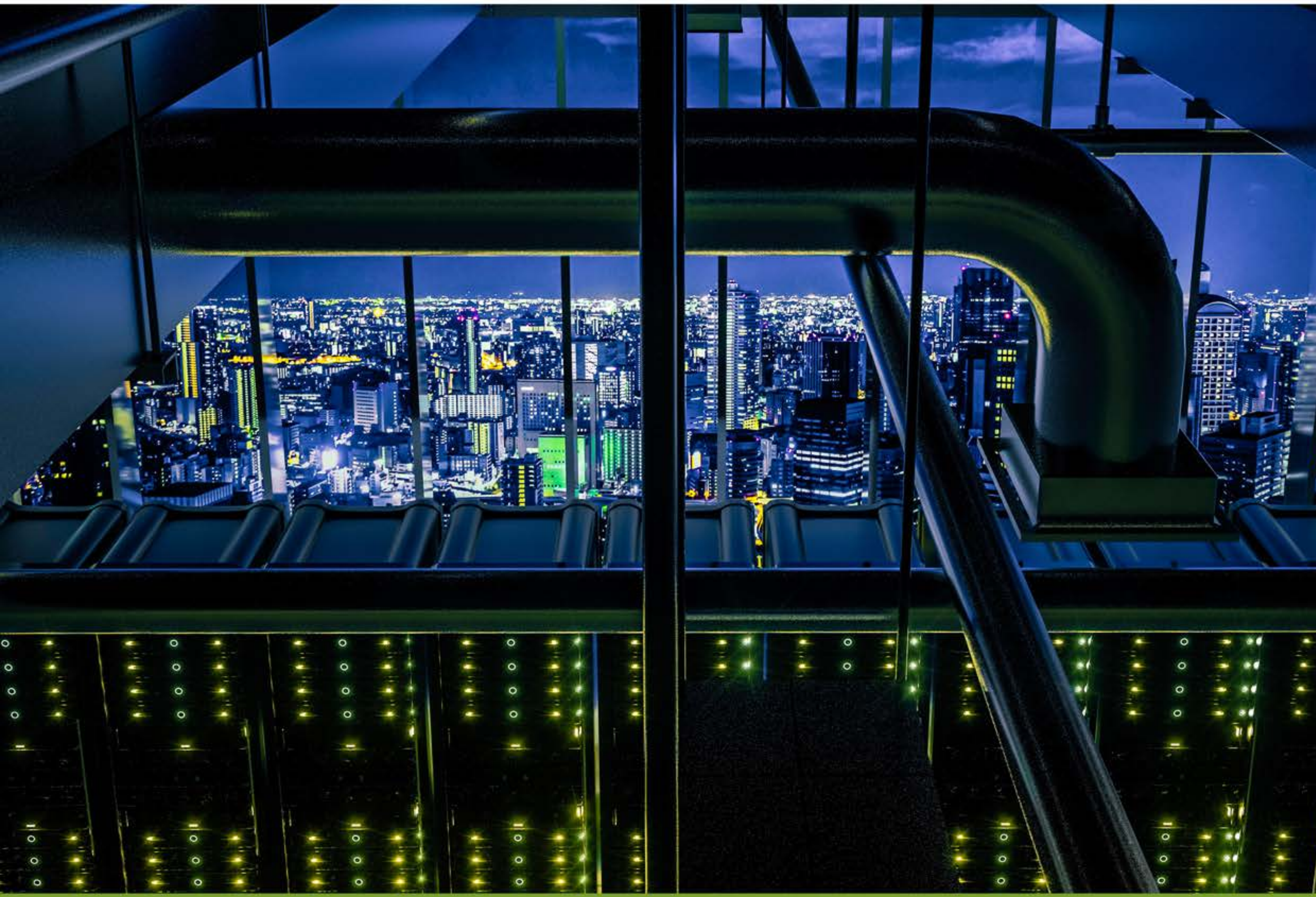


ASIFMA Securitisation in Asia 2018

Table of Contents

I. Executive Summary (ASIFMA)

As a tool to diversify and disperse risks, securitisation has played a vital role in developed markets for an extended period of time – As the range of securitised products and markets have grown in terms of variety and sophistication, a wider range of investors and market participants have recognised the potential for securitisation to meet the twin objectives of a) enhanced return and b) portfolio diversification. Given the success that securitisation has enjoyed globally, the time has come for the effective use of this tool across Asia – with one market in particular standing out for the spectacular strides that it has made over the last few years – China.

That said, some of the Asian markets that have seen reasonable volumes of domestic securitisations, in the years after 2008-09 include Korea, Singapore (especially with respect to the development of the covered bond market), India and as pointed out above, China. In fact, from a near standing start, China has over the last five years has become Asia's largest securitisation market, with South Korea a distant second. This is a promising development (and one topic that this document focuses on) worth watching closely – the opening of China's securitisation market to international investors via the opening of the China Interbank Bond Market (CIBM) and the recently introduced "Bond Connect", the adoption of global ratings standards and the diversification of Chinese issuers both by issuers and product type are all welcome developments. Moreover, this would also assist in the internationalisation of the renminbi, a process that is well advanced.

The organisation of this document follows a logical trajectory – Beginning with the origins and broad description of what securitisation represents and the benefits it confers for issuers and investors alike (Chapter 2), the document then describes the state of securitisation in China and the evolution of securitisation structures and the latest trends in that market (Chapter 3). The next chapter (Chapter 4) covers developments in the US, Europe and the rest of Asia (South Korea, Singapore and India) while Chapter 5 covers "International Regulation" and its impacts on securitisation globally. Subsequently, Chapter 6 covers the rapidly developing field of covered bonds in Asia while the next chapter (Chapter 7) looks at the ratings framework governing securitisations. Chapter 8 covers taxation issues in securitisation across the region. Chapters 9 & 10 take a deeper dive into regulatory issues covering a) the tools available to regulators and b) the state of regulation in Asia. Chapter 11 touches on a topic of great current interest, the blockchain and its applicability in the context of asset backed finance. concludes the document with a look at the way forward for Asian securitisation. The final Chapter (Chapter 12) weaves together the themes highlighted in the preceding chapters and aims to point to the way forward for securitisation in Asia.

In summary, the goal of this document is to serve as a primer for the state of securitisation in Asia and make the case for its continued development in the months and years ahead, with a particular focus on what has already become the largest market for Asian securitisations – China.

II. What is Securitisation (Clifford Chance)

Securitisation is now a developed financing tool in Asia; the method of its adoption has varied throughout the region, where some jurisdictions, such as China, Korea and Japan, have implemented special legal regimes, while others, such as Hong Kong and Singapore, have made use of existing laws, with some special cases, such as the regulatory covered bond regime in Singapore. Financial institutions and corporates equally make different uses of securitisation, with some using it for funding, others for regulatory capital relief and others for balance sheet management.

It is clear, however, that the securitisation markets in Asia are not as deep as those found in the US or Europe, though there is now significant increasing interest, on the one hand, among investors in Asia looking at investing in US and European securitisations and, on the other hand, among issuers in Asia putting in place securitisation structures which will appeal to US and European investors.

Regulators in Asia are taking a balanced and thoughtful approach. In Hong Kong and Singapore, for instance, the HKMA and MAS have been implementing the Basel securitisation framework, and in China, using a quota system to try our different types of securitised product before making them more widely available.

The three biggest regional uses of securitisation technology are very much linked to the real economy – mortgage loans (for instance, Singapore covered bonds), consumer credit (for instance, the Korean and Chinese domestic securitisation markets) and trade (Asia has a strong history of cross-border trade). This is an important point to note, as it shows both regulators and financial institutions are supporting the socially useful features of securitisation, drawing capital from a range of bank and capital markets sources and delivering that capital to help support citizens as they use and draw on credit in their day-to-day lives.

This chapter outlines what securitisation is, its role in recent history, its benefits and some of the different forms it takes.

1. Back-to-basics

Features

"*Securitisation*", as a term, is used colloquially to refer to a wide and diverse range of financial products. At its core, however, securitisation should be thought of as a set of techniques, or tools, rather than a particular product. The presence of these techniques in a transaction or structure are hallmarks that that transaction or structure is a securitisation. These techniques, or hallmarks of securitisation, are:

- a pooling of financial assets;
- isolating the credit risk of those financial assets from the credit risk of the entity to which they are currently owed; and
- using the cash flow from those financial assets to repay an investment.

Capital markets investors, such as banks' treasury departments, insurance companies, pension funds and a range of investment funds, are able to make use of these techniques to provide funding for real economic activity by banks and corporates.

The following diagram illustrates a typical securitisation transaction.

