Asset Securitisation in Emerging Market Economies: Fundamental Considerations

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I. Introduction

Securitisation in the US has seen explosive growth in the 1990s as the shrinking profitability from traditional lending has induced US financial institutions and businesses to consider alternative methods of financing. Some reports estimate that the total value of outstanding US securitised assets now exceeds US$1.9 trillion.[1] The success of the US market, together with other global economic factors, such as increased direct access to capital markets and reduced liquidity of traditional bank lenders, has generated significant interest

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1 Claire A. Hill, 'Securitization: A Low Cost Sweetener For Lemons' in (1996) 74 *Washington University Law Quarterly*, p. 1061 at p. 1062.

Yearbook of International Financial and Economic Law 1997
ISBN: 90-411-9700-1;

in securitisation outside of the US.[2] Additionally, technological advances in computer data processing have facilitated the evaluation of loans, and recent advances in telecommunications have allowed for lending and trading virtually without borders.

However, growth of the securitisation markets in countries outside the US has been slow thus far due to the relative lack of experience with secured transactions, the complicated nature of securitisations and the restrictive regulatory environments.[3] Nevertheless, securitisation markets do presently exist in various countries in Europe[4] and are at an initial stage in some emerging market countries in Latin America and south-east Asia.

As banks in emerging market countries endeavour to comply with the international risk-based framework of the Basle Accord capital adequacy guidelines and as major global economic shocks, such as the recent financial crisis in Asia, threaten the very existence of some emerging market financial institutions and corporations, securitisation is becoming an increasingly indispensable tool for financing and for improving liquidity and capital structure.

This chapter was drafted with the emerging market country in mind and is intended to provide those who may have little or no experience in securitisation with a general understanding of the relevant issues concerning securitisation, including the likely advantages and disadvantages of becoming a participant in the securitisation market. Specifically, the second section discusses the basics of securitisation, paying particular attention to the motivations behind securitisation and the common risks involved. The third section explains the most common methods of structuring a securitisation transaction. The fourth section follows with an explanation of the process of securitisation, focusing on common obstacles to a transaction and on characteristics that facilitate and hinder transactions. The fifth section describes selective examples of transactions from the US and from emerging market economies in Latin America and Asia. Finally, the sixth section discusses the legal and financial infrastructure necessary to foster a domestic securitisation market.

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2 See Joseph C. Shenker and Anthony J. Colletta, 'Asset Securitization: Evolution, Current Issues, and New Frontiers' in (1991) 69 *Texas Law Review*, p. 1369; see also Michael T. Kawachi, 'Pacific Rim Trade: The New Law of Asset Securitization in Japan' in (1994) 17 *University of Puget Sound Law Review*, p. 587 at p. 588.

3 See 'Despite Encouraging Developments, S&P Finds Securitization Grows Slowly Outside the US' in *Global Asset Backed Monitor*, 8 February 1993, pp. 4–5.

4 *Ibid.*

II. The Basics of Securitisation

In general, 'securitisation' refers to the practice of collecting large numbers of illiquid loans or receivables into pools that are used to collateralise securities for eventual sale to investors.[5] The securities issued from the pool are backed by the strength of the pool.

Typically, a financial institution or corporation that wishes to raise funds through securitisation begins by identifying assets that can be used to raise funds.[6] Loan assets, such as mortgage loans or credit card receivables, are generally considered the most suitable for securitisation because they provide regular payment streams and can easily be pooled together. The financial institution or corporation that owns these assets is referred to as the 'originator'. After identifying the assets to be used in the securitisation, the originator then transfers the assets to a newly formed special purpose entity, referred to as a special purpose vehicle (SPV).[7] The SPV is formed as an entity legally separate from the originator so that the transferred assets will be isolated from the credit risk of the originator.[8] Thus, the assets are made immune from the claims of the originator's creditors in the event of the originator's bankruptcy. To ensure that the assets are fully isolated from the originator, the transfer is structured so that it constitutes a 'true sale' that completely removes the assets from the balance sheet of the originator.[9] The securities are then issued to the public through the SPV and are typically rated by one or more rating agencies such as Standard & Poor's Ratings Group (S&P), Moody's Investor's Service Inc., Fitch Investors Service Inc., and Duff &

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5 Stephen J. Consentino, 'Swimming in New Waters - Bank Participation in Securitised Loan Pools' in (1997) 65 *UMKC Law Review*, p. 543 at p. 544.

6 Stephen L. Schwarcz, 'The Alchemy of Asset Securitization' in (1994) 1 *Stanford Journal of Law Business and Finance*, p. 133 at p. 135.

7 An SPV can take the form of a trust, a corporation or even a partnership.

8 Peter F. Culver, 'The Dawning of Securitization' in (1994) 8 *APR Prob. and Prop.*, p. 34 at pp. 34-35.

9 To qualify as a 'true sale', the originator must surrender control over the assets transferred to the SPV. Pursuant to the Federal Accounting Standards Board requirements, the sale must meet the following conditions: (i) the transferred assets must have been isolated from the transferor and put beyond the reach of the transferor and its creditors, even in the event of the bankruptcy of the transferor; (ii) the transferee is a qualified special purpose entity and the holders of debt and equity interests in that entity have the right to pledge or exchange those interests; and (iii) the transferor does not effectively maintain control over the transferred assets by a concurrent agreement that entitles the transferor to repurchase, prior to maturity, transferred assets that are not really obtainable. See *New Developments in Asset Securitization* (1996), p. 283.

Phelps.[10] The goal is to obtain a rating of 'investment grade'[11] on the most senior securities and to obtain a rating that is higher than that of the originator.

Since the SPV is bankruptcy-remote from the originator, investors who acquire the securities issued by the SPV look to the creditworthiness of the assets themselves rather than the creditworthiness of the originator. Thus, a securitisation relies on collateral and structure to achieve creditworthiness independent of the originator.

As the assets, such as mortgage loans or automobile loans, convert to cash through payment by obligors, the SPV uses the cashflows to pay the investors with respect to their securities. The amount and consistency of these cashflows is dependent on the nature and quality of the underlying assets.

Reallocating cashflows into multiple classes, or tranches, is common in a securitisation. The effect of this tranching can be to lower the financing costs in a securitisation by matching maturities with investors' portfolios and, with a positively sloped yield curve, this tranching can result in lower interest rates to the first maturing tranches. Thus, through the structuring of cashflows and the rating process, securitisation can provide lower cost financing to originators.

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10 These four agencies are independent private companies which over the years have gained widespread investor acceptance as 'rating agencies'. Rating agencies heavily influence the structure of securitisation transactions, imposing specific and detailed criteria before a transaction may receive an investment grade. Rating agencies are consulted early and often for most securitisation transactions, especially when the transaction contains any novel features.

11 S&P and Moody's offer the following ratings:

	S&P	Moody's
Highest quality, 'gilt edged'	AAA	Aaa
High quality	AA	Aa
Upper medium grade	A	A
Medium grade	BBB	Baa
Predominantly speculative	BB	Ba
Speculative, low grade	B	B
Poor to default	CCC	Caa
Highest speculation	CC	Ca
Lowest quality, no interest	C	C
In default, in arrears	DDD	DDD
Questionable value	DD	DD

S&P may also use a + or - to modify some ratings. Moody's uses the numerical modifiers 1, 2 and 3, with 1 being the highest. An investment grade is typically BBB- or higher from S&P or Baa3 or higher from Moody's. Such a rating reflects a rating agency's prediction that the securities will be paid on a timely basis. See Hill, *op cit* note 1, at note 39.

A. *Motivations for Securitisation*

An originator would consider securitisation for several reasons. The most compelling reason for most originators is that securitisation provides an alternative and efficient source of funding.[12] In particular, securitisation can provide a means to access the capital markets, thereby increasing the sources of financing and reducing funding risks. Since many investors feel comfortable purchasing highly rated securities even without detailed knowledge of the underlying assets, an originator can gain access to an entirely new group of investors. For example, mutual and pension fund managers are usually willing to purchase highly rated securities supported by an originator's assets, but may not be willing to enter into a conventional debt obligation with the originator.[13]

A securitisation often receives a better credit rating than the originator. The higher rating is a function of the reduction in credit risk and directly translates into lower interest rates for the originator. This is a particularly important feature of securitisation for those in emerging market countries where the ratings of the originators, and often the originators' sovereign countries, are low investment grade or even below investment grade. In such a situation, the interest rates charged to an originator for a conventional loan may be so steep as to make the loan unattractive.

Further, since investors look primarily to the credit quality of the assets rather than the originator, adverse conditions experienced by the originator which do not affect its ability to service the assets should not have any negative effect on the securitisation's marketability or the originator's ability to attract investors.

Another reason why an originator may want to consider securitisation is to reallocate and diversify risks and returns.[14] Securitisation allows the originator to transform the several separate credit risks presented by the assets into one single risk.[15] Risk is thus simplified. The risk of catastrophic loss from the assets is transferred to the investor, with the originator's exposure to loss limited to the amount of retained interest.[16] Although risk is transferred to the investor, credit enhancement may reduce the investor's exposure to risk. As an added

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12 See Joseph J. Norton *et al*, *International Asset Securitization* (1995), p. 11.

13 See Schwarcz, *op cit* note 6, p. 136.

14 See Cosentino, *op cit* note 5, p. 547.

15 *Ibid.*

16 See Edward J. Park, 'Allowing Japanese Banks to Engage in Securitization: Potential Benefits, Regulatory Obstacles, and Theories for Reform' in (1996) 17 *University of Pennsylvania Journal of International Economic Law*, p. 723.

benefit, the removal of risky and illiquid assets from the originator's portfolio may improve the overall credit rating of the originator, which in turn leads to lower interest rates through traditional funding avenues.

Securitisation may also serve as a means of improving liquidity. Through securitisation, an originator can convert illiquid assets into highly liquid rateable securities and thereby improve the liquidity of its portfolio. Securitisation on a macro-economic scale helps to improve the overall liquidity of an economy's credit markets.[17] As lenders sell off their loan assets to investors through securitisations, they receive cash in return. This cash can then be lent to a new group of borrowers. The period of time required for the assets to be recycled into funds available for lending is thereby reduced. This reduction in time enhances the liquidity of an economy's credit markets and can also lead to lower overall costs to borrowers for obtaining funds.

