Securitisation in Emerging Markets: observations from the Mexican capital market

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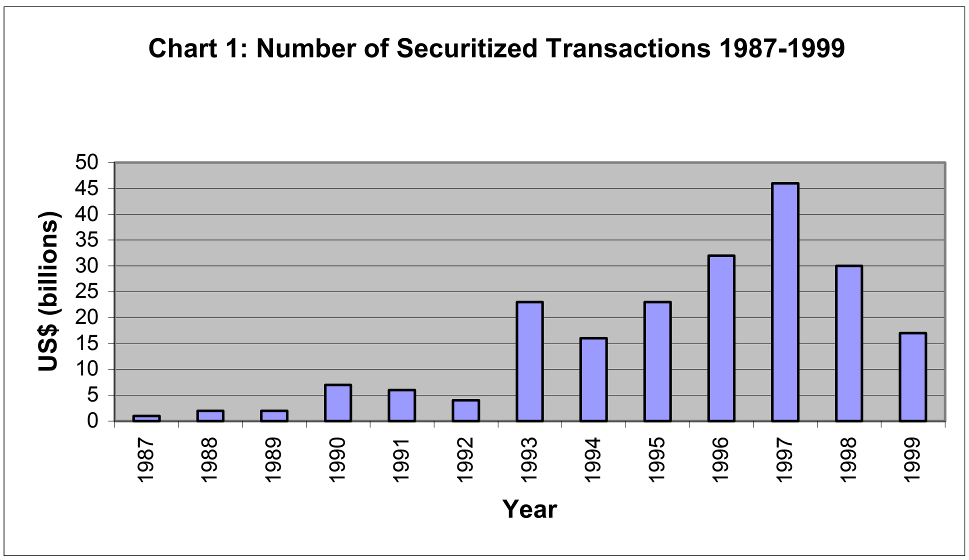
Abstract
This article considers the experience of securitisation of future receivables in Mexico, where the impact of the "Tequila Effect" resulted in both the sovereign government and corporates considering new ways of raising finance.

Securitisation structures frequently result in the originator of the issued securities benefiting from a credit rating higher than the "sovereign ceiling" on the debtor's home jurisdiction. This in turn dramatically improves the securities' marketability. Thus this technique lends itself to application in emerging markets, where the sovereign ceiling can act as a barrier to the raising of affordable capital. In Mexico, the main constraints to securitisation have been legal and regulatory aspects of Mexican law, which would appear to require further development to enable the mechanism to be used on a larger scale.

Introduction

The first important future flow securitised transaction in a developing country occurred in 1987 with the securitisation of telephone receivables from the Telmex company in Mexico. The market has developed from there. By the end of 2001, the three principal rating agencies—Fitch IBCA, Moody's, and Standard and Poor's—had rated more than 150 future flow securitisations, with total principal exceeding $36 billion, in developing countries. The issuance of future flow receivable-backed securities has increased, with growth marked since the Mexican crisis of 1994-95 (Chart 1).

From that year, the rating agencies have collectively rated well over 200 securitisations with the aggregate principal amount totalling US$47.3 billion[1].



Source: S uhas Ketkar and Dilip Ratha 2001.

The majority of securitisation transactions that have occurred in Mexico to date are future receivables transactions, which have involved an offshore dollar cash flow. The typical offshore dollar receivables transactions are credit cards, and these assets have been securitised by several banks. Unlike traditional credit card securitisations that are backed by existing amounts due from the credit card banks, these transactions involve the securitisation of the future flow of dollars due to Mexican banks that have processed credit card charges made by foreigners in Mexico[2].