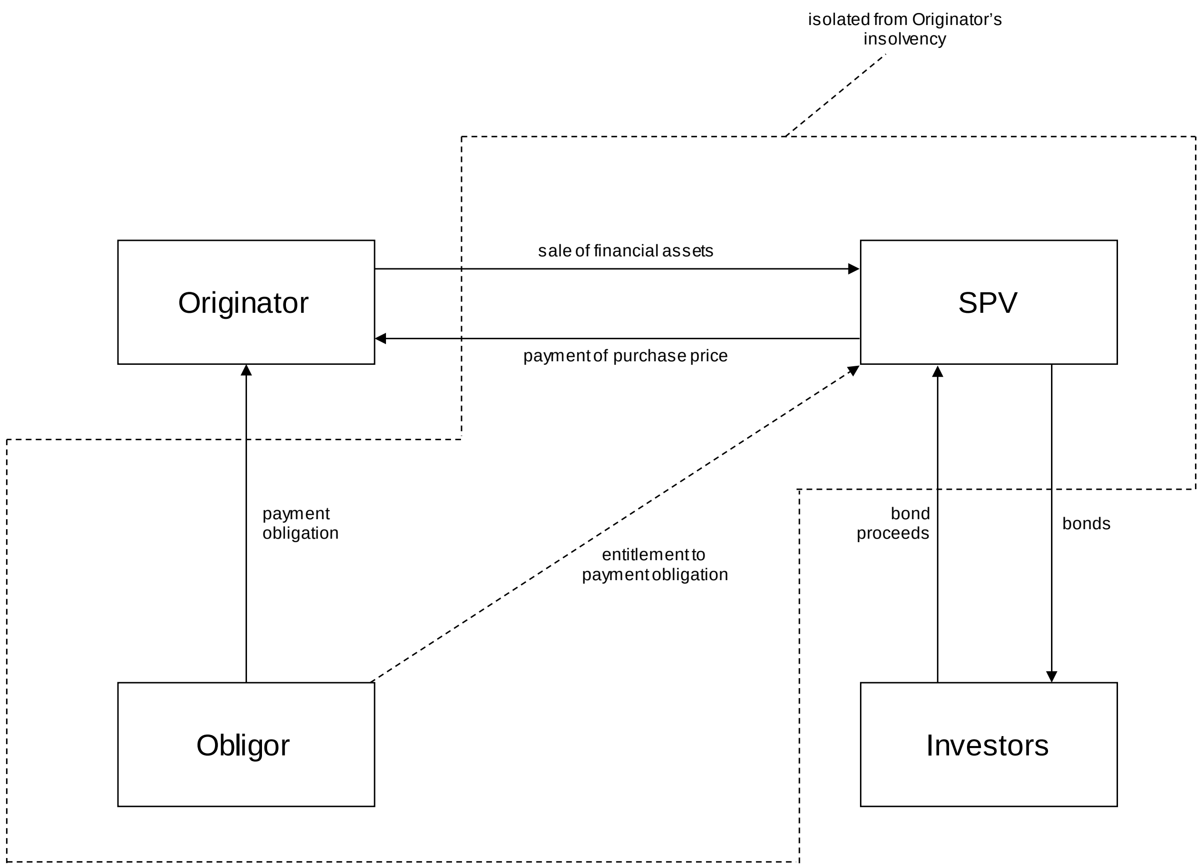


Figure 1: A basic "true sale" securitisation structure

The Originator is a creditor to the Obligor, e.g., as a lender under a consumer loan, and is therefore owed a payment obligation by the Obligor.

The Originator, as owner of the payment obligations, sells them to an SPV. The SPV is a stand-alone entity, created especially for the purposes of the securitisation.

The SPV pays the purchase price for the sale of the payment obligations to the Originator. The SPV funds the payment of purchase price by issuing bonds to Investors.

Although the Obligors continue to make payment to the Originator, usually as servicer of the payment obligations, the entitlement to the payment obligation has been transferred to the SPV and is ring-fenced from the Originator's insolvency. If the Originator becomes insolvent, the payment obligations will no longer form part of its insolvent estate.

The Originator will pass collections it receives to the SPV, which will use that cashflow to make payments of interest and principal on the bonds.

Securitisation structures

There are many ways in which securitisation techniques are employed in transactions and in the boxes over the next few pages you will note the differences between true sale securitisations, covered bonds, master trusts, whole-business securitisations and trade receivables securitisations.

Asset classes

A range of financial assets are regularly securitised and these include, among others:

- residential mortgages;
- commercial mortgages;
- auto-loans and leases;
- consumer loans;
- credit cards;
- trade receivables;
- corporate loans (including SME loans); and
- project finance loans.

Each asset class has its own peculiarities which result in, sometimes nuanced, differences in the way transaction involving them are structured. Due to differences in asset quality or legal systems (which can each also, in turn, drive differing requirements from rating agencies), some jurisdictions often favour some asset classes over others.

2. The Old Axioms of Securitisation and the Global Financial Crisis

Prior to the global financial crisis arrangers, originators and investors alike, believed axiomatically that securitisation was beneficial to the economy for a number of reasons. Included among these reasons was the thinking that securitisation, simply of itself, provided greater market liquidity and market completion – by slicing and dicing risk and allowing investors to choose what level of risk they wanted, it created a more efficient, financially stable market. The credit creating effect of securitisation was also widely considered beneficial on the basis that additional credit meant there could be additional growth.

However, the global financial crisis turned these perceived principles on their head – the way the US and European financial industry participants had been operating in the preceding years had resulted in a build up, not a reduction, of risk and credit creation fuelled inflation. US and European financial institutions had also become more interconnected which meant, when the crisis began, losses were quickly transmitted around most economies in the Western world.

The role of securitisation in an economy, and the "shadow banking" sector where securitisation techniques were frequently employed, was then brought into sharp focus. With hindsight, the way securitisation had been used in some contexts – such as in SIVs, CDO^2s, originate-to-distribute business models and capital arbitrage transactions – had contributed to the build-up of risk which, alongside the broader effects of "shadow banking", had led to a less stable financial system.

"SIV" – a structured investment vehicle. These vehicles typically issued short term commercial paper to finance a pool of securities which it bought and sold. A SIV would make a spread by arbitraging the short-term nature of its funding with the longer-term nature of the securities it bought and sold.

"CDO^2s" – a collateralised debt obligation squared. A collateralised debt obligation is a transaction whereby a pool of securities are purchased by an SPV, financed by that SPV issuing its own securities. A CDO^2 is a CDO of a CDO – i.e., an SPV which purchases securities which have been issued as part of a CDO.

"originate-to-distribute" – a business model employed by a number of investment banks and other market participants where mortgage loans, corporate loans or other financial assets were originated solely for the purpose of securitising them. As the business originating the loans was transferring all the risk in all the loans to a securitisation, there was little, or no, incentive for that business to engage in sound underwriting practices – the credit quality of the loans in the securitisation might then be significantly less than a securitisation investor would expect.

"capital arbitrage" – entities subject to capital requirements rules might be able to engage in an arbitrage transaction, whereby the capital they need to hold against a particular asset might be significantly less if held through a certain transaction structure compared to another whereas the underlying risk in the asset would remain the same.

What became clearer though, was that securitisation was a tool, not something which had effects in and of itself. If securitisation is used in a particular way, it can have very serious consequences but when used in other ways, it can bring very significant benefits.

3. How Securitisation Can Be Used to Benefit the Economy and Strengthen the Financial System

Whatever benefits securitisation can bring, it is widely believed by regulators in both Europe and the US, that securitisation should be regulated – boundaries are being drawn around the scope of what securitisation can and cannot be used for. To achieve some of the benefits outlined in this section, proper regulatory scrutiny would like to be needed – the possible regulatory options for positive securitisation in China are explored further in Chapter X.

Reducing an overreliance on the banking system

One risk highlighted by the global financial crisis, particularly in Europe where bank assets were three times European GDP, was an overreliance on the banking system as the provider of credit for the economy. The "credit crunch" experienced in Europe resulted from the banking sector cutting the amount of credit it provides in the wake of increased capital requirements and a general desire to engage in less risky activity. As banks were the main provider of credit many companies became unable to access the finance they needed.

Securitisation is a tool that can be used to deal with this problem in two ways. First, it can be used by corporates who would otherwise be reliant on bank funding to securitise their assets and access the capital markets as a funding source directly (for instance, utility companies or corporates with large portfolios of trade receivables). Second, it can be used by banks to distribute their existing risk to the capital markets thereby freeing up their balance sheets to undertake more lending themselves. This latter use has two benefits – (i) spreading risk more widely around the financial system (ensuring not too much is concentrated just in the banking sector) and (ii) facilitating the extension of further credit through an already existing banking system.

Additional non-bank credit provision

Having a wider proportion of credit provided by non-banks (by accessing the capital markets through securitisation) can have a positive effect on financial stability. Non-banks are typically less vulnerable to the risks inherent in the banking system – for instance (i) they are less reliant on short-term funding sources (such as customer deposits or interbank lending), (ii) they have less complex balance sheets and (iii) they are typically less leveraged than large banks as they would not benefit from the "too-big-to-fail" subsidy. Moving more risks from banks to non-banks would means that a shock in the banking system would not necessarily involve issues among non-banks resulting in credit continuing to be available through that channel despite issues in the banking system.

