in terms of credit quality, maturity and interest risk are chosen.

4 Legal separation is very important in the securitisation process as it determines whether, in the event of bankruptcy of the original holder, the assets pledged continue to service the issue on the terms originally agreed on, thus making the SPV "bankruptcy-remote".

Securitisation trends in Latin America

Securitisation has expanded rapidly …

Structured transactions have expanded rapidly in Latin America since 2003. The amount of new securitised transactions in the region reached a total of $20 billion in 2006, from only $6 billion in 2002 (Graph 1). Of the 2006 total, over $16 billion represented issues in local markets, while transactions in the cross-border market amounted to just $3.6 billion. Despite these favourable trends, the market for securitised products in Latin America remains small, in particular when compared with those of developed regions and other emerging markets, such as Asia (Gyntelberg et al (2007), Gyntelberg and Remolona (2006)).

…evolving from a cross-border market …

Broadly speaking, the development of securitisation in Latin America can be split into three stages. In the first stage, prior to the crises of the late 1990s, the market was dominated by cross-border transactions (Graph 1). At this stage, securitised assets or future flows were denominated in foreign currency, and financing was restricted to the largest, most financially sound and most creditworthy originators in each country.

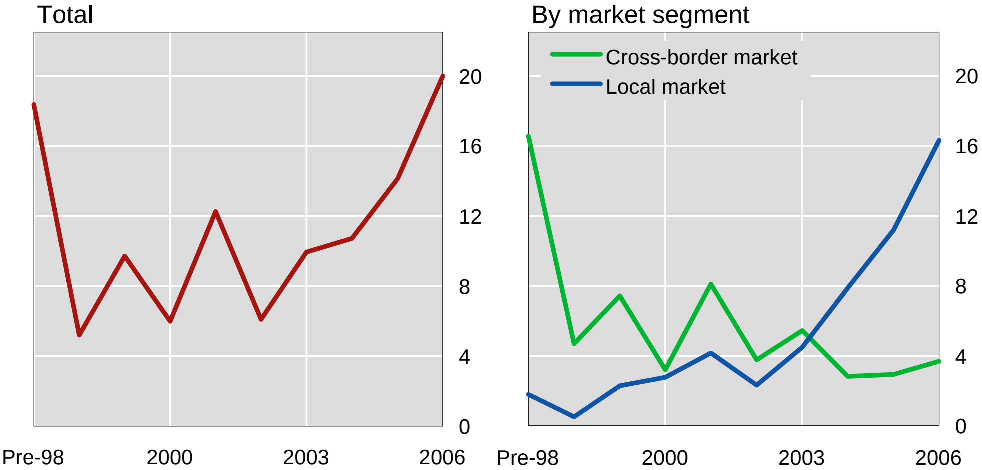
The second stage started with the advent of the financial turmoil in the late 1990s, followed by further market instability in the wake of the Argentine default in 2001 and the events surrounding the presidential election in Brazil in 2002. During this period, cross-border issuance was volatile at well below pre-crisis levels (Graph 1). Nonetheless, while other markets in the region were stagnant, structured finance actually began to expand in Chile and Colombia, partly due to the introduction of new legal frameworks, which lent an initial dynamism to mortgage-backed securities (MBSs).[5]

… to a local market …

The third stage began around 2003 with a vibrant market recovery in which second-tier originators, lacking access to international markets,