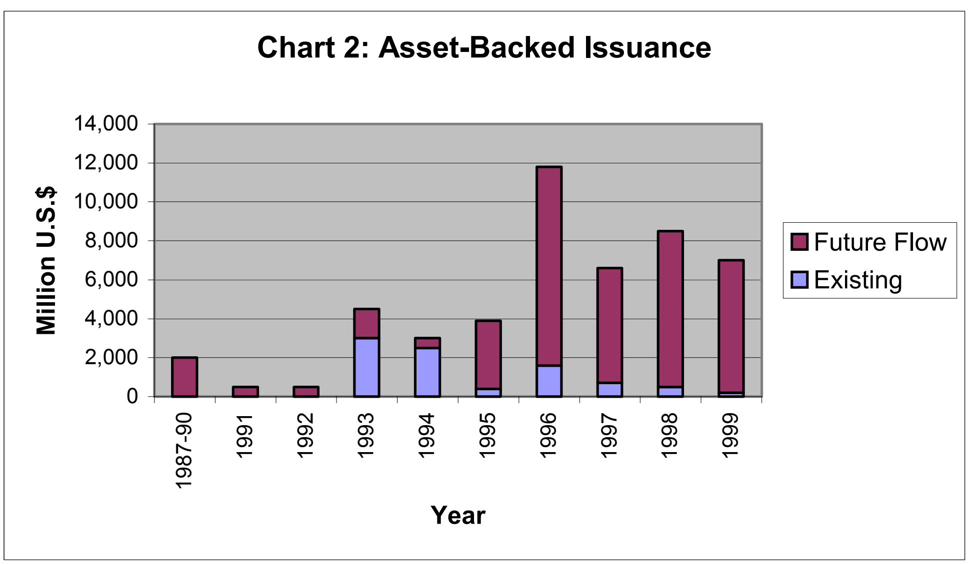
[1] Suhas Ketkar and Ratha Dilip 2001.
[2] Ministry of Finance and Public Credit , The National Banking and Securities Commission and The Bank of Mexico. 1999.

On the domestic market where structured financial deals were once extremely uncommon, there has been activity on three fronts in recent years, in accounts receivables, in toll roads and in the mortgage and home-building sector[3].

For example, in July 1997 the electric-appliance chain Elektra Group began the first in a series of placement programs of securitised certificates on the Mexican Stock Exchange. This company has now made nine such asset-backed issues on the exchange, a total of US$381m. In February 2002, Elektra placed Ps750m in three-year receivable-backed securities. In one of two domestic securitisations of toll-road receivables during 2001, Empresas ICA (Mexico's largest construction firm) in March issued securities for Ps180m in UDIs (Unidades de Inversion-instruments created in the high inflation climate that followed the 1994 peso devaluation), backed by tolls on the Autopista del Sol highway. The third area of nascent activity in local structured finance is in the homebuilding sector. Mexico's largest low-income home builder, Geo Corporation, made a pilot issue of Ps133m in April 2000 and followed that with another placement for Ps167m in December 2000. A year later Geo placed its third issue of Ps100m.

The securitisation of future flow receivables as a financing mechanism increased in pace after the Mexican peso crisis in 1994-95 as sovereign ratings were downgraded and borrowing costs rose in major Latin American countries (See chart 2)[4].

In this article we introduce the framework of securitisation in Mexico. We then consider [three] case studies that highlight the asset classes used in structured finance transactions to date.



Source: Suhas Ketkar and Dilip Ratha. 2001

[3] Country Finance.2002.

The Framework of Securitisation in Mexico

We consider first the overall framework of securitisation in the Mexican capital market.

Financial Institutions Involved in Credit Organization

Under Mexican law, the granting of credit alone is not considered to be an activity subject to regulation. However, if credit granting is made with resources founded by the public, through deposit taking or securities issuance, then it is considered financial intermediation and is subject to financial regulation. The Mexican financial system adopts a universal banking approach under which a variety of financial services can be provided through a financial group. However, unlike European markets such as Germany or Spain, where a single financial institution can provide all types of financial services, under Mexican law each financial entity can only engage in the financial activities expressly authorized for that type of institution.

Effects of Bankruptcy on Transfer of Assets

Under Mexican law, there are certain special circumstances where even though a transfer has legally occurred, the transferor or the creditors of the transferor may be able to nullify or cancel the transfer. This is sometimes the case in the event of the bankruptcy of the transferor, which is of particular concern in connection with securitisation where the goal is to isolate the assets completely from the credit risk of the transferor/originator. In the event of bankruptcy if the transfer of assets is declared invalid, the assets will be considered property of the bankrupt seller. If the assets had been part of a securitisation, the investors may end up as creditors of the bankrupt seller. This is a potential barrier to the application of structured finance techniques in the debt markets. When a company defaults, in the case of a securitisation transaction, the originator and the issuer may enter into administration agreements for the servicing of the assets. Banks Secrecy Laws.

Under Mexican law, banks are required to keep confidential certain information pertaining to bank clients. The bank secrecy may be an obstacle to credit securitisation if the securitisation process requires specific loan-by-loan information, debtors can on a case-by-case basis authorize the release of information by a bank to third parties.