Non-maturity transforming credit

Securitisation can offer credit in a way which is not maturity transforming – securities can be issued with a tenor many years into the future. Banks tend to avoid such long commitments as they are generally receiving their own funding on a short term basis. By enabling access to investors who are willing to accept or desire longer tenors, the borrowing needs of people who and companies which need long term credit can better be met.

Two key areas where securitisation can help in this manner are residential mortgage borrowing and infrastructure borrowing – in both instances there is a desire for long term credit over many years which can be met through securitisation.

An investment instrument

Securitisation can repackage illiquid assets into liquid securities. Some non-bank investors, such as insurance companies and pension funds, are reluctant to grant loans directly on the basis there is limited liquidity if they wish to transfer that risk further down the line. By holding liquid securities, rather than a loan, it means that position can be readily sold on, if the investor so chooses.

Diversification of risk

Securitisation offers investors, both banks and non-banks alike, the opportunity to diversify their portfolios, whether in terms of risk profile, geographical location or liquidity. Rather than simply buying corporate bonds or shares, which depend on the risk of a corporate as a going concern, an investment in a securitisation gives exposure to an underlying pool of assets – a different type of risk which can bring more diversity to, and therefore will reduce overall risk in, an investment portfolio.

Tranching

The securitisation technique of tranching means that securities representing interests in the same asset pool can be given different risk profiles. This is done through a legal technique called a waterfall or a priority or payments.

For instance, a pool of residential mortgages with a face value of 100 might be transferred to an SPV and the SPV issues 100 of notes to fund that acquisition – 50 "A" notes, 30 "B" notes and 20 "C" notes. The transaction documents will provide that as the residential mortgages are repaid by the underlying borrowers, the cash collection are used first to redeem the A Notes, second to redeem the B notes and finally to redeem the C notes. The result of creating this priority is for the C notes to take the "first loss" on the pool – i.e., any losses up to and including 20% would result in the holders of the C notes losing out without the A noteholders or B noteholders taking any losses. Losses in this pool between 20% and 50% would be borne by the B noteholders and the A noteholders would begin to experience losses only in excess of 50% of the entire pool. The A notes therefore have significantly less risk attached to them than the C notes, but will likely yield a much smaller margin to investors holding them.

Thereby through tranching a ready supply of high-quality low risk securities can consequently be provided for investors through the use of securitisation, provided the underlying assets are, overall, of a sufficiently high credit.

Banking stability

Securitisation can also be used by banks to help reduce some of the risks inherent in banking activity. This can be done by:

- better matching the bank's assets to its liabilities – by having funding provided to the bank with the same tenor as it requires to lend;
- better risk management – by imposing reporting and information requirements on a bank reporting to its investors it is incentivised to continue to accurately monitor the risks of the assets it is funding;
- wider investor base – investors in securitisation are an alternative source of funding for banks, aside from depositors, interbank lending and bonds, providing banks with a more even source of funds making them more resilient to shocks or reductions in credit in one

investor base; and

- cost of funding – by better matching an investors appetite to risk through tranching or the credit quality of the underlying assets a bank can better price its securitisation funding thereby resulting in cheaper funding for it than might be available through other secured funding channels.

4. Ratings in Securitisations

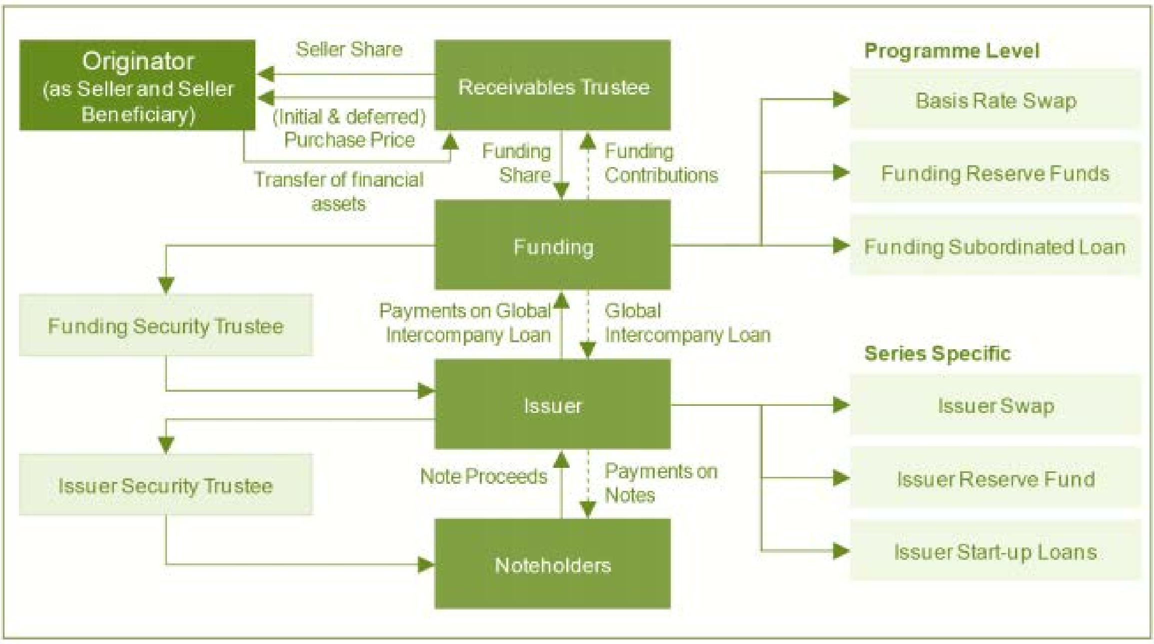
Rating agencies are often engaged in securitisation transaction in order to provide investors with a view on the likelihood of the ultimate repayment or principal on a particular class of notes and/or the expectation or timely payment of interest on a particular class of notes.

There are a number of factors which a rating agency will take into account when assigning a rating to a particular transaction. These factors include the following and are explored in more detail in Chapter VI:

- the credit rating of the originator of the assets;
- the historic performance of the assets originated by the originator;
- the credit policies of the originator in extending credit to its customers;
- the ease with which the servicing function might be replaced upon the insolvency of the servicer;
- the jurisdictions in which underlying debtors are located;
- the level of credit enhancement provided to the tranche being rated; and
- the strength of any legal opinions provided as to the insolvency-proof nature of the transaction.

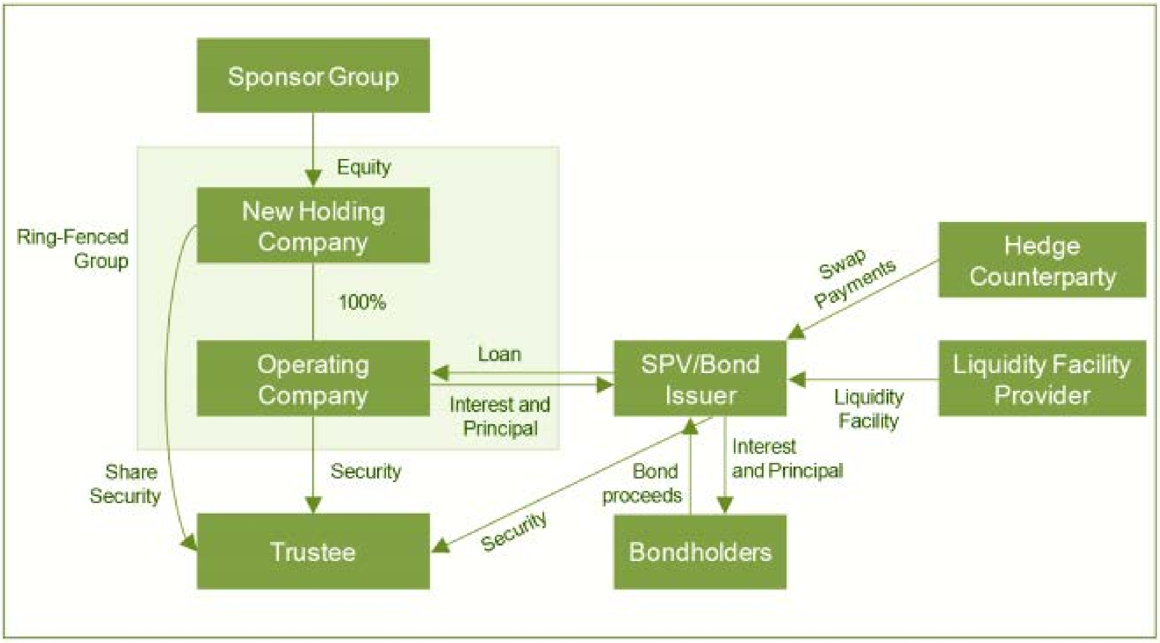
The rating process is often fairly involved, with rating agencies undertaking due diligence visits to the originator and requesting large amounts of data in order to provide a robust rating for the transaction.