Latin American securitisation

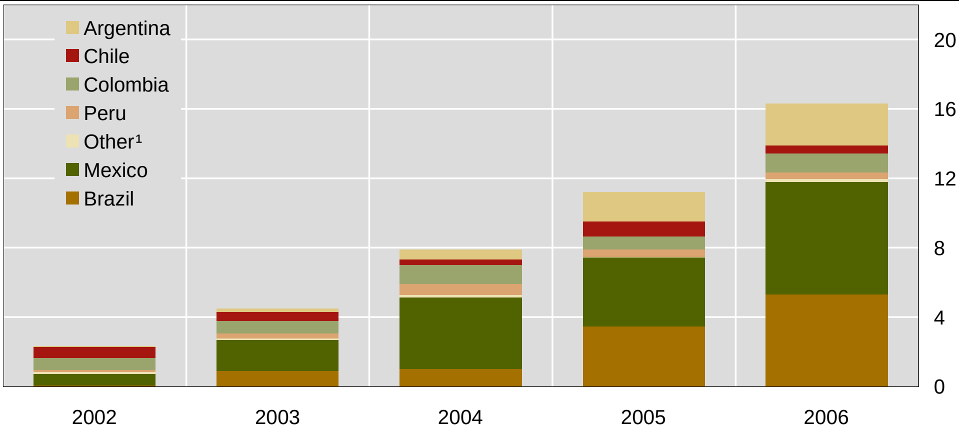
In billions of US dollars



Source: Fitch Ratings. Graph 1

[5] In Chile, a law that stimulated the market was the Ley de Mercado de Valores of 1981, last amended in 2002. In Colombia, it was the enactment of Law 546 of 1999.

Latin American local market securitisation issuance
In billions of US dollars



[1] Bolivia, Central America, Ecuador and Venezuela.

Source: Fitch Ratings. Graph 2

increasingly turned to low-cost financing through securitisation in domestic markets. The securitisation of commercial and residential mortgages, auto and consumer loans and trade receivables all began to expand rapidly, with the result that the cross-border market became overshadowed by the local market.

... with heterogeneous development across the region

A country breakdown of local market securitisation issuance indicates that developments in Brazil and Mexico were in large part responsible for the aggregate expansion in the region. A number of legal initiatives paved the way for a more viable securitisation process (see the box). In 2006, issuance in these markets reached \$5.3 billion and \$6.5 billion, respectively, representing together nearly three quarters of the region's total local market issuance (Graph 2). The Argentine securitisation market is the third largest in the region. Although it has also been expanding, its structure still reflects the effects of the 2001 crisis. In particular, guaranteed loans backed by the government (debt known as "préstamos garantizados") still accounted for about 15% of total domestic issuance in 2006. The Chilean and Colombian markets have lost some momentum in recent years, after showing promise in the second stage noted above. For instance, Chile has seen a significant slowdown since 2004, with issuance declining from a level of \$273 million in 2003 to just \$127 million in 2006.[6] This followed a prepayment crisis in the RMBS market and the emergence of alternative ways to fund mortgages in the form of credit notes. However, these markets are expected to resume growth in the near future, as is the Peruvian market.

Transaction breakdown

Traditional ABSs have surpassed future flow transactions ...

The types of assets involved in securitised transactions also indicate that the market is maturing (Graph 3). The most telling transformation has been the shift away from future flow transactions in the cross-border market towards

[6] In 2004, prepayment rates jumped to unexpected levels due to the drop in local interest rates.

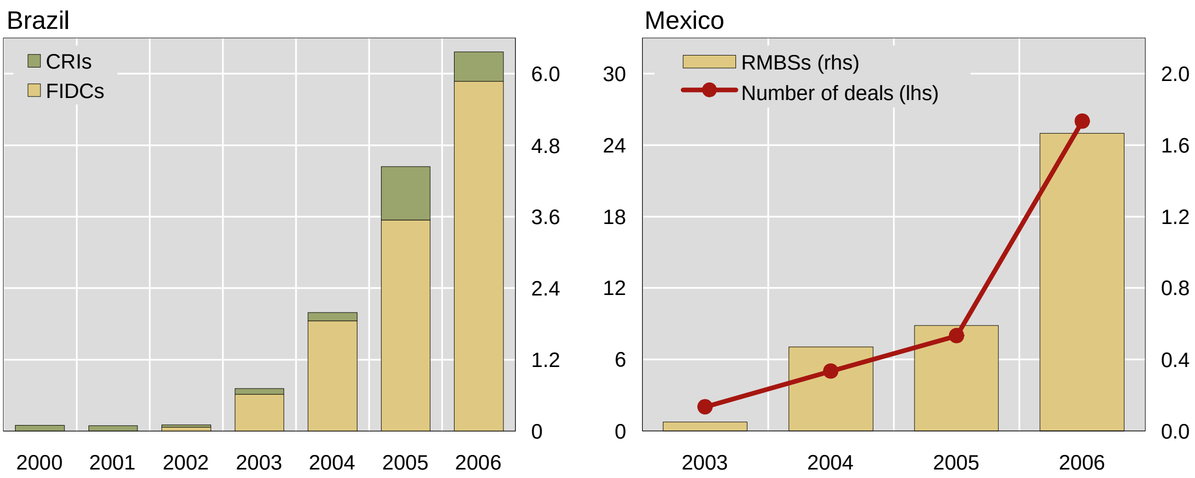
Elements of securitisation in Brazil and Mexico