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[4] Suhas Ketkar and Ratha Dilip .2001.

Special Purpose Vehicles

In Mexico, most securitisation transactions have used trusts. However, there are several alternatives including special purpose corporations and mutual funds.

Trusts

A trust is a legal vehicle that has been used successfully in several securitisation transactions in Mexico. The principal advantage of a trust is that it is a flexible legal entity. The disadvantage is that trust services can be expensive. Most trustees are accustomed to charging a fee based on the value of the trust assets. However, with the more sophisticated trustees it is possible to negotiate an appropriate compensation that will not significantly burden the cash flows. Nevertheless, attempts at securitisation on a larger scale may be affected by a trust's limitations.

Special Corporation

This is a special purpose vehicle that may be used in connection with a securitisation. Although Mexican law provides for several different types of corporations, the one best suited for a special purpose vehicle is a "Sociedad Anonima" (normally referred to as S.A.).

A corporation has certain advantages and disadvantages as a vehicle to issue securities. The principal advantage is that the corporation is not restricted as to the type of instruments that it may publicity issue. Consequently, the corporation could issue short or long-term debt instruments as well as enter into a special contractual arrangement for the transfer of cash flows.

The potential disadvantages include:

a) Establishment and Operating Costs: The costs tend to be high because the corporation will be required to maintain full accounting records and make regular tax fillings. Nevertheless, it has to be noted that the costs associated with a corporation are not materially different from those associated with a trust.

b) Bankruptcy Risk: A corporation will always be subject to the risk of bankruptcy, whilst, under Mexican law, a trust is not subject to the bankruptcy law. However, it is possible to structure the corporation so that it is "bankruptcy remote" by limiting its activities and its ability to incur additional debt.

The corporation is, however, vulnerable to tax and labour claims, which under Mexican law come before claims of secured lenders. In addition, having several issues from the same corporation could have the problem that subsequent issues of securities would be affected by the fate of earlier ones. A new investor would have to evaluate the risk of bankruptcy of the corporation if earlier issues of securities were not successful. Thus, it would be difficult to isolate a pool of assets from the claims of other holders of securities issued by the same corporation.

Capital Adequacy

Mexican capital adequacy rules are consistent with the Basel Accord. However, as securitisation is not yet fully developed in Mexico, most of the capital adequacy issues relevant to securitisation have not been resolved. Mexican financial authorities have expressed concerns in the context of proposed securitisations that bank issuances could be perceived by investors as having the credit risk of the bank. They are concerned that banks will feel an implicit obligation to repurchase non-performing assets in order to protect the performance of the transaction and the reputation of the bank.