In some cases, an originator may carry out a securitisation internally for the sole purpose of improving its liquidity. During the US banking crisis of the late 1980s, a certain Texas bank took its illiquid auto loans and used them to structure an internal securitisation in which the loans were converted into AA-rated securities valued at US$500 million. The securities were never offered for sale to the public, but were used solely to improve the bank's liquidity. As a result of the improvement in the bank's liquidity, it was able to borrow money from the Federal Reserve Bank using the securitisation securities as collateral and was also able to perform other transactions such as collateralising its leasehold improvements. Although the bank did eventually fail as a result of the crisis, the securitisation allowed it to remain in business for a longer period of time than many other banks in Texas.

An important advantage of securitisation is that it provides the originator with an opportunity to improve its capital structure. To the extent that a securitisation is treated as a sale for accounting purposes, both assets and liabilities will be taken off the balance sheet, thereby freeing capital reserves that the financial institution or company would normally have to maintain to guard against the risk that those assets will end in default.[18] The liberated capital reserves may then be used for further lending or for other productive uses.

Capital structure improvement is especially important for banks that must

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17 See *Basle Committee Report on Asset Transfers and Securitization* (September 1992), reprinted in *Compendium of Documents Produced by the Basle Committee on Banking Supervision* (April 1997), 115.

18 See Park, *op cit* note 16, p. 729.

comply with the capital adequacy guidelines set forth in the Basle Accord.[19] It is also highly relevant to banks that have been plagued with underperforming loans and that wish to improve the quality of their asset portfolios and thereby reduce the required level of capital reserves.

Securitisation can serve as a good source of generating fee income. In most securitisations, the originator will continue to service the assets even though it is no longer the owner of the assets. Through its role as servicer, the originator is entitled to receive a reasonable fee for servicing the assets on behalf of the investors. An originator might also agree to service another originator's assets, thus generating additional fee income.

Finally, a financial institution or company can use securitisation to avoid maturity mismatches between its assets and liabilities.[20] A mismatch between an originator's assets and liabilities can subject it to serious interest rate risk. The US savings and loan crisis during the late 1980s was caused in large part by maturity mismatches created by the savings and loans practice of lending to customers on a long-term basis, through 30-year mortgages, while financing the loans through short-term borrowings such as demand deposits or certificates of deposit. When market interest rates began to rise, savings and loans were forced to offer higher interest rates on their deposits in order to attract depositors. At the same time, the income they continued to receive from the 30-year mortgages was at a fixed rate of interest below the rates paid on deposits. Thus, it was not long before a crisis developed.

B. Risks of Securitisation

While securitisation may offer several benefits to an emerging market country, it also poses several potential risks, especially to the banking system. The most serious risk that a financial institution or company may face from a securitisation arises when the originator has failed to achieve a true sale of

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19 According to the capital standards of the Basle Accord, banks undertaking international business must maintain a capital-to-assets ratio of 8 per cent. Banks were required to meet this ratio by the end of 1992. Banks seeking to comply with the capital adequacy standards have two options. The first option is to increase the bank's capital. This can be an expensive option, especially for banks which have unfavourable ratios. The second and more popular option is to decrease the riskiness of the bank's assets by selling loans with high-risk weightings. Securitisation has proven a highly effective tool for removing such low-quality, risky loans from the balance sheets. See Committee on Banking Regulations and Supervisory Practices, *Final International Risk-Based Capital Standards Adopted by the Basle Committee on Banking Regulations* (1988), reprinted in (1988) 51 *Banking Reports* (BNA), p. 143 at p. 149.

20 See Norton *et al*, *op cit* note 12, p. 13.

the assets and is forced to recognise some or all of the losses that occur if the assets subsequently cease to perform.[21] Therefore the securitisation process must be carried out with utmost care and every effort must be made to ensure that the assets are completely separated from the originator.

Also, a potential risk exists that banks seeking a favourable market reception for their securitised assets may tend to sell off the highest quality assets while retaining the lower quality assets and thereby increase the average risk in the remaining portfolio.[22] Moreover, since an ongoing securitisation programme requires a growing loan portfolio, banks may be pressured into lowering credit standards to generate the necessary volume of loans. At the same time, the bank's incentive to monitor and assess the credit risk of the loan assets is reduced since the assets may only remain with the bank for a short while before being securitised.

Securitisation may also pose certain systemic risks. In so far as securitisation reduces the proportion of financial assets and liabilities held by banks, it renders more difficult the execution of monetary policy in countries where central banks operate through variable minimum reserve requirements.[23]

Finally, securitisation has been criticised by some as being an inadequate means of alleviating the Third World debt crisis of the 1980s.[24] The debt crisis arose when commercial banks from the US and other industrialised nations lent unprecedented sums of money to developing nations of the Third World in the 1970s, due in large part to increased reserves stemming from an influx of oil-generated deposits by the Organisations of Petroleum Exporting Countries (OPEC). Banks imprudently exposed themselves to Latin America and elsewhere, filling their portfolios with underperforming and high-risk loans. Eventually, this led to over US$1.3 trillion in debt owed by developing countries to the industrialised world.[25]

Again in the 1990s, the economic downturn in the markets of many developing nations from south-east Asia, and the subsequent devaluation of

21 See Basle Committee Report, *op cit* note 17, p. 115.

22 *Ibid*, p. 116.

23 Under a variable minimum reserve requirement system, a country's central bank can influence the domestic money supply by raising or lowering the level of minimum reserves that banks must keep. As the level of reserves is increased, less money is available for lending and this leads to decrease in the money supply. Because the minimum reserve requirement is expressed as a percentage of the bank's total assets and liabilities, its effectiveness is reduced when the overall level of assets and liabilities held by banks decreases. *Ibid*, p. 117.

24 See David W. Leebrom, 'First Things First: A Comment on Securitizing Third World Debt' in (1989) *Columbia Business Law Review*, p. 173.

25 Alfred J. Puchala, Jr, 'Securitizing Third World Debt' in (1989) *Columbia Business Law Review*, p. 137.

their currencies, has left those countries with enormous external debts. For example, at the end of 1997, South Korea owed an estimated US$100 billion dollars in short-term debt,[26] and Indonesia owed an estimated US$65 billion in external debt.[27]

Various securitisation plans have been proposed as a solution for alleviating the problem of Third World debt. Most of these plans entail a repackaging of debts into a negotiable instrument, such as a bond, which creditor banks may then sell on the secondary markets to private investors.[28] Unlike a debt-equity swap, the debt would not be exchanged for equity investments in the debtor nation. The debt would instead be swapped at a discount for a negotiable instrument that would, at least in theory, be more attractive to both creditor banks and third party investors than the loans that currently exist.[29] One such instrument, the Brady Bond, has been widely popular and has been credited, at least in part, in solving the Third World debt problems of the 1980s. Nevertheless, at least one author has criticised all securitisation plans as not addressing the debtor nations' main problem of simply having too much external debt to service in the near or medium-term future.[30] What the debtor nations really need, it is argued, is for creditors to forgive and write-down a portion of the debt until the situation stabilises.[31] Only then, that author asserts, should securitisation of the debt be considered.

III. Securitisation Structures

A. *Debt Structure*

The participants in a typical debt structure securitisation include an issuer that is usually an SPV, a special purpose, bankruptcy-remote entity (see Figure 1). The entity is specifically organised so that it cannot be affected by the bankruptcy of the originator. The debt structure also involves an originator that creates the loan assets to be securitised. In addition, there will be a servicer

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26 Adam Entous, IMF, *13 Nations Speed Aid to South Korea*, 25 December 1997 at http://nt.excite.com/reuters/971225/01.NEWS-KOREA.html.

27 *Indonesia – A Diving Market*, 20 December 1997 at http://pacificrim.bx.com/articles/12-20diving_mkt.ht.

28 Robert Plehn, 'Securitization of Third World Debt' in (1989) 23 *International Lawyer*, p. 161 at p. 162.

29 *Ibid.*

30 See Leebrom, *op cit* note 24, p. 173.

31 *Ibid*, p. 175.

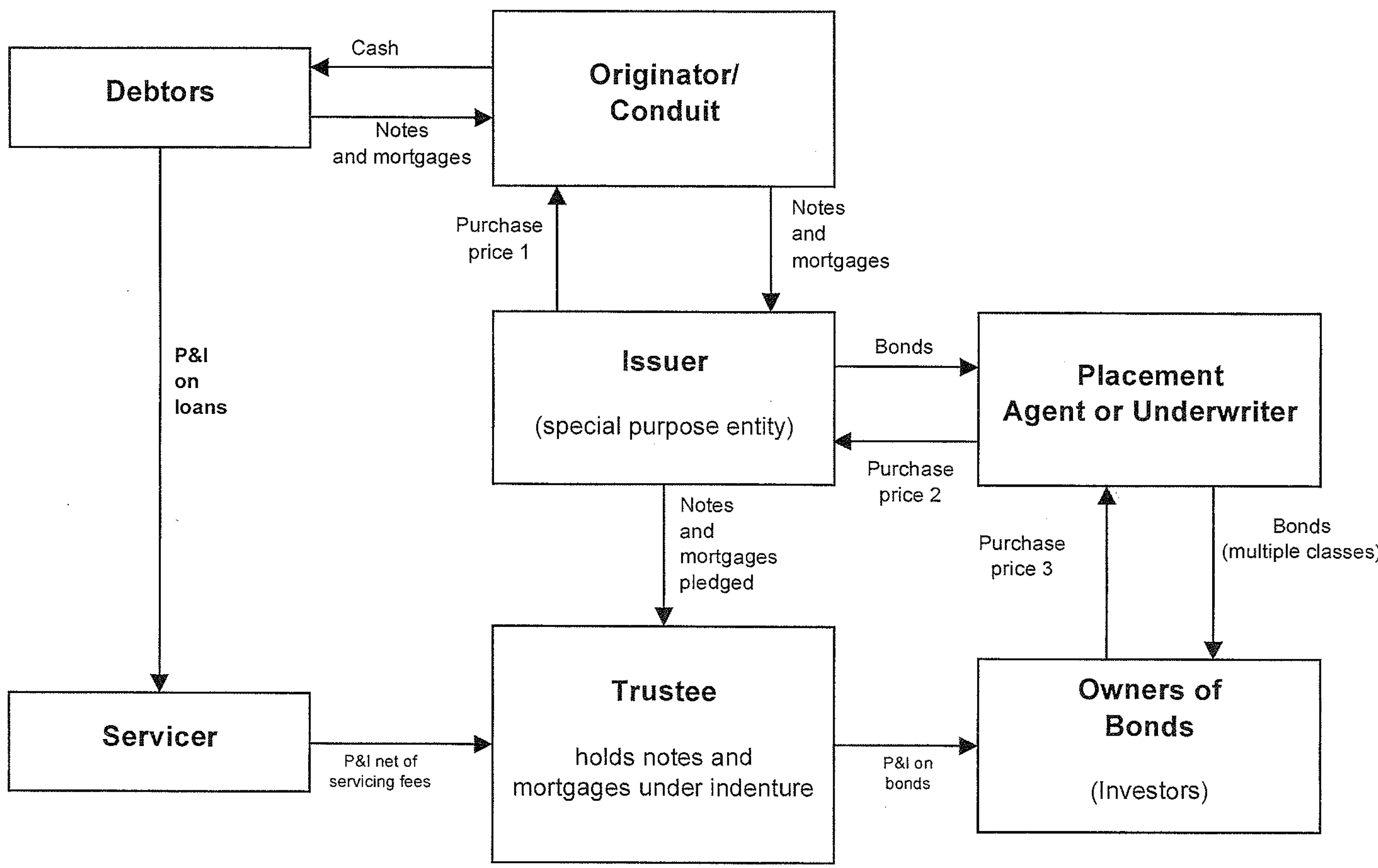

Figure 1 Debt Structure

of the assets, which may or may not be the originator. Normally, the servicer at least shares some affiliation with the originator. If there exists more than one servicer, there will typically be a master servicer. There are, of course, obligors on the payments of the collateral. During the accumulation period, there may be a warehouse lender that lends money to the originator.