Brazil and Mexico have become the two largest markets for structured securities in the region. In both cases, improved macroeconomic performance, fiscal and monetary management, and the introduction of new securitisation frameworks have accounted for the expansion.

In Brazil, the introduction in 2001 of Fundos de Investimentos em Direitos Creditórios (FIDCs) prompted the recent growth. FIDCs are "bankruptcy-remote", low-cost issuing vehicles, which have given companies an alternative to traditional bank credit. The types of underlying assets supporting these transactions include payroll-deductible personal loans (creditos consignados), vehicle loans, credit cards, utility bills and commercial flows. By sector, financial institutions lead the origination of receivables (40%), followed by service utilities and retail (26% each). Most of the deals nowadays are placed in the public capital markets, which contrasts with the use of private placements in the early stages of FIDC development. While FIDCs have experienced sustained growth since 2003, residential mortgage-backed securities (RMBSs) and commercial mortgage-backed securities (CMBSs) have exhibited a more volatile trend and remain underdeveloped, representing only 9% of all structured transactions executed in 2006. In this segment, the real estate backed Certificados de Recebíveis Imobiliários (CRIs) issued by securitisation companies represent most of the transactions.

Securitisation in Brazil and Mexico

In billions of US dollars



Sources: Comissão de Valores Mobiliários (CVM); Fitch Ratings.

Mexico has the largest RMBS market in the region. Much of this development is due to a strong political effort directed at offsetting a very large housing shortage (estimated at around seven million units) and to a number of legislative reforms. In 2001, the Mexican federal government established a federal mortgage institution (Sociedad Hipotecaria Federal – SHF). This development bank was created to grant loans and guarantees for the financing and construction of housing, and to help the securitisation of credits granted through the financial intermediaries. Acting as a wholesale mortgage bank and guarantor, the SHF: (i) provides long-term funding to financial intermediaries and hedges interest rate risk; (ii) provides mortgage insurance; and (iii) ensures timely payments on bonds. As a result, it has filled an important gap related to the lack of government guarantees, which are required in order to introduce MBSs in secondary markets. However, by law, the SHF will not be allowed to fund financial intermediaries after 2009. This means that alternative methods to fund mortgages will have to emerge, and there are plans to develop a securitisation market for mortgages as the main source of funding for the housing market. Also, although all the securities the SHF currently handles are fully backed by the federal government, this will change in October 2013, as the SHF will have to become self-supporting.