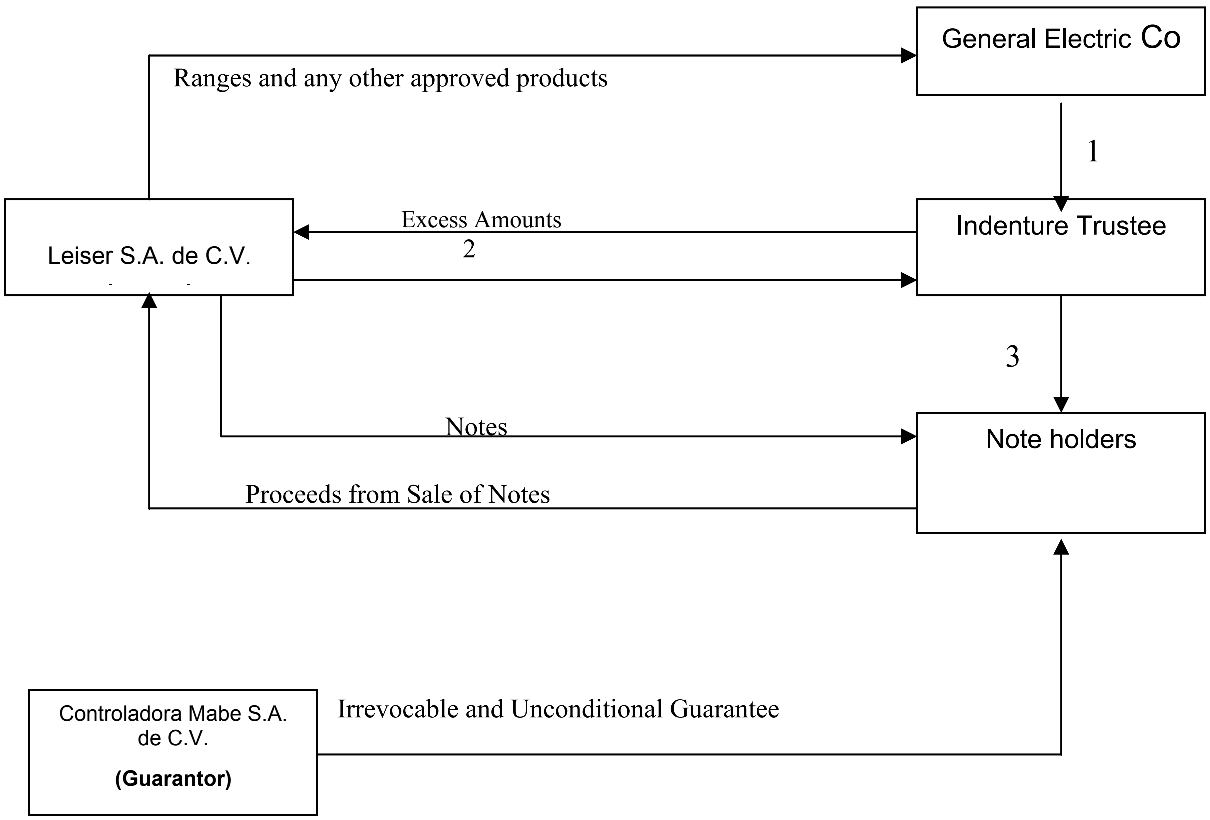
We now consider some case studies of Mexican securitisation deals which give an idea of the state of the Mexican market.

Case Studies

Leiser S.A. de C.V.

The structure diagram for this transaction is illustrated at Chart 3. The liabilities comprise US$250 million secured export notes, which have secured a BBB rating. The transaction closed in December 1999. The special purpose vehicle is *Leiser S.A. de C.V.,* a wholly owned subsidiary of Mabe. *Controladora Mabe S.A.* is a Mexican holding company that specializes in the production of white goods.

Chart 3: Leiser S.A. de C.V. Securitisation Structure



Source: Standard and Poors. 2000.

1: Proceeds from the sale of ranges and other approved products.
2: Pledge and assignment of the receivables and initial funding of reserve account.
3: Principal and interest payments.

In this structure, the receivables are generated from the sale of white goods to GE. in the US and Canada these were pledged by the issuer to an *indenture trustee* under US law. The indenture trustee controls a collection account on behalf of the note holders into which all payments will be deposited. The notes were US dollar securities placed with investors in the US market.

The transaction was rated, with notes rated at BBB and coupon fixed at 8.94%. Investors considered some of the risks of the transaction to be:

- Generation Risk: This securitisation is dependent on the issuer's continued existence and the generation of enough products. In this case, ranges for export to GE to meet all debt service requirements timely.

- Sovereign Risk: This transaction benefits from an offshore collection account. Also, Leiser's production capacity is well in excess of domestic demand, the country is a net exporter of the product, and the transaction's substantial over collateralization allows for the bulk of export revenues to be returned to Mexico even while debt service payments are being made.

- Credit Risk: Cash flows were stressed to take into account various scenarios, some of which included a decline in demand for ranges in the U.S. and Canada, and a loss in market share from the estimated current 40% for GE gas ranges and slightly higher for electric ranges in the same markets.

- Events of Default: If any event of default except bankruptcy or insolvency has occurred, the note holders may declare the notes immediately due and payable if at least 50% of them vote to take such action. The insolvency or bankruptcy of the issuer or guarantor is an automatic event of default and does not require note holder action to take effect.

Pemex Finance Ltd.[5]

Petroleos Mexicanos was established by a decree of the Mexican Congress passed on the 7th of June 1938, following the nationalization of the foreign owned oil companies then operating in Mexico. It is the Mexican state oil-and-gas company.