At the time of securitisation, the originator will sell the assets to the issuer who will then pledge the assets in a debt structure, such as a bond, to an indenture trustee. During this process, rating agencies evaluate material given to them to determine the appropriate rating and, depending on the structure, a credit enhancement provider may be retained to enhance the rating. Once the assets have been pledged to the trustee, the issuer will sell its bonds to a placement agent or underwriter who will then sell the bonds to either private or public investors. To briefly summarise, a debt structure involves assets that are transferred from the originator to the issuer, then are pledged to the trustee through debt type instruments and, finally, are sold to investors through placement agents or underwriters.

B. Pass-Through Structure

A pass-through structure is similar to a debt structure with respect to the various participants (see Figure 2). However, instead of pledging the assets to the trustee, the SPV sells the assets to a trust that will then issue pass-through certificates back to the SPV. The SPV then sells the certificates to the underwriter who in turn sells them to the investors. The certificates represent an equity-like interest in the trust and thus an undivided fractional interest in the pool of underlying assets.[32] In a pass-through structure, the assets are typically taken off the balance sheet of the originator.[33]

C. Multiseller Securitisation Conduit[34]

A multiseller securitisation conduit is similar to both the debt and pass-through structures, but in a conduit programme several originators originate loan assets pursuant to the conduit's guidelines and sell the loans to the conduit

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[32] See Cosentino, *op cit* note 5, pp. 544–545.

[33] Until FASB 125 became effective in 1997, in most debt structures in the US the assets were not taken off the balance sheet. However, with the promulgation of FASB 125, debt-type transactions can be structured in such a manner so that the assets are removed from the balance sheet.

[34] See Schwarcz, *op cit* note 6, p. 140.

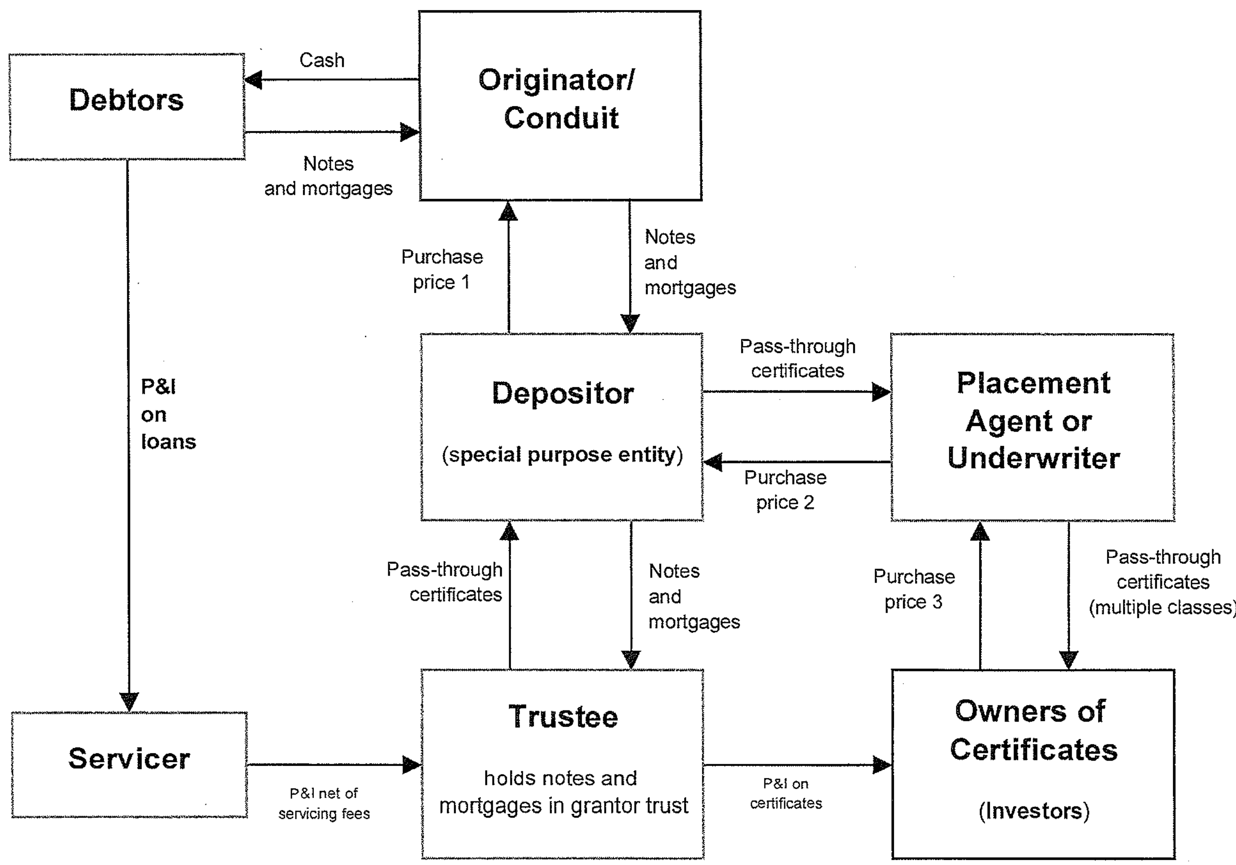

Figure 2 Pass Through Structure

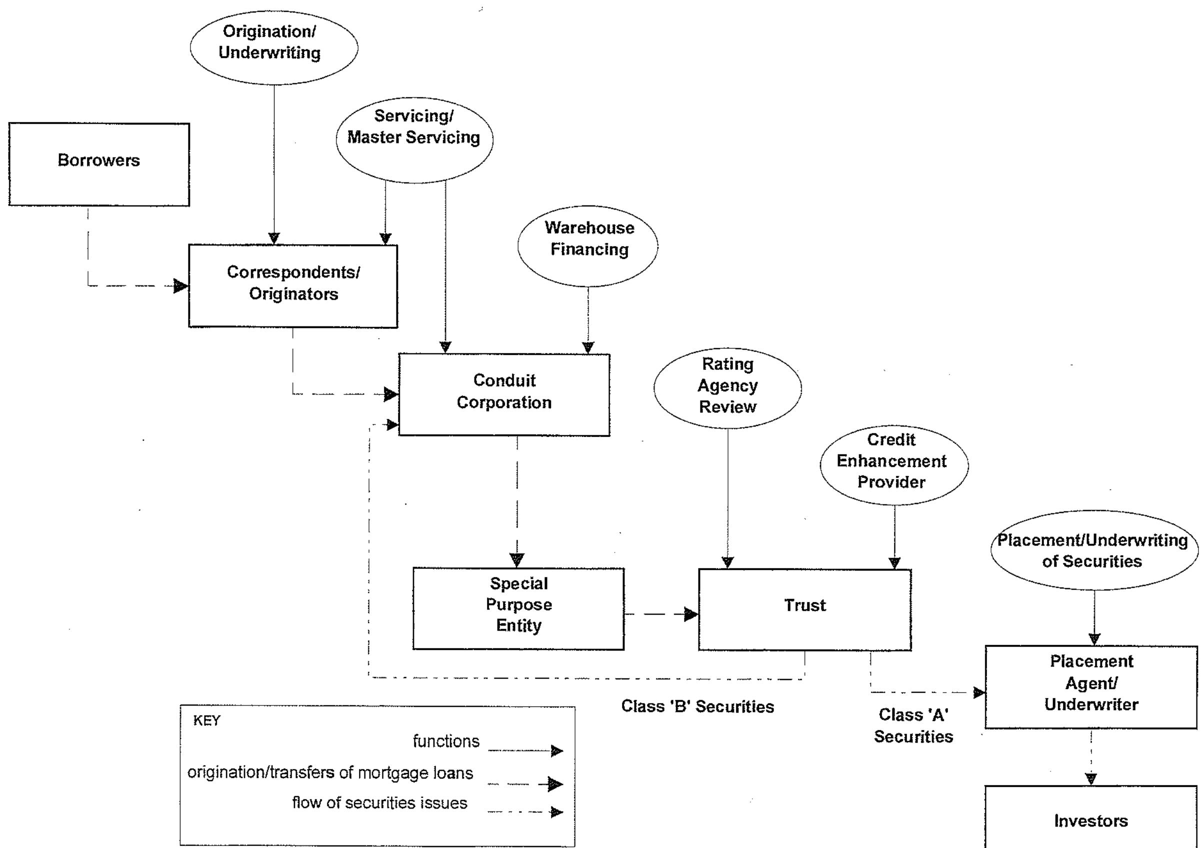

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Figure 3 Mortgage Loan Conduit Programme (see Figure 3). After the sale, the conduit will accumulate the loans through warehouse financing, work with the rating agency to review the collateral, and then transfer the assets to an SPV. The SPV will either issue notes or deposit assets into a trust that will then issue pass-through certificates back to the SPV.

D. Types of Assets Subject to Securitisation

A broad range of assets may be subject to securitisation. These asset types include residential mortgage loans, commercial mortgage loans, automobile loan receivables, credit card receivables, computer and equipment loan receivables, commercial loans, natural resource receivables, leases, trade receivables, tax-exempt bonds and certificates, and even non-performing loans.[35] And the list continues to grow.

The development of the securitisation of these assets took place mainly in the US during the 1980s and 1990s. However, securitisation in the US actually began in the 1970s as a financing method developed in connection with single-family residential mortgage loans made by the Federal National Mortgage Association.[36] Since then, all of the above-listed asset types have been securitised in the US, and some of them have been securitised in other countries.