Master Trust



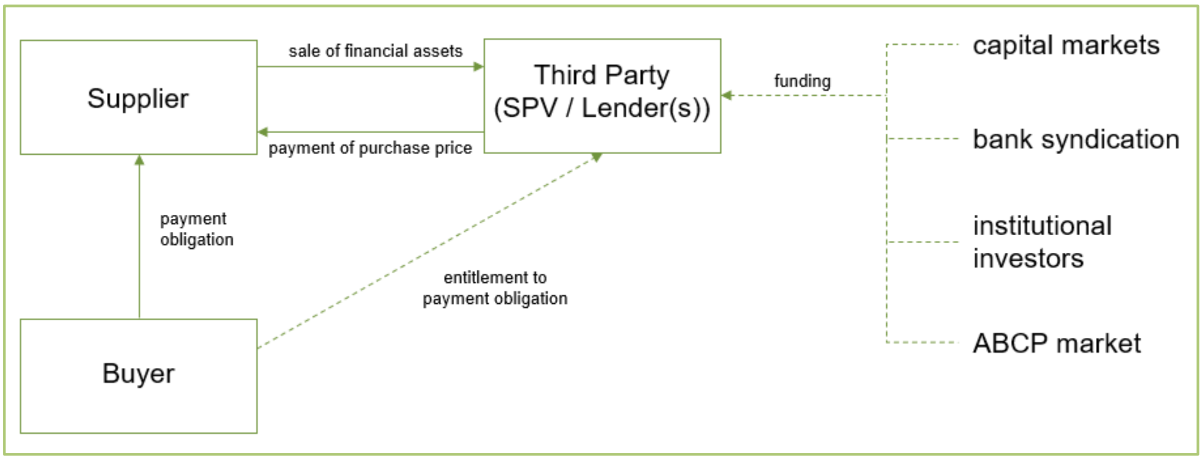
A master trust is effectively set up to permit regular programmatic issuance by an originator which a steady supply of financial assets – for instance an active residential mortgage originator or a credit card company. A "platform" is established pursuant to which the originator continually transfers its newly originated assets to a trustee (in the example below, a Receivables Trustee) which declares a trust over the assets for the benefit of the originator and intermediary funding vehicles (in the example below, Funding). Each time the originator wishes to raise finance, the note issuing vehicle (in the example below, the issuer) will issue a series of notes which will be backed by the assets held by the Receivables Trustee.

Whole-business securitisation



Whole-business securitisations are used to provide corporates, which have either steady or regulated income streams, to raise finance in the capital markets – typical examples include ports, airports, water companies and holiday parks. They are very commonly used to fund infrastructure following its construction. A security net is placed over the revenue generating entities and assets within the group (creating a ring-fence around those entities and assets) to isolate the cash flows and all creditors (e.g., capital markets investors, swap providers, capex lenders, term facility providers, working capital lenders) to that group agree on a common set of representations, covenants, events of default and intercreditor terms. In the example below, the SPV issuer is a creditor of the group which raises finance in the capital markets by issuing notes giving capital markets investors exposure to the group.

Trade receivables securitisations



Trade receivable securitisations can take a variety of forms but, at their core, they involve a trade receivable owed by a buyer to a supplier being sold to a third party, such that the supplier receives a purchase price for that receivable and the third party becomes exposed to the credit risk of the buyer.

A typical structure would involved a single supplier selling receivables owed by its pool of customers.

Other structures can involve receivables owed by a single buyer to its various suppliers, or receivables acquired by a factoring company or even receivables acquired or originated through on-line platforms.

III. State of securitisation in China (King & Wood Mallesons)

1. Overview – Securitisation in the PRC

China's securitisation industry has experienced significant growth in recent years. In 2017, the volume of domestic asset-backed securities ("ABS") issuance grew 64.7% to approximately RMB 1.5 trillion[1] making China the world's second largest securitisation market in 2017 for new issuance volume. For the first six months of 2018, China's securitisation issuance had 42% year-over-year growth[2]. This represents a remarkable turnaround from the tentative stop-start approach to the development of the market for the best part of the past decade.

Securitisation was first introduced into the PRC through a pilot programme in 2005 and was suspended in 2008 following the onset of the global financial crisis amidst concerns relating to securitised assets. The pilot programme in 2012 with an initial quota of RMB 50 billion which was then increased to RMB 500 billion by the PRC State Council on 13 May 2015. Since then, the market has seen increased issuance volumes, growth in asset classes and structures and greater offshore interest in onshore ABS.

In this article, we explore the regulatory landscape for ABS in China[3] and the recent developments and latest trends in ABS-product offerings. Against this backdrop, we will summarise some of the opportunities available for originators, investors, intermediaries and other service providers and advisors. We will look into how the PRC legal framework addresses the common legal issues relating to ABS issuances. Finally, we highlight potential areas for reform to further develop the PRC securitisation market – these proposals include a streamlined regulatory framework, access to a wider pool of investors and support for cross-border ABS issuances.

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[1] Pengyuan International report dated 17 January 2018 entitled "*Asset-Backed Securitisation (ABS) in China: Development and Risk*".

[2] S&P Global Ratings report dated 24 July 2017 entitled "*Global Securitisation On Pace For $1 Trillion In 2018*".

[3] KWM acknowledges different approaches in the market when labelling the PRC ABS structures described in this article.