The Pemex Finance structure was organised for the purpose of issuing up to $5.0 billion in senior unsecured debt. It is similar in concept to a programme structure as observed in the European market. The proceeds of such debt were to be used to purchase current and future receivables generated from the scale of crude oil, and, in the event that such crude is unavailable for export, other crude oil, provided by PMI Services, an indirectly wholly owned subsidiary of Pemex. PMI Services in turn, purchases the receivables from P.M.I. Comercio Internacional S.A. (PMI) [6]. If a default occurs as a result of the failure of a designated customer to make a payment on a purchased receivable, the amount of cash flow available to pay debt service on the notes and to purchase current and future receivables will be reduced.

Table 1 shows the profile of the transactions recently carried out by the Pemex programme vehicle.

The programme structure is illustrated at chart 4.

[5] Standard and Poor's Reports.2000.
[6] Standard and Poor's Reports . 2000.

Table 1

1998 Notes (Dec 14,1998)	Rating
Tranche A-1 5.72% notes due 2003	AAA
Tranche A-2 8.02% notes due 2007	BBB+
Tranche A-3 6.25% notes due 2010	AAA
Tranche A-4 9.15% notes due 2018	BBB+

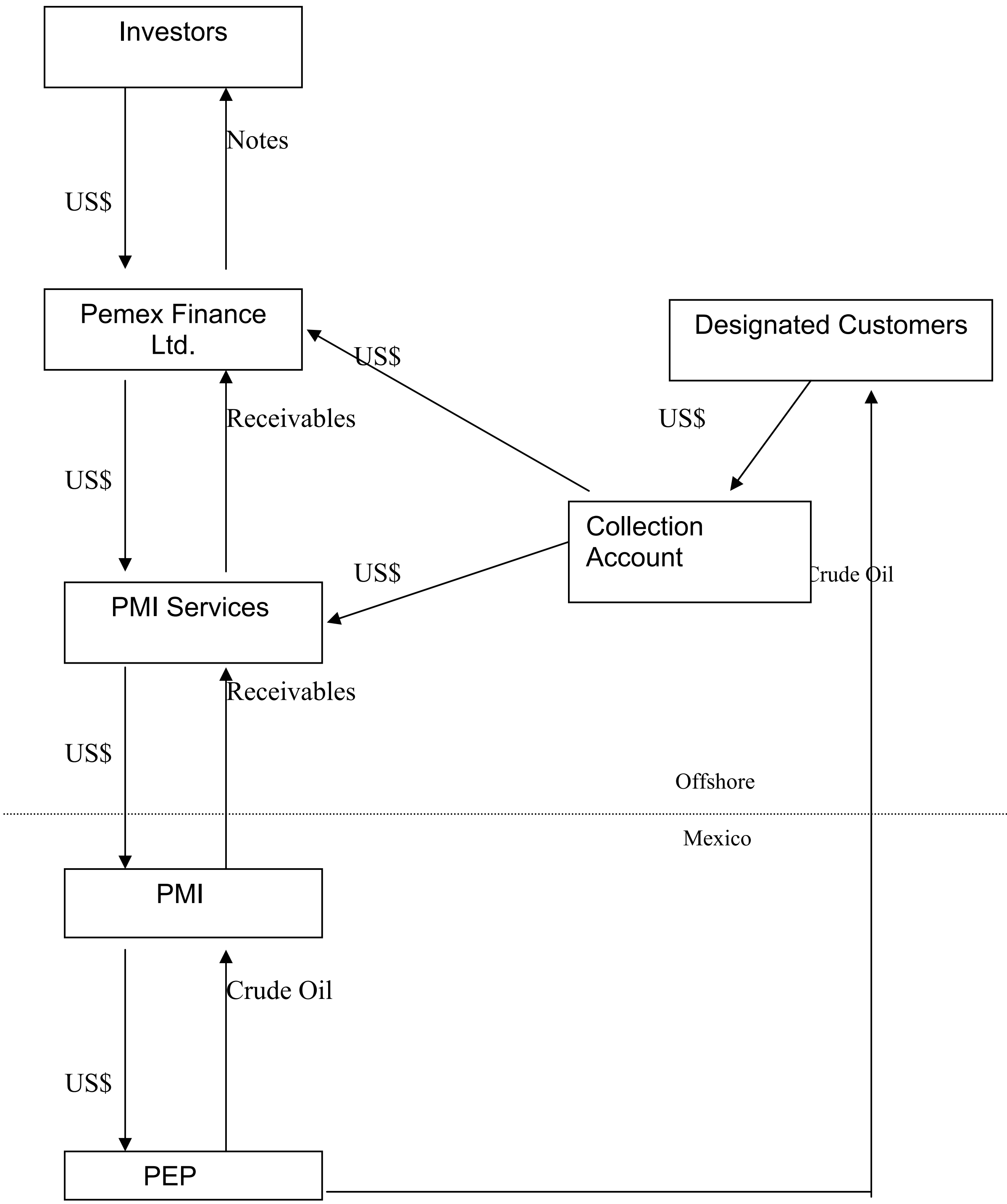
1999-A Notes (Feb 25,1999)	Rating
Tranche A-1 6.125% notes due 2003	AAA
Tranche A-2 8.45% notes due 2007	BBB+
Tranche A-3 6.55% notes due 2008	AAA
Tranche A-4 8.875% notes due 2010	BBB+
Tranche A-5 floating rate notes, series A due 2014	BBB+