Often, the range of assets that potential issuers in emerging market countries may securitise is limited by the particular law or laws governing securitisation. Under Chilean law, for example, until recently only single-family mortgage loans could be securitised. However, Chile's regulatory body, the *Superintendencia de Valores y Seguros* (SVS), can by regulation expand asset types to other written obligations that can be endorsed. By contrast, the Argentine Trust Law 1995 does not limit the types of assets which may be securitised,[37] but only natural resource receivables and mortgage loans have been securitised to date under their Trust Law.

Securitisation of non-performing loans should be of particular interest to an emerging market country experiencing financial difficulties or a debt crisis. Instead of continuing to resort to write-offs and reserves, banks could liquidate some of their non-performing loans through securitisation and dramatically improve their asset portfolios.

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[35] See J. Norton and R. Spellman, *Asset Securitization: International Financial and Legal Perspectives* (1991), pp. 4–7; see also Kawachi, *op cit* note 2, p. 588.

[36] *Ibid.*

[37] See Carlos E. Alfaro and Pablo F. Ferraro-Mila, 'International Tax Developments in Argentina: Argentina Adopts Concepts of Trusts, Securitization, and Lease Agreements' in (1996) 7 *Journal of International Taxation*, p. 38.

As an example, in response to the US banking crisis of the late 1980s, the federal government created the Resolution Trust Corporation (RTC) to dispose of the assets of failed institutions. A substantial portion of the failed institutions' assets were non-performing loans. Through the securitisation of the non-performing loans, the RTC was able to dispose efficiently of the entire amount of assets within an incredibly short period of time and thus was able to reduce the overall costs of the savings and loan bailout.[38]

IV. The Process of Securitisation

A. Common Obstacles Encountered

Securitisation is not a simple, effortless process and is often laden with difficulties. Therefore, an originator must be aware of the several obstacles that it will likely encounter during a typical securitisation transaction.

An originator that does not already have in its portfolio a substantial number of suitable assets must face the obstacle of enduring the lengthy asset accumulation period necessary to create a securitisation. During this period, the originator must accumulate a sufficient amount of assets to pool together. Normally, the originator finances this accumulation through interim or warehouse financing. Thus, the originator must have enough capital to put up the equity during this interim financing period and must also originate a steady flow of assets so that a sufficiently large volume can be obtained to enable the securitisation to receive the best rating. The originator must also be cognisant of market risks, particularly interest rate risks, during the accumulation period and hedge accordingly.[39]

Another obstacle to securitisation is that the issuer will normally need to provide additional credit support to obtain an investment-grade rating for the securitisation. Credit support can take the form of either internal support or external support. Internal credit support is dependent on the value of the securitised asset or provisions by the originator, whereas external credit

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38 See Culver, *op cit* note 8, p. 36.

39 It may be difficult or impossible for an originator in an emerging market country to properly hedge against interest rate risks during the accumulation period if the originator's country lacks an established derivatives market in which to carry out the interest rate hedging. In such a situation, it is advisable for the originator to securitise the assets as soon as possible rather than wait for the assets to become seasoned.

support relies on the credit of third parties.[40] Common examples of internal support are spread accounts, cash collateral accounts, senior-subordinated structures and overcollateralisation.

A spread account is a deposit built up from the spread between the interest paid on the pooled assets and the lower interest paid on the securities issued.[41] The spread is accumulated in the account up to a level required for adequate credit enhancement. Once this level is reached, all future spread earnings can be passed back to the originator. The originator normally must deposit funds in the spread account at the initial stage to cover any early losses. When the securities have reached their maturity, all remaining funds in the spread account revert back to the originator.[42]

A cash collateral account is a deposit equal to the necessary credit enhancement which is held for the benefit of the holders of the securities.[43] The account funds are used if and when any losses occur. Again, all remaining funds in the account revert back to the originator once the securities have matured.

In a senior-subordinated structure, a certain percentage of the securities are issued as a class subordinate to the senior securities. The subordinate securities have a lower rating and are usually sold at a higher interest rate and yield.[44] Alternatively, the originator may decide to retain the subordinated securities rather than sell them to investors. The flow of funds from the assets is used first to pay the investors with senior securities. Payment is made on the subordinated securities only after the senior securities are fully paid.

In an overcollateralisation, the issuer puts up additional assets or reserve funds to support the securities that are issued. This additional collateral helps to protect the overall yield of the security in case a portion of the assets causes problems. The additional collateral must be maintained at a level sufficient to provide an adequate amount of credit enhancement.

Examples of external credit support are insurance from a third party guarantor, irrevocable letters of credit, and swap or hedge transactions. In cases where the securities are supported by a third party credit guarantor, the rating agencies will consider the creditworthiness of the guarantor in its determination of the credit rating to be assigned the securities.[45]

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40 Derrick Allen Dyer, 'The Impact of Dilution in Asset Securitization: Commercial Separation Anxiety' in (1996) 66 *Mississippi Law Journal*, p. 407 at p. 419.
41 See Norton and Spellman, *op cit* note 35, p. 16.
42 *Ibid.*
43 See Basle Committee Report, *op cit* note 17, p. 114.
44 See Schwarcz, *op cit* note 6, p. 143.
45 See Yoshiki Shimada and Shinji Itoh, 'Japanese Asset Securitization: A Guide for Practitioners' in (1997) 38 *Harvard International Law Journal*, p. 171 at p. 173.

A further obstacle to securitisation arises from initial transaction costs. Initial transaction costs may include those of the placement agent or underwriter, the cost of credit enhancement, and the cost of various types of advice including legal, accounting and due diligence. An originator in an emerging market country will likely encounter transfer fees and other tax costs in addition to those costs listed above. Because of these initial transaction costs, the first securitisation transaction can be very expensive. However, to the extent that the transaction's structure remains constant, the second and future securitisations should be much less expensive.[46] Additionally, the burden of the initial transaction costs can be reduced by capitalising and amortising them over a long period of time.

Finally, a potential obstacle to securitisation may arise from a lack of knowledge and maturity in the secondary market for the asset type being securitised. Such a lack of secondary market information can widen the minimum spread that investors will demand in return for purchasing the security. However, this obstacle normally disappears over time through the natural education process of the market and through the favourable performance of each consecutive securitisation.

B. Characteristics That Facilitate Securitisation

The characteristic that most greatly facilitates the securitisation of a pool of assets is a predictable cashflow. Practically any type of asset can be securitised if it has predictable cashflow.[47] In order to have predictable cashflow, the assets should ideally require regular payments at a fixed rate of interest. Securitisation is further enhanced when the assets contain prohibitions against the prepayment of the underlying obligations.

Standardised documentation is another characteristic which is very helpful.[48] Assets with standardised documentation are more easily pooled together. Moreover, standardised loans are relatively easy to value and their default rates are more easily estimated. Standardisation even facilitates the transfer of the duty to service the assets, when necessary. Similarly, it is important to have standardised underwriting and servicing policies. Investors have a strong preference for assets that have been originated under similar guidelines and that will be serviced uniformly.

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46 See Hill, *op cit* note 1, p. 1083.

47 See Gilles Thieffry and Jonathan Walsh, 'Securitization: The New Opportunities Offered by Economic and Monetary Union' in (1997) 12 *Journal of International Business Law*, p. 463 at p. 464.

48 See Cosentino, *op cit* note 5, p. 548.

It is always beneficial to have an extensive payment history with respect to the assets. When investors receive accurate information regarding how the assets have performed in the past, they can more readily predict how the assets will perform in the future. Accordingly, investors place a premium on the certainty that an extensive payment history provides.

Additionally, fully amortising assets are preferable. In other words, the asset pool should consist of loans that will have fully paid all principal at maturity. Fully amortising loans provide a more steady flow of income, do not require rescheduling at maturity, and are considered less likely to end in default.

Geographic and demographic diversity of assets are other important characteristics. For example, a pool of mortgage loan assets selected entirely from earthquake-prone San Francisco would be subject to greater risk than a pool of mortgage loan assets from several different cities. It will obviously be difficult for those from emerging market countries of limited geographical size to form a geographically diverse pool of assets. In such a case, the emphasis should be on obtaining demographic diversity.

Securitisation will similarly benefit from seasoned assets (ie, those which have existed for a significant period of time). Generally, default levels are highest during the earlier years of instalment loans. Thus, the greater the average age of the assets, the lower the expected default rate. However, an originator must balance the benefits received from seasoning loans against the benefits received from immediately securitising newly originated assets to reduce the risk of market movements.

High-quality collateral is of course better than low-quality collateral since quality has a significant impact on the amount of credit enhancement that would be needed for obtaining investment-grade ratings. However, as long as the originator can reasonably predict the collateral's aggregate default rate, even low-quality collateral having a higher risk of uncollectibility can be securitised by increasing the level of credit enhancement.[49] Moreover, if an originator is able to charge a high enough interest rate to the obligors of the lower quality collateral or buy the collateral at a steep discount, then it will be easier to consummate a securitisation of low-quality collateral successfully, since high gross yields will provide a sufficiently strong income stream to offset the potentially higher rates of default.

[49] See Schwarcz, *op cit* note 6, p. 135.

C. Characteristics That Impede Securitisation

A number of characteristics tend to impede securitisation. Not surprisingly, these characteristics are often the exact opposite of those that facilitate securitisations. For example, loans with balloon maturities,[50] where less than 100 per cent of the principal has been paid on maturity, make securitisation more difficult than fully amortising loans. Loans with balloon maturities have the disadvantage of requiring refinancing after the loan matures. Another drawback of balloon payments (as well as other non-level payments) is that they lead to irregular cashflows to investors and are considered more likely to end in default.[51]

Similarly, loans which allow infrequent payments are not as advantageous as loans requiring regular payments. Further, if there are only a small number of assets in the securitisation pool, or if the assets otherwise lack sufficient diversity, a rating agency is likely to give the securitisation a lower rating. A lower rating impedes securitisation by making it more difficult to market to investors.

Normally, the credit quality of the originator will not affect the credit rating of the securitisation, except in the case where an originator retains responsibility for servicing the assets. An inexperienced or undercapitalised servicer may not be able to consummate a securitisation at all without the help of a backup or standby servicer that is highly rated by the rating agencies.

A high ratio of the largest asset to the average size of the assets in a pool creates unreasonable risk since a default of the largest asset can seriously affect the entire pool. Therefore a preference exists for assets of equal or similar size.