2. The PRC Regulatory Landscape

2.1. History overview

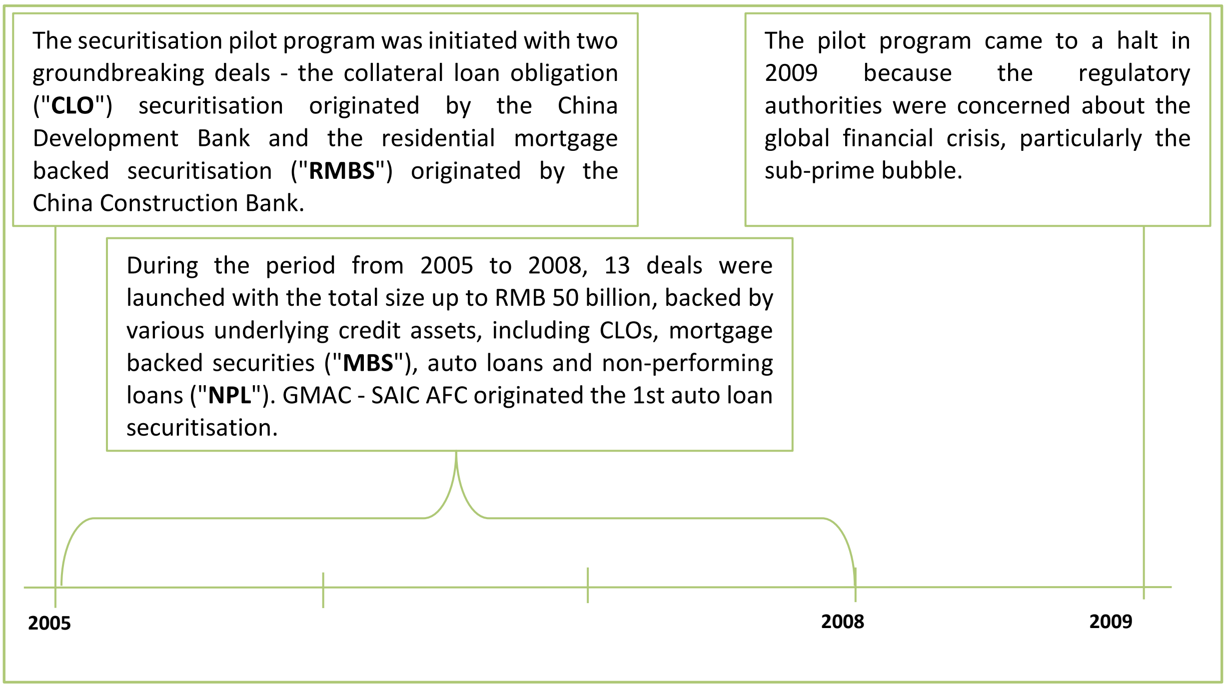

Figure 5

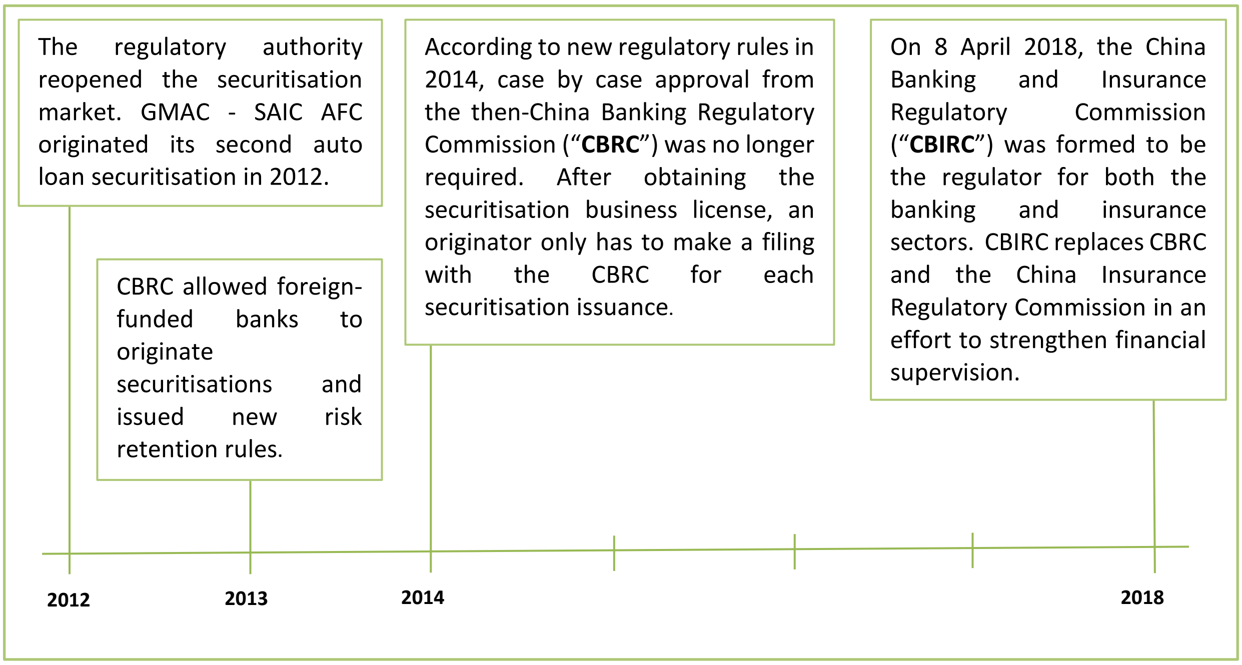

Figure 6

Within the PRC, there are three broad securitisation frameworks in place, with each promulgated by a different regulator and targeting a different group of originators. The three structures are described in further detail below.

2.2. The CBIRC SPT structure

The better-known framework is the one promulgated by the CBIRC, which involves the securitisation of "credit assets" originated by CBIRC-regulated financial institutions (for example, commercial banks, financial leasing companies and auto-finance companies). This typically involves the entrustment of certain credit assets to a special purpose trust, which will form the basis of the receivable pool backing the issuance of ABS in the PRC National Interbank Bond Market (the "**NIBM**"). There is no clear definition of "credit assets". In the PRC, "credit assets" usually refers to credit facilities granted by financial institutions, including corporate loans, mortgage loans, auto loans, credit card receivables and lease receivables. Thus, ABS currently issued in the NIBM are all collateral loan obligations ("**CLOs**"). For the purposes of this article, ABS issued under this framework will be broadly referred to as CLOs under the "**CBIRC SPT Structure**".

The NIBM is not open to retail investors. Rather, it is a closed market available to a group of approximately 10,000 institutional members made up of mainly financial institutions such as commercial banks, securities companies, insurance companies, and various kinds of investment vehicles like mutual funds and pension funds. Among these, commercial banks are the most active participants in the NIBM.

Under the CBIRC SPT Structure, an originator entrusts credit assets to the trustee of a special purpose trust which issues CLOs in the form of multi-tranche trust certificates. The following PRC regulations are relevant for these issues:

- the Administrative Measures on Pilot Projects for Securitisation of Credit Assets Procedures, jointly issued by the People's Bank of China (the "**PBOC**") and then-CBRC on 20 April 2005;
- the Measures for the Supervision and Administration on Pilot Securitisation Projects of Credit Assets of Financial Institutions, issued by then-CBRC on 7 November 2005;
- the Notice on Relevant Matters Concerning Further Expanding the Pilot Securitisation of Credit Assets, jointly issued by then-CBRC, the PBOC and the Ministry of Finance on 17 May 2012;
- the Circular on Further Regulating Risk Retention by Originators in Credit Asset Securitisation jointly issued by then-CBRC and the PBOC in December 2013; and
- the Circular Concerning the Filing Process of Securitisation of Credit Assets, issued by then-CBRC on 20 November 2014.

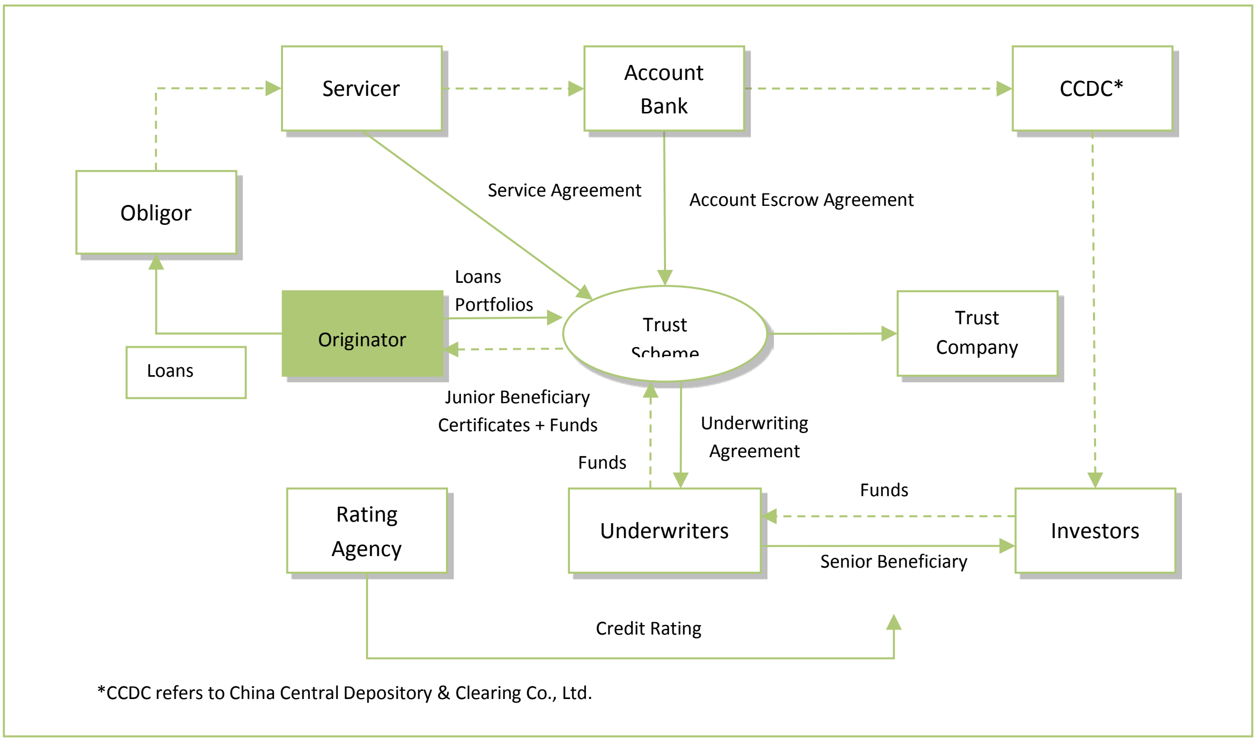

Figure 7

Originators	CBIRC-regulated financial institutions, including: (a) commercial and policy banks; (b) urban and rural credit unions; and (c) other financial institutions which are regulated by the CBIRC such as auto finance companies, asset management companies, finance lease companies and finance companies.
Assets to be securitised	"Credit assets" – this is not clearly defined but usually means credit facilities granted by financial institutions, including corporate loans, mortgage loans, auto loans and lease receivables. The Pilot Notice extended eligible financial assets to include agricultural industry loans, credit card receivables and local government loans.
Regulatory approvals / registrations	PBOC and CBIRC. The CBIRC approval process was waived for 27 commercial banks in early 2015.
Originator skin-in-the-game rules	The originator is required to retain no less than 5% of the total exposure credit risks of underlying assets by way of "horizontal slice" or "vertical slice".

	The "horizontal slice" requires the originator to hold part of the junior tranche with a total nominal value of no less than 5% of total issuance size. The "vertical slice" requires the originator to hold, in addition to at least 5% of the junior tranche, a similar proportion of each senior class notes, such that the total risk retention by the Borrower is no less than 5% of the total issuance size; All the notes invested by the originator for this risk retention requirement should be held-to-maturity.
Trustee issuer	Must be a licensed PRC trust company.
Investors	Members of the NIBM – commercial banks, finance companies, trust corporations, credit unions, mutual funds and securities companies. The Pilot Notice enlarged the possible scope of institutional investors and non-banking institutional investors to insurance companies, securities investment funds, enterprise annuities and national social security funds. Foreign investors including QFII, RQFII, foreign central banks and monetary authorities, clearing banks for cross-border RMB settlement in Hong Kong and Macau and overseas participating banks for RMB settlement of cross-border trade are allowed to trade in bonds (including ABS) in the NIBM after obtaining approval by the PBOC. Since 3 July 2017, overseas investors from Hong Kong and other regions are allowed to trade in bonds (including ABS) in the NIBM through the Northbound Trading of the Bond Connect, a new mutual market access scheme that allows investors from the PRC and overseas to trade in each other's bond markets through the related PRC and Hong Kong financial infrastructure institutions.
Single investor cap	40% for banking institutions.
Rating	All the tradable tranches other than the junior tranche must be rated by at least two credit rating agencies. There is no minimum rating requirement for those tranches.