1999-B Notes (July 27,1999)	Rating
Tranche A-1 9.69% notes due 2009	BBB+
Tranche A-2 7.33% notes due 2012	AAA
Tranche A-3 10.61% notes due 2017	BBB+
Tranche A-4 9.22% notes due 2004	BBB+
Tranche A-5 9.14% notes due 2004	BBB+
Tranche A-6 floating rate notes, series C due 2004	BBB+
Tranche A-7 floating rate notes, series B due 2014	BBB+

2000-A Notes (Feb 10, 2000)	Rating
Tranche A-1 9.03% notes due 2011	BBB+
Tranche A-2 7.8% notes due 2013	AAA

Source: Standard and Poor's Report 2000.

Chart 4: Pemex Finance Ltd. Structure



Source: Suhas K. and Ratha D. 2001.

The investor risks generated include:

- Sovereign Risk: The possibility of sovereign interference is lessened by the structural enhancements of the transactions. In order to directly interfere with the timely payment debt service, the sovereign would either have to redirect the product to other customers who have not signed customer notice, or cause designated customers to make payments directly to an account other than the collection account established for the benefit of the note holders.

- Other Risks**:** While this structure reduces the usual convertibility and transfer risks, other risks still remain. There is a risk that a fluctuation in crude oil prices will result in revenues insufficient to cover the interest and principal due to note holders. The over collateralization of the notes minimizes the risk- PMI will provide a minimum coverage ratio of three times the amount needed for payment of interest and principal.