Finally, limited or otherwise inadequate data concerning the underlying assets in a securitisation may have a negative effect on the securitisation's price because investors will be uncertain about the performance quality of the assets.

V. Information on Selected Emerging Market Economies

This section provides a description of recent securitisation transactions, which were completed in the US and in two emerging market economies in Latin

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[50] A balloon maturity is a payment method whereby the borrower pays a disproportionately large payment at the end of the loan period rather than paying in equal instalments throughout the period. See Norton *et al*, *op cit* note 12, p. 83.

[51] See Norton and Spellman, *op cit* note 35, p. 121.

America. The descriptions of the transactions illustrate some of the types of structures that can be used successfully and show how the legal principles and practical considerations described in the sections above were applied in real-life situations. However, every securitisation transaction is unique in some way and must be tailored to fit the needs of the transaction parties. Following the descriptions of the transactions, the section concludes with a brief report on the current status of securitisation transactions in selected emerging market economies in Asia.

A. United States Single Family Mortgage Securitisation

The issuer in the US Single Family Mortgage transaction was CMC Securities Corporation IV (see Figure 4). The parties utilised both a pass-through and a bond debt structure. Various lenders originated mortgage loans and sold them to Capstead Inc. In the initial part of the securitisation, Capstead Inc. sold the loans to a pass-through trustee and took back pass-through certificates that represented interest in the underlying mortgage loans. As part of the pass-through structure, Capstead Mortgage Corporation was set up as the master servicer of the programme. Once Capstead Inc. received its pass-through certificates, it sold these certificates to the issuer, which pledged the certificates to an indenture trustee. After pledging the pass-through certificates to the trustee, the issuer issued bonds to underwriters. The underwriters then tranched the bonds into senior bonds, junior bonds, interest-only bonds and principal-only bonds and sold them in the market to investors.

B. Banco Hipotecario Nacional Securitisation

The *Banco Hipotecario Nacional* (BHN) transaction involved the first mortgage-backed securitisation transaction consummated in Argentina (see Figure 5). In early 1995, the Argentine Congress passed a Trust Law, Law No 24,441,[52] that together with Resolution No 271[53] of the *Comisión Nacional de Valores* (CNV) established a comprehensive general framework for securitisation.[54] Prior to the

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[52] Law No 24,441, passed on 9 January 1995 and published on 16 January 1995, falls under the general area of 'housing', but covers subjects such as residential and building financing, trusts, leasing, mortgage loans and foreclosures of mortgages.

[53] Resolution No 271 of the *Comisión Nacional de Valores* was published on 1 September 1995.

[54] See David Barbour *et al*, *Securitization in Argentina and Chile, Asia Law, Securitization – A Global Guide* (1997) (on file with the Centre for Commercial Law Studies).

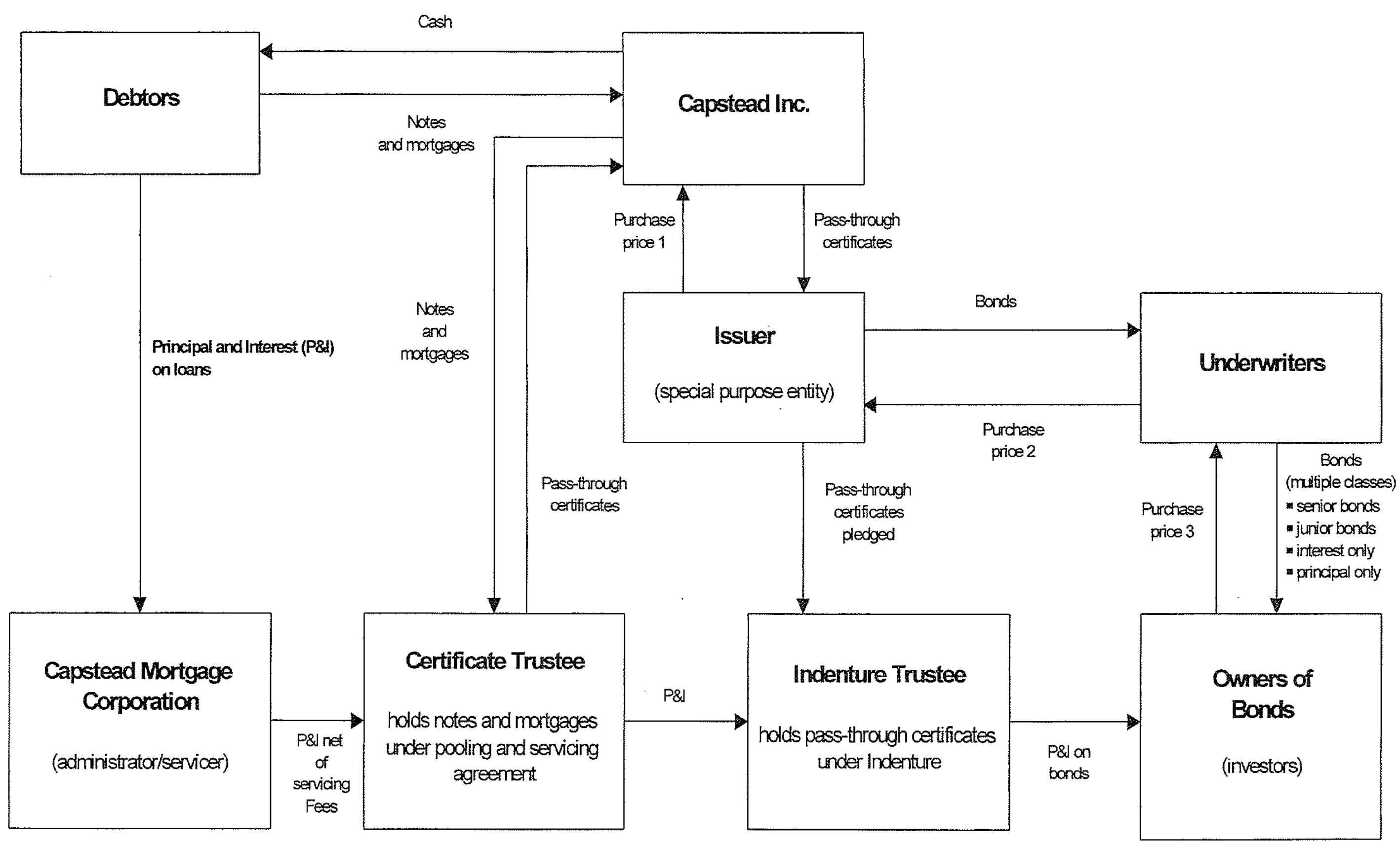

Figure 4 CMC Securities Corporation IV

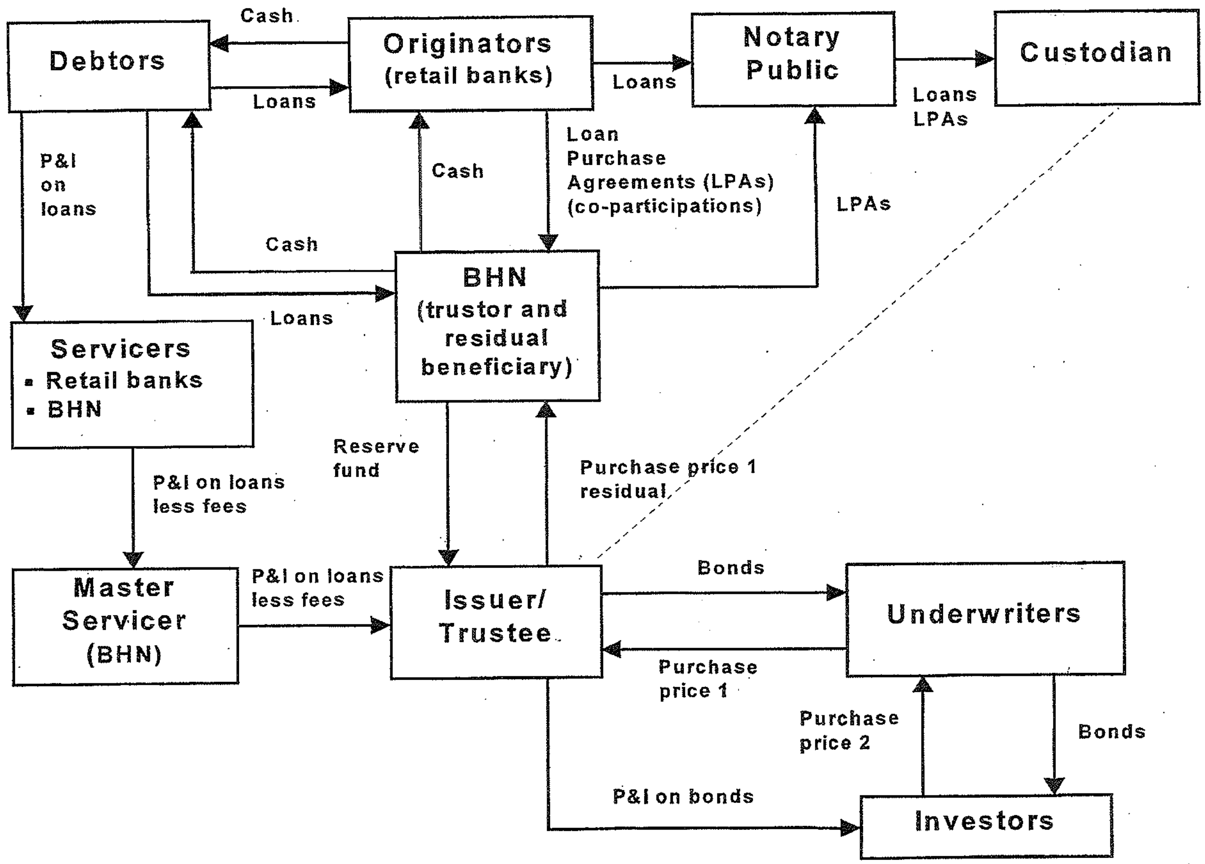

Figure 5 Banco Hipotecario Nacional

enactment of the Trust Law, the trust was not a concept known to Argentina's civil law system.[55] The closest entity resembling a trust was an instrument referred to as a *fedeicomiso*, which shared some of the benefits of a trust through permitting the transfer of certain property rights to a third party.[56] Under the new Trust Law, securitisation transactions similar to those customary in the US were possible. The securitisation was initiated soon after the Trust Law was enacted.

BHN, established by the Argentine government in 1986 to provide low interest rate mortgage loans, was restructured in the 1990s as a wholesale bank to provide medium-term and long-term mortgage loans. BHN purchased loans from approximately 40 retail, or originating, banks. The retail banks advanced principal and interest to the extent not paid by the borrowers and were obligated to cover any credit losses on the loans that were originated by the banks. If a bank failed to pay, then BHN would have the right to debit such retail bank's account at the Central Bank of Argentina.