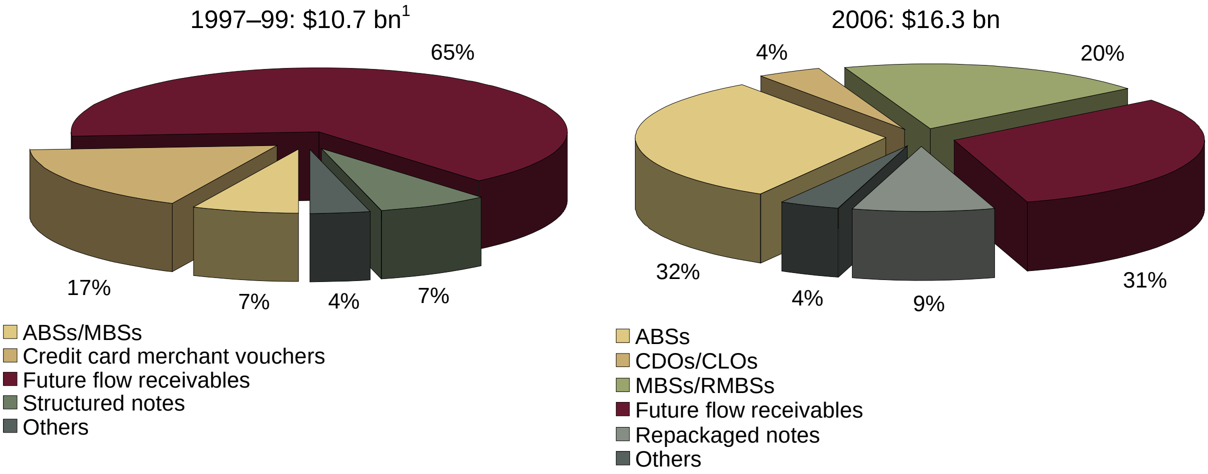
more traditional asset-backed securities (ABSs) in the local market. Indeed, while export receivables and credit card receivables dominated the market in the 1990s, by 2006 a more diverse asset structure had begun to emerge.

A number of specific developments have contributed to this change in the landscape. First, there have been placements of sub-investment grade structured issues. Second, CDOs began to make their appearance in 2006, with Brazil seeing the first CDO transaction in the local market.[7] Third, in Mexico there have been successful placements of ABSs in which the underlying collateral has income flows denominated in pesos while the bonds are denominated in hard currencies. Of course, such a structure creates a currency mismatch that requires developed swap markets to hedge exchange rate risk. Given that swap markets elsewhere remain underdeveloped, it is doubtful that other countries in the region will be able to emulate this feature of the Mexican market in the near future. These transactions have been encouraged by improving sovereign credit ratings and the maturing of local currency markets, which have obviated the need for the credit enhancing techniques characteristic of future flow transactions to access the market.

… but there is still little activity in CDOs

Despite the progress made so far, much remains to be done. For instance, with the exception of Brazil and Mexico, structured transactions tend to be dominated by one type of asset. In 2006, credit cards had a 45% share of all transactions in Chile, RMBSs had a market share of 60% in Colombia, and in Peru 46% of all transactions related to future flows (Fitch Ratings (2007b)).

Latin American local market breakdown by asset



[1] Includes national and global issues rated by Standard & Poor's.

Source: Authors' regrouping based on Fitch Ratings and Standard & Poor's.

Graph 3

[7] In Argentina, collateralised loan obligations (CLOs) have been issued for a number of years. However, due to the sovereign default of December 2001, these operations have been essentially restricted to small and short-term transactions with export-oriented agricultural industries.

Benefits of securitisation

Securitisation can offer important benefits to the region. For instance, it may help complete financial markets,[8] mitigate sovereign risk, improve the resilience of markets in periods of stress, and provide a source of funding for the housing finance system.

Completing domestic financial markets

Securitisation can improve liquidity and credit quality …

Securitisation can help complete domestic financial markets in two principal ways. First, it can create liquid assets from the pooling of relatively illiquid ones, such as residential mortgages, household credits and other receivables. Second, it can improve the credit quality of the structured asset through credit enhancement techniques. In this way, securitisation can help bridge the credit quality gap between the instruments borrowers are able to offer and those investors prefer to hold. In the region, transactions aimed at creating instruments with better credit risk profiles than those of the underlying assets, such as CDOs, remain limited. Indeed, in 2006 such instruments accounted for only 3%, 10% and 6% of total assets in Argentina, Brazil and Mexico, respectively.

Mitigating sovereign risk

… mitigate sovereign risk …

Cross-border securitisation proved a viable funding option in Latin America for many years because it provided a vehicle to mitigate sovereign risk. Domestic firms often faced historical constraints in financing themselves abroad, even when they themselves had a good credit record, because of low sovereign ratings and perceived political risk. Structures known as future flow securitisations (FFSs) allowed some firms to successfully tap international capital markets in spite of these constrains, even in periods of stress.