Table 1 - CBIRC SPT Structure – at a glance

2.3. The CSRC ABSP structure

The second framework is the asset-backed specific programme framework promulgated by the CSRC (the "**CSRC ABSP Structure**"). This framework is technically broad enough to cover credit assets generated by all corporate entities (including CBIRC regulated financial institutions). However, in practice, ABS issuances adopting the CSRC ABSP Structure have been limited to assets originated by non-financial institutions, such as independent leasing companies, toll operators, e-commerce platforms and telecom service providers. ABS adopting the CSRC ABSP Structure can be freely traded on the Shanghai Stock Exchange and the Shenzhen Stock Exchange.

The CSRC ABSP Structure involves an asset-backed specific programme ("**ABSP**") established pursuant to the *Administrative Provisions on the Asset Securitisation Business of Securities Companies and Subsidiaries of Fund Management Companies* ("**ABSP Rules**") which were published by the China Securities Regulatory Commission ("**CSRC**") in 2014.

Under the CSRC ABSP Structure, a securities company or a subsidiary of a fund management company, as an asset manager, will offer and launch an ABSP to investors who subscribe units of different tranches under such ABSP. The offer can be made by the securities company itself or by another distribution agency (e.g. other securities companies, commercial banks and other institutions approved by the CSRC). Upon the closing of offering, the ABSP (acting through the securities company as asset manager) will use the funds to purchase the underlying assets. The cash flow generated from the underlying assets will fund the interest and principal payments. The launch of the ABSP is subject to registration and filing with the Asset Management Association of China. Upon the closing and subject to the further registration with the Shanghai Stock Exchange and/or the Shenzhen Stock Exchange (as applicable), the units of the ABSP can be traded on the relevant stock exchange market(s).

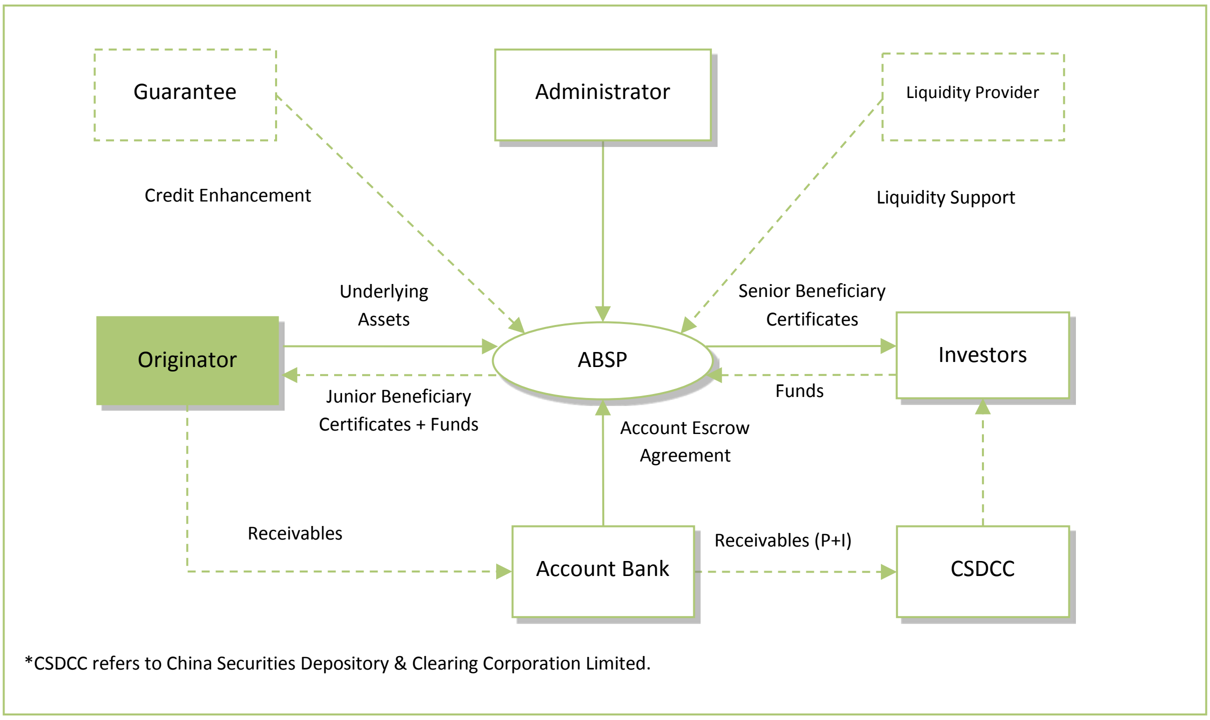

Figure 8

Originators	Theoretically covers all types of institutions. So far, all the market precedents involve non-financial institutions.
Underlying assets	Receivables (including trade receivables), credit assets, trust beneficiary rights, infrastructure toll rights and real estate.
Regulatory approvals / registration	Registration with the Asset Management Association of China
Originator skin-in-the-game rules	None
Trustee issuer	Not applicable
Investors	Qualified investors, including individuals, legal entities, organisations and other entities approved by the CSRC.
Single investor cap	No

Rating	No mandatory requirements

Table 2 - CSRC ABSP Structure – at a glance

2.4. NAFMII ABN Structure

The third framework is issuance of asset-backed notes ("**ABN**") by non-financial enterprises in the NIBM, which is promulgated by National Association of Financial Market Institutional Investors ("**NAFMII**"). The issuance of ABN is classified as issuing debt financing instruments ("**Debt Instruments**") by non-financial enterprises in the NIBM, which is regulated by the *Measures of the Administration of Debt Financing Instruments of Non-financial Enterprises on the Inter-bank Bond Market* promulgated by the PBOC on 9 April 2008 ("**PBOC Measure**") and a series of self-regulation managing rules promulgates by the NAFMII ("**NAFMII Rules**") (*Main NAFMII Rules on the Issuance and Trade of Debt Financing Instruments of Non-financial Enterprises in the NIBM*).

Under the category of Debt Instruments issued by a non-financial enterprise, ABN is a type of structured fixed income instrument introduced to the PRC market in 2012 under the *Guidance for the Issue of Asset-Backed Notes by Non-Financial Enterprises in the Inter-bank Bond Market* ("**2012 Guidance**"), promulgated by the NAFMII. On 12 December 2016, NAFMII further revised and publicised the *Guidelines on Asset-backed Notes of Non-financial Enterprises in the Inter-bank Bond Market (Revised Draft)* ("**Revised Guidance**") and simultaneously formulated the *Registration Documents and Forms System for the Public Offerings of Asset-backed Notes by Non-financial Enterprises*.

So far, the Revised Guidance has vitalised the ABN market and many non-financial enterprises now use ABN as an alternative to the CSRC ABSP Structure. Further to the 2012 Guidance, the Revised Guidance regulates the types of assets, transaction structure, role of SPV, risk management, information disclosure, rights and obligations of all participants and investor protection mechanisms.