The BHN transaction involved an issuer, BHN Mortgage Fund, to which BHN transferred its ownership interest in the mortgage loans. At the same time, legal title to the loans was transferred to a custodian by means of recordation in the public records by a notary public. Under the Trust Law, the transfer of the loans to a duly organised trust protects the assets from the bankruptcy of the transferor as well as the trustee. A master servicing unit was created by BHN to direct the servicing of the loans. As it was very important that the rating agencies be satisfied that the master servicer would be able to perform all of its duties and obligations, the longest period of time during the development of the first transaction was spent setting up the master servicer and making it ready for securitisation.

The BHN transaction required a reserve fund as well as a subordination to achieve an investment-grade rating. The transaction was historic because it was the first transaction to receive a rating higher than the rating of its sovereign country, even though the assets were generated entirely within Argentina and were completely subject to country risk. In the initial BHN transaction, there was a 15 per cent subordinated piece as well as a reserve fund of two years' interest on the A bonds, which amounted to approximately US$15 million on a US$100 million transaction when fully funded. In contrast, six months later when the second BHN transaction was issued, the subordination had been reduced from 15 per cent to 10 per cent, and the reserve fund from approximately US$15 million to approximately US$2 million. These lower

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55 See Alfaro and Ferraro-Mila, *op cit* note 37, p. 38.
56 See *ibid*.

levels were due partly as a result of investors having increased knowledge of the Argentine market, and even more so as a result of S&P's favourable view towards dollar-denominated emerging economies like Argentina.

The parties issued three classes of securities, including an A bond, a B bond, and certificates. The A bonds were sold internationally, the B bonds were sold in Argentina, and the certificates were retained by BHN. Today, BHN is a well-known issuer in the international community and has as its goal the issuance of US$100 million of bonds every three months.

C. *Chilean Mortgage Securitisation*

The Chilean transaction involved one of the first securitisations consummated within Chile (see Figure 6). In 1994, Chile established a rather unique securitisation law which was probably designed to encourage Chile's highly capitalised pension funds and insurance companies to invest in long-term securitised debt issuances.[57] The principal Chilean legal framework for securitisation is found in Law No. 18,045 (the Securities Market Law).[58] Title XVIII of the Securities Market Law (the Securitisation Law)[59] sets forth the requirements regarding the formation and operation of 'securitisation companies' in order to undertake securitisation in Chile. Among the requirements set forth in the Securitisation Law is that the legal name of a securitisation company must contain the term *securitizadora*.[60]

The Chilean securitisation differs from those in Argentina in that it was issued internally rather than cross-border. Whereas BHN was forced to issue cross-border securitisations because of a lack of sufficient investment capital within Argentina, Chile was able to issue an internal securitisation because its well-developed pension system had ample investment capital.

Pursuant to Article 59 of Decree Law No. 824 of 1974 (the Income Tax Law),[61] remittances of interest to investors who are non-residents of Chile are subject to a withholding tax of up to 35 per cent, although there are certain exemptions available. For example, interest payments resulting from the following are subject to a 4 per cent withholding tax: (i) loans granted from abroad by banking or financial institutions, foreign or domestic, so long as, in

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57 See Barbour *et al*, *op cit* note 54, p. 67.

58 Law No 18,045, published in the *Official Gazette* on 22 October 1981.

59 Title XVIII was added to the Securities Market Law pursuant to Law No 19,301 of 19 March 1994.

60 See Barbour *et al*, *op cit* note 54, p. 67.

61 Decree Law No 824 of 1974 was most recently amended on 30 July 1997 by Law No 19,506.

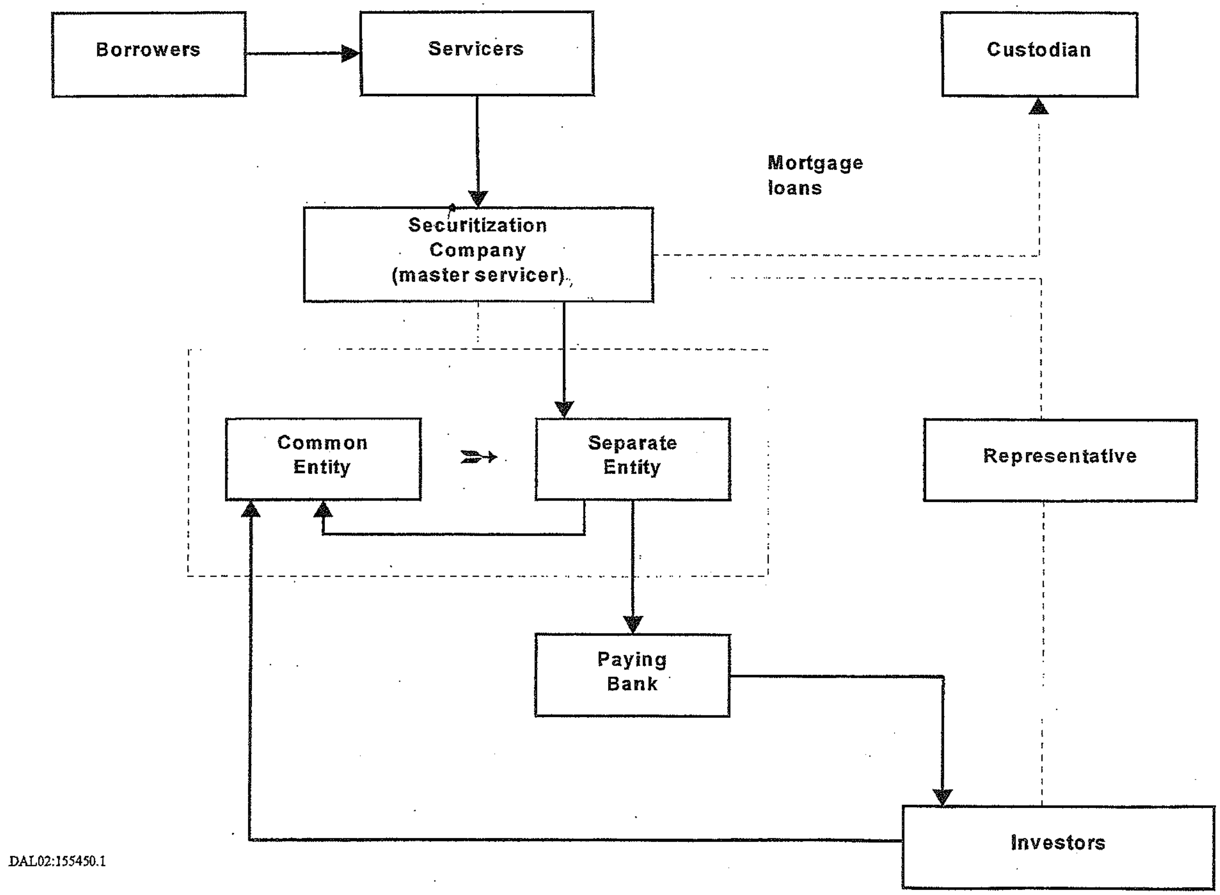

Figure 6 Chilean Securitisation Structure

the case of the latter, they are expressly authorised by Chile's Central Bank;[62] and (ii) bonds or debentures issued in foreign currency by companies organised in Chile, so long as the applicable transaction has been authorised by the Central Bank.[63]

In the Chilean structure, a securitisation company was formed for the purpose of accumulating loans. Pursuant to the Securitisation Law, the securitisation company consisted of two different types of estates: a 'common estate' and one or more 'separate estates'. A common estate is subject to net worth requirements and limits on indebtedness. It is also subject to limitations on ownership that restrict bank owners of securitisation companies from contributing more than 15 per cent of the assets of any securitisation. Additionally, a common estate is an entity that is subject to bankruptcy.

At the time of securitisation, the securitisation company transfers the pool of assets subject to securitisation from its common estate to the applicable separate estate pursuant to an issuance agreement. A new separate estate is established for each subsequent securitisation of a different pool of assets. The securitisation company must keep a special register of the securities issued under each separate estate.

Like the structures used in Argentina and the US, separate estates are bankruptcy-remote so that the bankruptcy or insolvency of the securitisation company does not affect the separate estates. Similarly, the assets of the separate estates are protected from any potential claims of the securitisation company's creditors during bankruptcy.

D. YPF Securitisation

The YPF transaction involved the securitisation of oil and gas receivables through the issuance of structured export notes (SENs) (see Figure 7). Privatised in 1993, YPF is now the eleventh largest publicly held oil company in the world. Although YPF's balance sheet is strong, its rating is constrained by the credit rating of its sovereign country, Argentina, resulting in higher financing costs. YPF sought to reduce these higher financing costs through cross-border securitisation of its oil and gas receivables. The transaction was initiated in February 1995, approximately two months after the Mexican peso devaluation.[64] As a result, the transaction was watched closely in the initial

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[62] Income Tax Law, Art. 59(b).

[63] *Ibid*, Art. 59(d).