FFSs are debt securities in which the originator arranges for future foreign currency receivables (income streams) to be transferred to an offshore account held by an SPV outside the jurisdiction of the originator’s country. The offshore SPV is intended to make it difficult for the government to interfere, thus mitigating political risk. Furthermore, most FFSs are not only overcollateralised, as they have a greater income stream than necessary paid into the trust account servicing that debt, but also have built-in credit enhancements in the form of bond insurance. Also, by ensuring that the payments go to the offshore trust, the FFS structure mitigates sovereign transfer and convertibility risk.

Today, the popularity of FFSs has significantly decreased, partly because of currently low sovereign spreads and partly because of the expansion of domestic bond markets in the region. It seems probable that, as long as credit quality continues to improve, the need for cross-border FFSs will remain subdued.

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8 For a complementary analysis of local currency bond markets in Latin America, see Jeanneau and Tovar (2006).

Securing financing in turbulent times

... help secure financing in periods of stress ...

Domestic securitisation markets could help secure financing in periods of stress should international credit markets shut down. Argentina offers an interesting example in this regard. During the Argentine crisis, some securitised assets performed better than straight, unsecured debt or other products. In particular, consumer loans remained performing both during and after the crisis. This was possible for two reasons. First, the underlying bonds were issued in pesos, so originators with income flows in pesos were able to continue to service the payments on the underlying bonds despite the currency depreciation. Second, although there was a spike in delinquencies and defaults of the underlying assets, the credit enhancements were sufficient to prevent any payment defaults on the bonds (Fitch Ratings (2007b)).

Funding for housing finance

... and contribute to reducing the housing deficit in the region

The securitisation of residential loans can be an important alternative or enhanced source of funding for housing finance. The pooling of mortgages and the creation of new securities sold in the secondary market provides a mechanism through which loans can be made without their being funded by deposits. In this manner, securitisation addresses a possible maturity mismatch problem that could constrain the extension of housing loans. Further, it alleviates the geographical concentration of loan activity as well.

In the region, the need for new sources of funding for housing finance is particularly high; the housing deficit is currently estimated at around 54 million units. From this point of view, the development of secondary structured markets can also help fulfil an important social and economic development role.

Looking forward: challenges and risks

Favourable outlook for securitisation in the region, but ...

Asset securitisation in Latin America has experienced significant growth in the last five years. A more stable macroeconomic environment coupled with legislative changes has been the main factor behind this expansion. However, this market remains in its infancy; its size is small and the assets involved in the transactions are not well diversified. This section highlights some key challenges that could hamper the development of securitisation in the region, as well as some of the risks that can arise from structured operations.

Small scale of markets

… some markets are small …

For securitisation to be economically viable, the volume of pooled assets must be such as to justify the cost of the process. In Latin America, some asset classes are not yet developed enough to warrant their pooling. For instance, given that corporate bond markets in the region are restricted to first-tier and highly rated companies, and that no market for second- or third-tier corporate bonds exists, the region has been unable to benefit from the securitisation of higher-risk corporate debt.

Legal framework

… legal frameworks can still be improved …

Effective securitisation relies heavily on the legal framework of the country in which the operation takes place. Any regulation that hinders the transfer of the underlying asset to be securitised, or that results in an unclear allocation of property rights, will affect both the ease of the process and the range of eligible assets. A number of regulations aimed at improving the legal infrastructure for securitisation have been put in place in most countries in the region. However, some fine-tuning and improvements could further promote this financing technique.

In the case of Mexico, the development of securitisation remained limited for a long time owing to a ban on trusts ("fideicomisos") issuing debt, as well as to overly long foreclosure proceedings. For such reasons, securitisation only became possible after important legal amendments were introduced. In 1996, laws were passed allowing for more expedient foreclosure proceedings and an easier transfer of mortgages. In 2000 and 2003, further progress was made as regulations were introduced allowing Mexican "fideicomisos" to become SPVs. Furthermore, a 2001 amendment to the Securities Market Law of 1975 introduced the "certificado bursatil", which SPVs found attractive to issue.