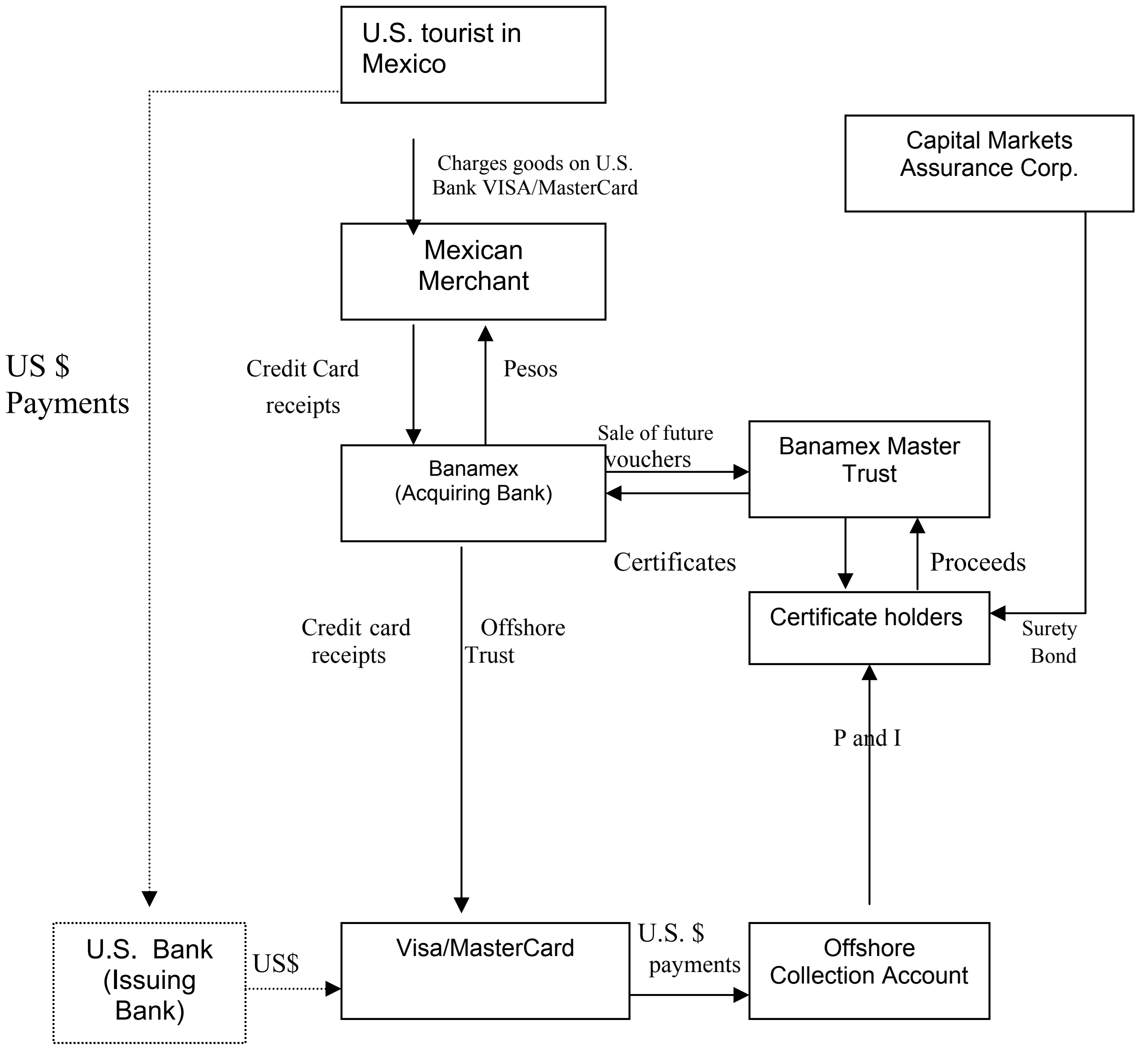
Banamex: Credit Card Merchant Voucher Receivables Master Trust[7]

This is an example of a credit card transaction, as well as a Master Trust vehicle. Master Trusts have been used in the US and European markets by frequent issuers of securitised notes, as they reduce the infrastructure and legal costs associated with issuance (Choudhry 2003). In the Mexican credit card market, securitisation is possible as a result of cash flows between local banks and the Visa and Mastercard organisations. These arise when foreign visitors purchase goods and services by charging their Master Card, Visa, American Express or other charge accounts. Local merchants take the resulting credit card vouchers to a local voucher-acquiring bank, which pays them cash[8]. The voucher-acquiring bank then obtains dollars from Master Card, Visa or others.

Banamex began servicing international MasterCard credit card vouchers in 1968, and international VISA credit card vouchers in 1987. In October 1999, Credit Card Merchant Voucher Receivables Master trust issued US$250 million 7.50% asset backed certificates series 1999-A. The notes were rated A.

[7] Standard and Poor's Reports. 2000.
[8] Ketkar S. and Ratha D. 2001.

Chart 4: Banamex Credit Card Merchant Voucher Receivables Master Trust



Source: Standards and Poor's Report on Securitisation 2000.

The investor risks generated include:

- Sovereign Risk: For a cross border transaction, there is always the possibility that a host sovereign government will impose some type of foreign exchange control and that there could be an interruption of timely payments of debt service during a sovereign financial and banking system crisis.

Certain structural elements of the transaction mitigate sovereign risks, which include the establishment of an offshore collection account by VISA and MasterCard. Even if the Mexican government assumes control of Banamex during a banking crisis, it would be unlikely that the government could redirect the payments from VISA or MasterCard.

- Credit Enhancement: The credit enhancement in the form of over collateralization supporting the investment-grade shadow rating is strong. Based on historical levels for 1998, the average (quarterly) debt service coverage ratio (DSCR) has been approximately 7.4x. In a severe case where the cash flows are reduced to 40% of 1998 levels, the debt service coverage is still more than 1.5x.