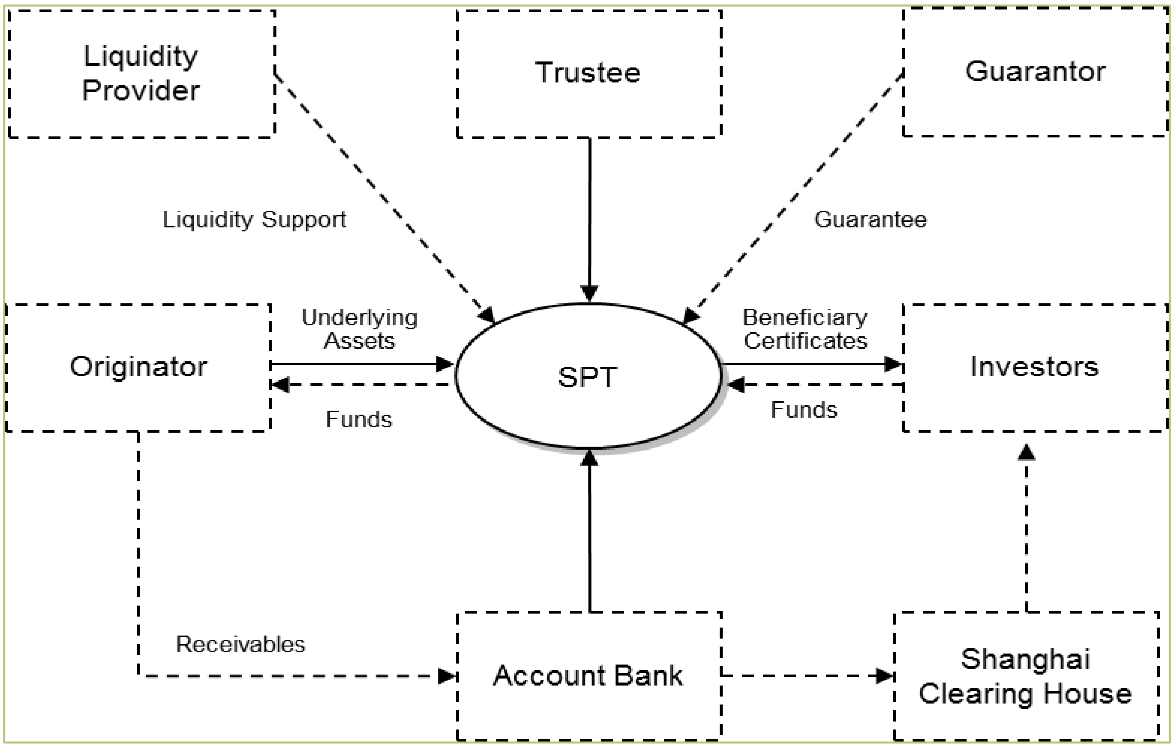

Figure 9

Originators	Non-financial enterprises with the membership granted by the NAFMII.
Underlying assets	Property rights as enterprise account receivables, lease receivables and trust beneficial rights, as well as immovable property rights such as the infrastructure and commercial property or other related property rights.
Regulatory approvals / registration	For the first issuance, registration with the NAFMII is required. Once approved, the valid term of issuance is two (2) years, and the first issuance should be completed within six (6) months from the registration, and any subsequent issuance within the valid term is only subject to filing with the NAFMII.
Originator skin in the game	None
Trustee issuer	Must be a licensed PRC trust company.

Investors	Onshore Investors: • Commercial banks and other financial institutions • Qualified investors other than financial institutions Offshore Investors: • Overseas central banks or currency authorities, RMB liquidation banks in Hong Kong and Macao, and overseas banks joining RMB settlement in cross-border trades • Foreign central banks, international financial organisations, and sovereign wealth funds • Qualified foreign institution investors ("**QFII**") and RMB qualified foreign institution investors ("**RQFII**")
Single investor cap	No
Rating	Public Offering – rated by qualified credit rating agency, with exception to the subordinated tranche. Private Placement – no mandatory rating requirement.

Table 3 - NAFMII ABN Structure – at a glance

2.5. Main differences

The main differences of the three PRC securitisation frameworks are summarised below:

	NAFMII ABN Structure	CBIRC SPT Structure	CSRC ABSP Structure
Regulatory authority	NAFMII	CBIRC and PBOC	CSRC
Originator	Non-financial enterprises	Financial institutions with qualifications granted by CBIRC	Financial institutions and Non-financial enterprises
Scope of eligible underlying assets	Property rights such as enterprise accounts receivable, lease receivables and trust beneficial rights, as well as immovable property rights such as infrastructure and commercial property or other related property rights	Credit assets, including corporate loans, mortgage loans, auto loans, lease receivables agricultural industry loans, credit card receivables and local government loans	Property rights as well as immovable property rights, and regulated by *the Negative List of Eligible Underlying Assets* promulgated by the Asset Management Association of China
Issuing vehicle	SPT, SPC and others[4]	SPT	ABSP and others
Trustee / administrator	Trust Company (SPT Structure)	Trust Company	Securities Company / Subsidiary of Fund Management Company (CSRC ABSP Structure)

4 As mentioned above, a SPT is the most common issuing vehicle for ABN. The SPT structure is further discussed further.

	NAFMII ABN Structure	CBIRC SPT Structure	CSRC ABSP Structure
Investors	Qualified investors recognised by the PBOC	Qualified investors recognised by the PBOC	Qualified investors[5]
Regulatory approvals / filings	• Registration with NAFMII • Filing with NAFMII for any subsequent issuance during the valid issuance period	• Filing with the CBIRC • Approval or registration with the PBOC	Post-filing with the Asset Management Association of China
Rating requirement for public offering transactions	Required	Required (at least two rating agencies, investor paid rating agency is a must)	Required

5 Qualified investors participating in the subscription for and transfer of ABS shall meet the following conditions:

(a) financial institutions established upon approval by the relevant financial regulatory authorities, including banks, securities companies, fund management companies, trust companies and insurance companies;

(b) financial products issued by the aforesaid financial institutions to investors, including but not limited to bank financial products, trust products, insurance products, fund products and asset management products of securities companies;

(c) overseas financial institutions recognised by the relevant financial regulatory institutions and the financial products issued by them, including but not limited to qualified foreign institutional investors (QFII) and Renminbi qualified foreign institutional investors (RQFII);

(d) pension funds such as social security funds and enterprise annuities, and social public welfare funds such as charitable funds;

(e) privately offered funds filed or registered with industrial self-regulatory organisations as well as managers of privately offered funds meeting the provision of Paragraph 6 of the present article;

(f) other entities with net assets not less than CNY10 million; and

(g) other qualified investors meeting the relevant provisions of CSRC.

	NAFMII ABN Structure	CBIRC SPT Structure	CSRC ABSP Structure
Secondary market	NIBM	NIBM	Shanghai Stock Exchange, Shenzhen Stock Exchange, National Equities Exchange and Quotations, Inter-agency Private Product Quotation and Service System, Over-the-Counter Market for Securities Companies and others
Registration and clearing institution	Shanghai Clearing House	China Central Depository & Clearing Co., Ltd.	China Securities Depository and Clearing Co., Ltd.

Table 4

2.6. China CMBS and Quasi-REITs

Commercial mortgage-backed securitisations ("**CMBS**") and quasi-real estate investment trusts ("**Quasi-REITs**")[6] have become one of the major financing instruments for PRC companies in possession of commercial real estate including office buildings, hotels and shopping malls since 2016. This section is dedicated to a brief introduction of PRC CMBS and Quasi-REITs, current market practice and expectation of future development.

6 See section 1.3 for the differences between REITs and Quasi-REITs.

2.6.1. Overview of China CMBS & Quasi-REITs

CMBS structure

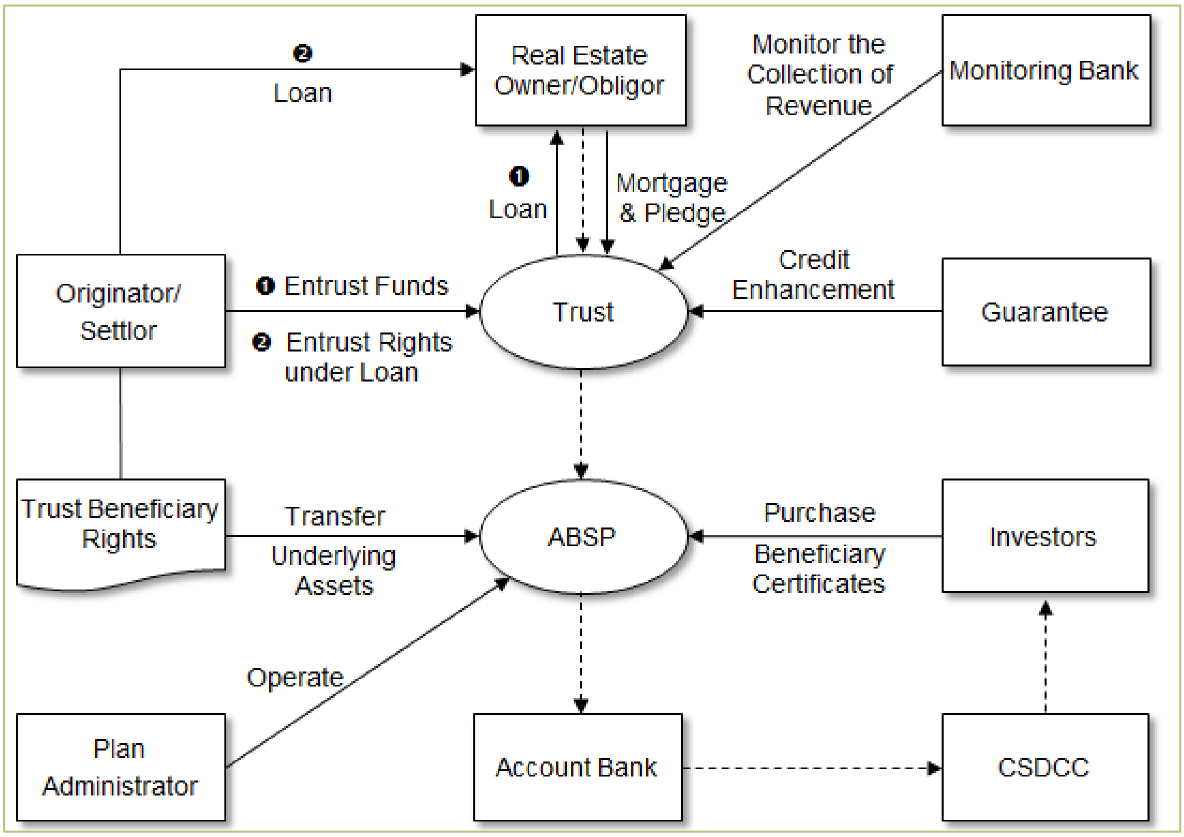

Figure 10

There are two ways to establish a trust, i.e. funds trust and property rights trust. Under the funds trust structure, the settlor (acting as the originator) entrusts funds to a trust company for creation of a trust and obtains trust beneficiary rights. The trust grants a mortgage loan to the owner of the real estate (acting as the obligor). The obligor mortgages its commercial real estates and pledges the operation revenue arising from the commercial real estates to the trust. Under the property rights trust structure, the originator, who would have already extended a loan to the obligor, entrusts its rights as the creditor of the loan to a trust company for creation of a trust. The obligor mortgages its commercial real estates and pledges the operation revenue arising from the commercial real estate directly to the trust.