In the case of Brazil, the structured market has benefited greatly from the introduction in 2001 of credit rights funds or FIDCs. Notwithstanding this and other regulatory changes introduced to stimulate the securitisation of a broader set of assets, RMBSs and CMBSs remain underdeveloped.[9] The lack of a clear and effective foreclosure process and legal issues related to the effective transfer of debt obligations have been important impediments to the development of mortgage securitisation.

Information constraints

… as can information disclosure …

Asset securitisation is an information-intensive process. In order to structure a transaction, a number of facts regarding the nature of the assets pooled and their performance need to be disclosed. First-time originators in emerging markets often fail to take this aspect into consideration, increasing the time and costs of the structure (Fitch Ratings (2007a)). For these reasons, companies involved in securitisation need to be committed to developing appropriate information management systems as well as the capacity to support such transactions, including credit origination and servicing procedures.[10]

In Latin America, constraints on the availability and use of data complicate risk assessment and the overall process of securitisation. This is partly due to the lack of appropriate databases. Furthermore, some assets being securitised

[9] Law 9514 of 1997 introduced the legal framework for the creation of CRIs, ie mortgage-backed securities. The same law introduced the "alienação fiduciária", which transferred the ownership of the property from the borrower to the trustee for the duration of the loan.

[10] This might include complete and clear policies and procedures for: credit underwriting; the valuation, registration and monitoring of collateral; the standardisation and documentation of legal contracts; rigorous monitoring; provisioning; and information reporting systems.

have relatively short credit histories (eg mortgages), which complicates their analysis over a full economic cycle.[11]

Moreover, even if data are readily available, they need to be processed correctly. One potential problem is that the calculation of certain indicators may differ from one country to another. An illustration of this is the calculation of delinquencies. According to international standards, if a borrower is late in paying, then the entire outstanding exposure must be classified as delinquent. However, in emerging market countries, delinquency may be assessed differently. Many companies have outstanding pools of loans, leases or receivables with government agencies which fail to be serviced for a period of time but are eventually fully paid (Fitch Ratings (2007a)). For this reason, they are usually not classified as being in default, regardless of the length of time they have been delinquent. This can create unanticipated problems for investors. Securitised portfolios must be able to make timely payments to investors, as these payments are funded only by the cash flow generated by the underlying credits.

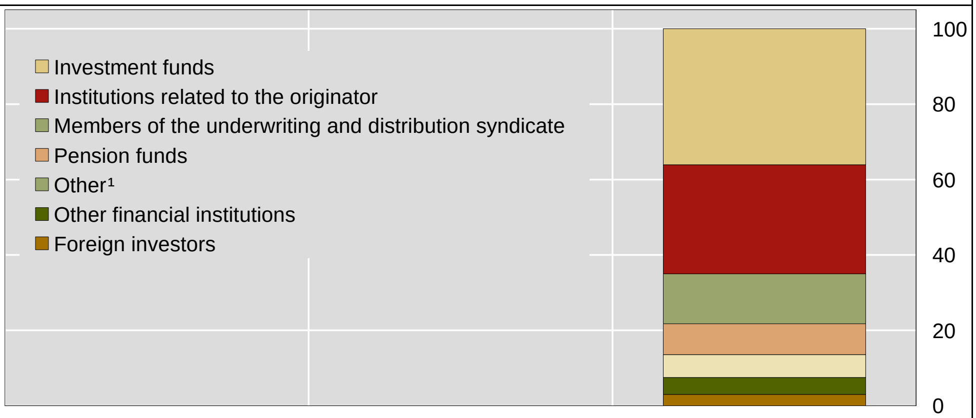
Broadening of the investor base

… and the investor base remains narrow

The existence of a significant demand for structured securities is obviously crucial for the development of these markets. Although the local investor base in the region has strengthened, its size remains small. In Brazil, for instance, the market began with just a few private local investors and a multilateral institution. Today this market is dominated by three main types of domestic investor, leaving foreign investors less well represented (Graph 4). Across the region, restrictions on investments by institutional investors and the resultant

Investor base in the Brazilian securitisation market, 2006

Issuance as a percentage of the total



[1] Commercial banks, individual investors, insurance companies, investment clubs and other institutional investors.