Conclusions

The experience in European markets to date has highlighted constraints to securitisation arising from the slow pace of development of the legal framework. A similar observation has been in regard to the Mexcian market. A study by the Comision Nacional Bancaria y de Valores and Secretaria de Hacienda y Credito Publico ("Legal and_Regulatory Obstacles to Securitisation in Mexico: An Analysis" 1999) sponsored by the Bank of Mexico in collaboration with other Mexican financial institutions has suggested that the main constraints of securitisation in Mexico arise from legal and regulatory aspects of the Mexican law, which could be preventing the development of securitisation as a viable financing mechanism. The current state of securitisation legislation has however enabled a number of different asset classes to be used as backing for an issue of notes, which we have considered in this article.

- In many Latin American countries and specifically in Mexico, the main obstacles for securitisation arise from legal and regulatory aspects of its law.

- In Mexico, for 2002 and beyond credit rating agencies like Standard & Poor's expect securitisations within a more diversified pool of asset types, including federal tax participation flows, partial credit guarantee, construction bridge loans, and mortgages as well as commercial real estate[9]. This is due to the following:

    a) Recent regulations have allowed Mexican states and cities to securitize their federal tax participation flows through bond offerings.
    b) 32 Mexican states and 2429 cities will have infrastructure requirements to fulfil in the coming year.
    c) Both construction companies and mortgage banks have made great efforts to start addressing Mexico's estimated 6 million unit housing deficit, and the need for additional funds is becoming more pressing.
    d) Given Mexico's macroeconomic conditions, transactions that have typically been financed by private investments will most likely begin to be financed by debt issuances as market interest rates continue to be a competitive alternative for developers and construction companies.

Our observations suggest, in Mexico as well as in other Latin American countries, that the laws regulating the financial system are delaying the speed at which the securitisation process should be evolving.

The governments involved should devote a greater deal of resources (human, logistic and economic) to deliver the necessary changes that can accelerate the development of securitisation in these countries. Among the aspects in need of rapid attention are property appraisal, bankruptcy law and capital adequacy.

[9] Standard and Poor's Report 2002.

The views, thoughts and opinions expressed in this article represent those of Maria Victoria Rivas Torres in her individual private capacity and do not represent the views of the Colombian Association of Economists.

References and Bibliography:

Buendia Rosario and Juan J. Flores. **Mexico's Structured Finance Market Should Experience Considerable Growth in 2002**. (2002). Standard and Poor's. New York.

Doetsch Douglas A., Mayer, Brown & Platt. **Emerging Market Cash Flow Securitisations Take Off**. (1996). Chicago.

Choudhry, Moorad. *The Process of Securitisation*, working paper, www.YieldCurve.com forthcoming 2003

Duff & Phelps Credit Rating Co..**Future-Flow Securitisation Rating Methodology.** (2000). New York.

Fitch IBCA, Duff & Phelps. **Rating Securities Backed by Future Export Receivables**. (2000).

Ketkar Suhas and Ratha Dillip. **Development Financing during a Crisis: Securitisation of Future Receivables**, (2001) World Bank, Washington DC.

Ketkar S. and Ratha D. **Securitisation of Future Flow Receivables: A Useful Tool for Developing Countries** (March 2001) "Finance Development" IMF Quarterly Magazine. Volume 38. Number 1. Washington, DC.

Martinez Danton Luis. **The Creation of a Mortgage-Backed Securities Market in Mexico**. (2001). Grupo Financiero BANAMEX. Mexico.

Standard and Poor's Report **Securitisation in Latin America.** (1997). New York.

Standard and Poor's Report **Securitisation in Latin America**. (1999). New York.

Standard and Poor's Report. **Securitisation in Latin America**. (2000). New York.

Standard and Poor's. Structured Finance: Emerging Markets Criteria.

Kime Kevin, Taillon Roger and Gigante Nancy. Standard and Poor's, Structured Finance. **New Bank Survivability Criteria Should Aid Emerging Market Financial Future Flow Issuers**. (2000). New York.

Smith-Easterby Mark, Thorpe Richard and Lowe Andy. **Management Research: An Introduction**. (2002). Second Edition. London.

Thomas Hugh,. **A preliminary look at gains from asset securitisation.** (March 1999) "Journal of International Financial Markets, Institutions and Money". 9 321-333.

Ministry of Finance and Public Credit (Hacienda), The National Banking and Securities Commission (CNBV), and the Bank of Mexico. **Legal and Regulatory Obstacles to Securitisation in Mexico: An Analysis**. (1999). Mexico.

"The Economist Intelligence Unit". **Country Finance: Mexico** Magazine (2002) New York.