[64] The Mexican peso devaluation crisis of 1994–1995 occurred as a result of heavy capital outflows during 1994 under a fixed currency exchange rate regime stemming from a loss in investor confidence in the Mexican economy. The

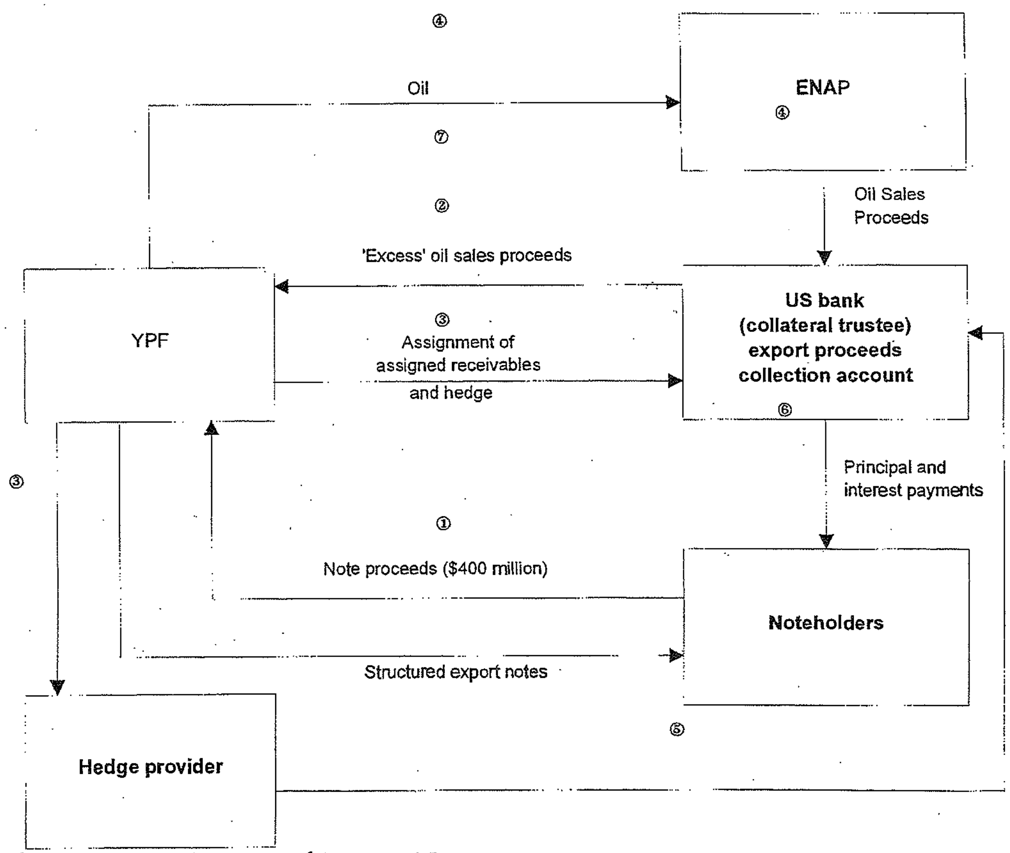

Figure 7 YPF Structured Export Notes

Transaction steps

① YPF issues US$400 million of structured export notes (SENs).

② YPF pledges assigned receivables.

③ YPF buys put option from the hedge provider and assigns to collateral trustee

④ ENAP receives oil from YPF and makes payments to the export proceeds collection account maintained by the collateral trustee.

⑤ Hedge provider makes put payments to the collateral trustee below strike price.

⑥ Principal and interest payments on SENs are made from the export proceeds collection account.

⑦ Proceeds from oil sales in excess of debt service payments and the maintenance of a debt service reserve are transferred to YPF.

capital markets arena because it was the first issue under the new Argentine Trust Law, and because Argentina was considered to be a country that was especially vulnerable to the so-called 'tequila effect'[65] brought about by the peso devaluation.

In its securitisation transaction, YPF issued US$400 million in SENs rated BBB from Duff & Phelps and S&P's based on YPF's existing export and sale of oil to Chile's state-owned oil company, ENAP. Pursuant to a crude oil purchase and sale agreement, YPF is obligated to deliver, and ENAP to purchase, 40,000 barrels of crude oil per day for a period of 15 years. The SENs are secured by certain US dollar payments, or assigned receivables, from ENAP under the oil purchase and sale agreement and a financial hedge to protect against a decline in oil prices. The assigned receivables and the hedge are both assigned to a collateral trustee located in the US as trustee for a trust established under the Trust Law. ENAP and the hedge provider make payments associated with the assigned receivables and the hedge, respectively, directly into an offshore export collection account. The transaction was structured with only a 1.0x debt service coverage based upon the oil price hedge and a debt service reserve equal to three months of debt service payments.

The first transaction was conditioned upon the SENs being the only financing secured by the oil purchase agreement. The assigned receivables were specified as the proceeds from the first 18,000 barrels sold to ENAP, netted. In subsequent transactions, the assigned receivables were specified as a fixed percentage obtained by dividing 18,000 barrels of oil per day by 40,000 of the base volume payments.

YPF's performance, collection and legal/structural risks met the criteria for an investment-grade BBB rating. Additionally, since ENAP is an entity of the government of Chile, which has a sovereign rating of A, the SENs could obtain a rating higher than Argentina's sovereign rating.

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cont.

resulting pressure on the exchange rate and the rapid loss of foreign reserves finally forced the government to revert to a floating exchange rate. A panic run ensued in which investors dumped stocks and short-term debt instruments, called *tesabonos*, causing a massive devaluation in the peso's value and throwing Mexico into a deep recession. For a detailed explanation of the causes of the devaluation, see Douglas W. Arner, 'The Mexican Peso Crisis: Implications for the Regulation of Financial Markets' in (1996) 2 *NAFTA: Law and Business Review of America* 4.

65 'Tequila effect' is the metaphor used to describe the negative impact that the Mexican peso devaluation had on economies that were closely linked to Mexico.

E. Securitisation Transactions in Asian Emerging Market Economies

In previous years, securitisation was not a concept that many Asian emerging market economies embraced. Because the sovereign ratings given to these countries by the rating agencies were higher than the ratings of their counterparts in Latin America and elsewhere, these countries enjoyed relatively low borrowing rates, thus undercutting the appeal of securitisation. Most Asian governments took a conservative position towards securitisation, continually questioning whether their economies could actually benefit from entering the securitisation market.

Attitudes have changed considerably as a result of the economic crisis which began in 1997 and continues in 1998. With the economic problems going from bad to worse in some economies in south-east Asia, asset securitisation may soon become the only method in which financial institutions and business can raise the capital they desperately need. In particular, the finance and property sectors of these economies have fallen on difficult times, and perhaps stand to benefit the most from securitisation. Today, the governments of emerging market economies such as Thailand, Indonesia and South Korea appear to have been strongly convinced that securitisation is really necessary and are beginning to look to the securitisation markets of Latin America for guidance in developing their own markets. Asian governments have just recently come to realise a securitisation benefit that Latin American governments discovered a few years ago: securitisation enables distressed, below-investment-grade financial institutions and companies to raise funding at investment-grade levels.

In Thailand, after several years of indecision on securitisation, the government enacted legislation in 1997 to support the development of a securitisation market. The legislation, applauded by many, officially recognised and legalised securitisation for the first time and created a specific legal infrastructure designed to remove the legal uncertainties from securitisation transactions. Additionally, the legislation permitted the establishment of the Secondary Mortgage Corporation (SMC), based on the US's Fannie Mae and the Hong Kong Mortgage Corporation.[66] The SMC is designed to create a secondary mortgage market and promote liquidity by purchasing mortgage loans, securitising them and then selling them as mortgage-backed bonds. Although presently undercapitalised with only Bt5 billion (US$114 million),

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66 See 'Thai Government Jumps on MBS Bandwagon' in (1997) 12 *Mortgage-Backed Securities Letter* 30, pp. 1, 9.

the SMC when fully capitalised should enable lenders to make loans more easily since they can be confident that the secondary market will buy them.

Before the onset of the Asian currency crisis, Thailand was poised to be one of Asia's hottest securitisation markets. A number of deals had been closed, and many more were in the process of completion. In August 1996, Thailand completed its first public securitisation, a US$250 million transaction backed by auto loans from Tru-way Co. Ltd. and TISCO Leasing Co. Ltd.[67] The securitisation was issued through a Cayman Islands SPV and was the first Asian securitisation outside of Japan or Hong Kong. The transaction received a triple-A rating from both S&P's and Moody's and attracted a tremendous amount of interest from foreign investors. By May 1997, a handful of other transactions had been successfully completed, including another triple-A rated transaction backed by auto loan receivables that garnered US$83 million.[68]

Unfortunately, by December 1997 the currency crisis had reached previously unimaginable levels, forcing the government to shut down 56 of the 58 Thai finance companies. Many of these finance companies were weeks, if not days, away from securitising their assets. An additional blow came when Moody's downgraded the country to below investment grade at Ba3. Conditions are slowly improving, however, and securitisation transactions are beginning to emerge once again, although none are denominated in Thailand's domestic currency, the baht.

The first securitisation transaction to be completed since the crisis erupted was slated for the US private placement market sometime near the end of April 1998. The transaction, from Thailand's Wongpaitoon Group, was anticipated to be worth between US$50 million and US$100 million and was backed by dollar-denominated revenues raised by the sale of sneakers to Reebok.[69] Additionally, rice, rubber and electronic manufacturers are all currently exploring transactions based on future flow export receivables.[70] Even Thailand's major banks are considering using similar structures to package future US dollar receivables gained from trade financing.

Indonesia, like Thailand, is considered an attractive market for securitisation transactions. Locally, Indonesian companies have been encouraged to seek securitisations by a strong regulation that severely restricts the amount of foreign currency that can be brought into the country, but which exempts

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67 See 'Thai Deal Helps Open Door to Asia' in *Asset Sales Report*, 5 August 1996, p. 3.

68 See 'Thai ABS Copes with Economic Strife' in (1997) 11 *Asset Sales Report* 19, p. 1.

69 See 'First Post-Crisis Thai ABS Deal Sneaks into US' in (1998) 1 *Asset Sales Report – International* 4, pp. 1, 15.

70 See 'Thailand: Down But Not Out' in (1998) 1 *Asset Sales Report – International* 2, p. 8.

from those limits off-balance sheet financing through securitisation. Other motivating factors for entering the Indonesian market are its large population, its growing middle class, and its triple-B sovereign rating.[71]

Additionally, the supply of new mortgages is abundant since demand for housing currently exceeds supply. The gap is expected to widen as the growing middle class and lower interest rates continue to spur demand. Demand has also been strong in the auto loan and credit card sectors. Such demand has caused a rise in the percentage of auto, home and credit card loans to the total assets in many financial institutions' balance sheets and this, in turn, has led to a corresponding rise in the overall risk level of those balance sheets. This situation has created an additional incentive for financial institutions to seek securitisations as a cost-effective method of removing higher-risk assets from their portfolios.

Various types of transactions have been completed in Indonesia since 1996. The first auto loan-backed transaction in Indonesia was completed in mid-1996 by PT Astra, an Indonesian holding company, and Thai Cars, an auto financing company, for US$200 million.[72] Under the transaction, a portion of the auto financing company's portfolio is allocated to an offshore SPV. The payments are collected by a local bank in local currency (rupiah) and then swapped for dollars by a swapping agent. Finally, the dollars are captured in a trust located outside of Indonesia to service the bonds.

Citibank Jakarta completed a credit card receivables transaction at the end of 1996 and is planning further transactions. Additionally, Bank Internasional Indonesia (BII) completed Asia's first rated, future flow credit card transaction in early 1997.[73] The private placement transaction was structured using a Latin American template in which future flows of assets were captured in special dollar-denominated offshore trusts. Because of overwhelming investor demand, BII increased the transaction's size from an initial target of US$75 million to approximately US$140 million. Notwithstanding the increase in the transaction's size, the private placement was reportedly 22 times over-subscribed.