Source: Uqbar (2007). Graph 4

[11] Fitch Ratings lists a number of data requirements for securitisation. For instance, there are information needs regarding the characteristics of individual obligors (location, creditworthiness, etc), the structure of receivables (original amount, term, interest rate, currency denomination, outstanding balance and remaining term), and the characteristics of the underlying collateral.

lack of sophistication could help explain the still narrow investor base. This last point is well illustrated by the Mexican experience. There, pension funds could formerly only invest in government paper. When this changed, they lacked sufficient asset management expertise and thus focused on the obligations of top-tier companies only.

Risk considerations

Securitisation can create new risks due to …

The development of asset securitisation can generate new sources of risk. Examples would include difficulties in evaluating credit risk, conflicts of interest associated with rating agencies, prepayment risk and the interest rate denomination of securities.

… difficulties in assessing credit risk …

Investors' ability to assess the credit risk attached to structured products can be weakened by the complexity and financial sophistication involved in creating new instruments. Anecdotal evidence suggests that investors cannot always adequately assess the risks attached to the different tranches (eg mezzanine and equity tranche) that constitute the final product. The limited availability of good data on credit histories is another consideration, since this weakens the ability to forecast defaults on underlying obligations. Finally, the volatile macroeconomic environment that has historically characterised Latin American economies is also not helpful when credit risks are being evaluated.

… conflicts of interest associated with rating agencies …

The reliance on credit rating agencies in structured finance markets can also be a source of risk. In early stages of the development of securitisation, new issues are relatively simple to rate as they involve homogeneous assets such as residential mortgages, for which default probabilities are relatively easy to calculate (albeit subject to data constraints) via the law of large numbers. However, as markets develop, less homogeneous assets are pooled through more sophisticated structures. In this context, rating agencies become more closely involved in the structuring and issuing process, and this may create conflicts of interest as their fees depend upon the completion of the securitisation process (BIS (2005)).

… prepayment risk …

Prepayment risk may also be a concern, in particular for MBSs. In some countries, mortgage borrowers can prepay their mortgages at any time and can force issuers to call their securities. When investors face such a change in the duration of their portfolios, they attempt to return to their target duration by replacing the called securities with newly issued mortgages, standard fixed income securities or positions in government bond futures. In turn, this creates pressures on the price of fixed income securities and, consequently, interest rates. Such a destabilising spiral of events can heighten market volatility or slow market development, as occurred in Chile in 2004. Interest rates in Latin America have historically been more volatile than those in more developed countries. It remains an open question whether this greater volatility could translate into greater prepayment risk.

… and the interest rate denomination of the securities issued

Finally, the type of interest rate paid on securities issued to support the securitisation transaction can also be a source of risk. In Latin America, most transactions have involved securities that are either linked to an inflation index (eg RMBSs in Brazil or Mexico) or are set in such a way as to allow a mismatch between the rate of return on the collateral and that of the security issued.

Short-term interest rate and inflation-linked securities can provide a degree of investor protection which makes the transaction more attractive. However, particularly in a highly volatile environment, if the underlying pool of assets does not have the same cash flow characteristics as the bonds issued, then the cash revenues of the original assets may be insufficient to cover servicing requirements. Although credit enhancements offer a means of dealing with such mismatches, it is not clear how sufficient these enhancements would be in times of stress. As of today, few transactions in the region have involved fixed rate securities. In fact, only one such transaction has been made in the Mexican RMBS market (April 2006).

Concluding remarks

While securitisation in Latin America has grown rapidly in recent years, the market remains in the early stages of its development. Securitisation can offer important benefits to the region, in particular by consolidating the development of domestic financial markets and improving their resilience. Because of these benefits, further attention should be given to promoting and developing a sound infrastructure to support securitisation. In this regard, a number of challenges need to be addressed to ease the process and lower its costs. At the same time, the recent experience in developed markets provides a warning signal about some risks that can also be associated with the securitisation process.

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