The Asian currency crisis has created significant economic volatility in Indonesia, just as it did in Thailand. The economic instability which began with the June devaluation of the baht soon radiated outward to other Asian countries whose economies were in similar shape to Thailand's. Like Thailand,

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71 See 'PUMA Starts Indonesian Home Loan Effort' in *Mortgage-Backed Securities Letter*, 1 December 1997, p. 5.

72 See 'Indonesia Readies Second Auto Offering' in (1996) 10 *Asset Sales Report* 44, pp. 1–2.

73 See 'Indonesian Deal May Open Doors' in *Asset Sales Report*, 10 March 1997, p. 10.

Indonesia was forced to abandon its fixed exchange rate in favour of a floating rate system. The rupiah has seen a 30 per cent devaluation, and interest rates have skyrocketed, putting considerable pressure on the financial system. Subsequently, BII's rating was downgraded by Duff & Phelps from BBB to BBB- and this led to a similar downgrade of its future credit card receivables securitisation from BBB+ to BBB.[74] Other securitisation deals have also been negatively affected. Despite the economic downturn during 1997, however, most analysts agree that Indonesia's fundamental economics are good, and that the current micro-economic reform taking place in connection with the IMF assistance package will eventually bring considerable benefits to the financial system.

South Korea, like its Asian neighbours, has been negatively affected by the Asian crisis that originated with the devaluation of the baht. Korea's problems surfaced in late October 1997 when foreign banks ceased rolling over loans to Korean financial institutions as worries grew over the country's credit quality. A liquidity crisis and a growing number of bad debts followed. Then, on 21 December 1997, several issuers were forced to put their securitisation transactions on hold when Moody's downgraded Korea's sovereign rating from Baa3 to a below-investment-grade Ba1. S&P followed the next day by downgrading Korea four notches from BBB- to B+.[75] Most of these securitisations transactions involved local-currency assets and were to be guaranteed by insurance companies. Currency instability, and the insurance companies' unwillingness to guarantee issues with below-investment-grade assets, made those transactions unfeasible.

Transactions backed by foreign currency assets, however, continue to progress. For example, SK Corp., South Korea's biggest oil refinery, is working on a transaction valued between US$100 and US$200 million.[76] The securitisation is backed by US dollar receivables payable by European petroleum and transport concerns. The income stream is to be captured in an offshore trust. Because the funds remain offshore and are denominated in dollars rather than rupiah, the transaction should receive a rating well above Korea's sovereign ceiling.

The concept of securitisation also appears to be gaining popularity in the Korean government. For example, Park Tae-joon, president of the United Liberal Democrats and the number three man in the ruling coalition, has

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74 See 'Asian Quake Hits ABS Deal' in *Asset Sales Report*, 8 September 1997, p. 3.

75 See 'Korean Deals Derailed' in *Asset Sales Report*, 12 January 1998, p. 2.

76 See 'SK Corp. Plans Korean ABS Plunge' in *Asset Sales Report*, 2 February 1998, pp. 1, 16.

recently vowed to amend the country's laws and regulations to establish a comprehensive securitisation system.

VI. Developing a Securitisation Infrastructure

Securitisation transactions may be difficult or even impossible to consummate unless the originator's country has established the proper legal and financial infrastructure upon which transactions can be structured. The following subsections discuss a few of the most essential components of a proper legal and financial infrastructure.

A. Legal Infrastructure

The lack of a proper legal framework has proven to be a major impediment to many emerging market countries who are otherwise eager to enter into the securitisation arena as quickly as possible. Accordingly, practitioners who are contemplating securitisation transactions in emerging market countries should make a careful analysis of the legal system of the originator's country prior to spending any substantial amount of time or resources on the transaction's structure.

Emerging market countries wishing to establish a market for securitisation must first abolish or amend any existing statutes or other laws that inhibit in whole or in part the practice of securitisation. For example, countries should amend any laws which prohibit certain entities, such as corporations and banks, from participating in the securities markets since securitisation will require those entities to participate in such markets. Laws inhibiting securitisation are more common than one might expect. Indeed, some countries, such as Thailand, have only recently passed decrees legalising securitisation.[77]

By far the most essential step in building a legal framework for securitisation is to enact laws allowing for the creation of SPVs to which an originator can transfer its receivables. Without the SPV, an originator cannot segregate the assets that collateralise its securities offering. However, even if the emerging market country lacks a provision allowing for an SPV, it is still possible (although with added cost and complexity) to consummate a securitisation

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[77] See 'Thai Government Jumps on MBS Bandwagon' in (1997) 12 *Mortgage-Backed Securities Letter* 30, p. 1.

transaction by structuring it so that the assets are transferred to an SPV located offshore (eg, in the Cayman Islands). This method has been used with success for securitisations in countries such as Thailand[78] and Indonesia.[79]

The SPV may be formed as a corporation, a trust, or in some instances as a limited partnership depending on which form fits best within the country's existing legal system.[80] Argentina has chosen to use the trust as its form of SPV while Chile has chosen to use the corporation as its form of SPV.

A well-developed bankruptcy system is another important aspect of creating an appropriate legal system for securitisation. The primary reason that an originator can obtain a good credit rating for its securitisation and a favourable price from investors is that the assets that collateralise the securities are shielded from the originator's creditors in the case of bankruptcy.[81] A country's bankruptcy system must provide that an SPV, in whatever form it takes, is bankruptcy-remote so that its assets are not consolidated with the originator if the originator becomes insolvent.

The real property laws of the emerging market country should allow for legal title to the assets to be transferred to the SPV with little or no extra recordation. Additional recordation translates into higher transaction costs and increases the potential that the assets will not be effectively transferred to the SPV.[82] If an effective transfer does not take place, then the assets will still be accessible to the originator's creditors in the case of bankruptcy.

Foreclosure procedures must also be efficient so that mortgage obligors will have the proper incentive to avoid defaulting on their loans. Onerous registration requirements and the lethargic foreclosure system in Mexico have created a serious impediment to securitisation. To alleviate this impediment, the Mexican government is currently working to amend each state's civil code so that mortgages can be transferred to a trust without having to be reregistered.[83] The government is also taking steps to reduce the time it takes to complete foreclosure proceedings from the current two or three-year period to a period between six months and one year.[84] These efforts should greatly facilitate future securitisations, especially those backed by mortgages.

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78 See *ibid.*
79 See 'PSM to Securitise Motorcycle Loans' in (1997) 11 *Asset Sales Report* 34, pp. 1, 12.
80 See Robert R. Veach, Jr, 'Securitization of Assets' in (1993) 30 *March Bulletin Business Law Section State Bar of Texas*, p. 23 at p. 32.
81 See *ibid*, p. 32.
82 See 'Mexican Banks Prepare for Mortgage Securitization' in *Asset Sales Report*, 31 October 1994, p. 5.
83 See Sara Kandler, 'Mexico to Sell Guarantees for MBS Program' in (1997) 10 *Emerging Markets Debt Report* 28, p. 2.
84 See *ibid.*

An emerging market country should also amend its tax regime so that assets transferred to an SPV are exempt from withholding tax. Withholding tax imposes an especially burdensome impediment to securitisation transactions. In certain countries, securitisation transactions must be structured as sales of assets to offshore SPVs to avoid withholding tax. The greater complexity of such structures leads to higher costs and increases the risk that there will be an ineffective transfer of assets to the SPV.

Additionally, if the emerging market country wishes to encourage the sale of securities to foreign investors, it should enact provisions that exempt foreign investors from paying withholding tax on the interest earned on the securities. A withholding tax on the earned interest reduces the value of the security and forces the issuer to compensate by increasing the level of interest paid to investors. A higher level of interest paid to investors negates the low-cost benefit of securitisation. In Argentina, foreign investors are exempted from paying withholding tax as long as the transaction is structured properly and authorised by the CNV. Chile, on the other hand, does not have such an exemption and, therefore, all international Chilean transactions will be subject to some withholding tax under Chile's present laws.

B. *Financial Infrastructure*

In addition to legal infrastructure, it is important to have the proper business and financial market infrastructure in place to foster securitisation transactions. In general, an emerging market country should seek transparency in all aspects of its financial markets. In other words, all market standards and practices should be uniform and unambiguous so that those structuring transactions may get consistent results out of each transaction.

Specifically, it is important to have uniform accounting standards that allow originators to structure the securitisation so that the transfer of assets to the SPV constitutes a true sale. In the case of mortgage-backed securities, it is important to have uniform procedures and standards for filing, recordation, property appraisal, loan application and loan approval. In Mexico, for example, the state housing trust fund is working with international accounting firms, sponsored by the World Bank, to develop uniform accounting standards as well as comprehensive home pricing data.[85] As stated earlier, standardised documentation greatly facilitates securitisation. Uniform procedures and standards encourage the development of standardised documentation and thus will facilitate securitisation.

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[85] See *ibid.*

Finally, countries must maintain stable domestic currency exchange rates. One can find a perfect example of the negative effects of an uncontrolled domestic currency exchange rate on securitisation transactions by looking at the south-east Asian countries of Thailand, Indonesia, Malaysia and South Korea whose recent wild currency fluctuations have caused several securitisation deals to be postponed indefinitely.[86] Since the crisis began, these countries have increased efforts to securitise their debt. Because of the currency fluctuations, however, most of the successful securitisations have used US dollar-based assets rather than assets based on domestic currencies. Unfortunately, the overwhelming majority of the remaining assets are based on domestic currencies, and few investors have been willing to take the risk of further fluctuations between the domestic currencies and the US dollar.[87] Therefore, it is clear that a stable exchange rate is essential for securitisations backed by domestic currency based assets.

VII. Concluding Remarks

In light of the economic problems that many emerging market countries are experiencing today and the negative effect that those problems have on the availability of credit through traditional funding channels, asset securitisation may soon be considered the cheapest way - and perhaps even the only way - for financial institutions and businesses to raise money. The asset securitisation market in the US grew out of a period of economic distress, so the current economic conditions in south-east Asia and other parts of the world should provide a strong catalyst to the development of new securitisation markets in those countries.

For some countries, creating the legal and financial infrastructure necessary to foster an active securitisation market will require a tremendous amount of effort and patience. Nevertheless, the virtues of securitisation, from lower funding costs to the reduction of risks, are so numerous and so positive that no emerging market country can afford to ignore using this revolutionary financing technique.

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86 See Cecile Gutscher and Betty Liu, 'Many Hurdles Are in Way of Asian Securitized Deals' in *Wall Street Journal Europe*, 5 January 1998, p. 1.

87 See *ibid.*