After the ABSP is established, the ABSP purchases the trust beneficiary rights from the originator. During the term to maturity of the ABS, the obligor transfers operation revenue to the trust account to repay the loan under the supervision of the monitoring bank. After receipt of repayment from the obligor, the trustee applies collections as interest and/or principal to the ABSP. The ABSP administrator will then make distributions to the investors.

Quasi-REITs structure

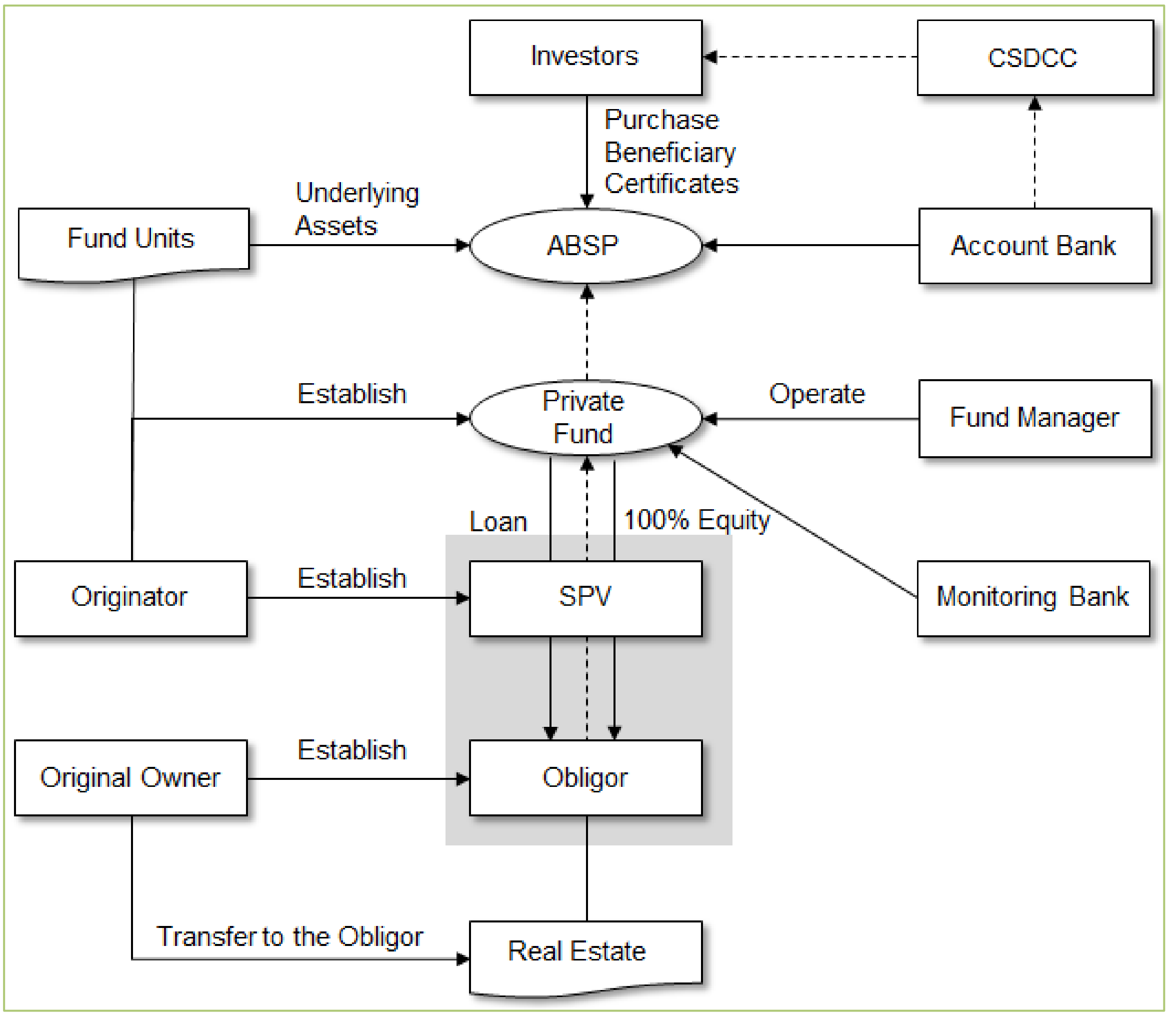

Figure 11

The transaction flow of the Quasi-REITs involves asset restructuring and the establishment of the ABSP.

In the process of asset restructuring:

A. the original owner of the commercial real estate ("**Original Owner**") establishes a wholly-owned subsidiary as the obligor ("**Obligor**") and transfers the ownership of the real estate to the Obligor;

B. the originator establishes a wholly-owned subsidiary ("SPV") and a private fund ("Private Fund") and obtains all the fund units without making the corresponding full capital contribution;

C. the SPV acquires all the equities of the Obligor from the Original Owner; and

D. the Private Fund acquires all the equities of the SPV from the originator. Payment of the consideration for the acquisitions in (C) and (D) are deferred.

After the ABSP is established:

A. the ABSP purchases the fund units as underlying assets from the originator and completes the capital contribution of the Private Fund;

B. the Private Fund grants a mortgage loan to the Obligor and pays the consideration for its acquisition of the SPV; the Obligor mortgages its commercial real estate and pledges the operation revenue from that real estate to the Private Fund;

C. the Obligor acquires all the equities of the SPV from the Private Fund;

D. during the term to maturity of the ABS, the Obligor transfers the operation revenue to the fund account to repay the loan and pay the dividends (if any) to the Private Fund as the shareholder under the supervision of the monitoring bank; and

E. the Private Fund applies the collections from the Obligor as interest and/or principal to the ABSP. The ABSP administrator will then make distributions to the investors.

Credit enhancement

Credit enhancement applicable to the trust/private fund include:

- **real estate mortgage:** the Obligor mortgages its real estate to the trust/private fund as collateral for the loan;
- **pledge of operation revenue:** the Obligor pledges its operation revenue such as rent to the trust/private fund as collateral and the main source of repayment;
- **guarantee:** the guarantor assumes joint liability for the loan; and
- **monitoring bank:** the Obligor is obliged to transfer all the operation revenue to the monitoring bank account to ensure repayment of the loan.

Credit enhancement applicable to the ABSP include:

- **subordination:** the senior tranches of the ABS are created with superior claims on the cash flows compared to the other tranches. The subordinated tranches absorb losses first;
- **excess spread:** expected collections from the underlying receivables should exceed the required payments to the investors as well as other fees and expenses;
- **maintenance fee:** the payor (usually the originator) pays a fee to the ABSP to maintain its right of first refusal with respect to the subordinated tranche of the ABS or the beneficiary rights/fund units. The maintenance fee is structured for the purpose of supplementing the interests of the senior tranches if the operation revenue is insufficient to satisfy required payments; and
- **put option and call option:** a put option gives the investors the right to receive the principal of the ABS before maturity and a call option allows the ABSP (as the issuer) to redeem all of the outstanding ABS before maturity.

2.6.2. Current market practice

Asset types

Office buildings, hotels and shopping malls are the major assets in China's CMBS and Quasi-REITs market. Industrial real estate, including high-tech factories and warehouses, have backed these deals since the second half of 2017 with the rapid development of the PRC e-commerce industry. For instance, Suning, one of the first-tier household appliance suppliers in the PRC, issued a Quasi-REIT with its warehouses recently. In addition, since the PRC government has issued a series of policies encouraging house renting, long-term rental apartments have started to emerge as a new asset type in CMBS and Quasi-REIT financings.

Location is also a significant factor. Real estate in mature neighbourhoods of first-tier cities and core areas of second-tier cities tend to be preferred under current PRC practice.

Transaction arrangements

Affected by a series of policies recently issued by the CBIRC, the funds trust structure described in section 2.6.1 above has become less feasible, while the property rights trust structure is currently a more viable alternative. First, cooperation between commercial banks and trust companies to provide trust loans is prohibited by most CBIRC provincial offices. Furthermore, trust companies are not allowed to provide liquidity facilities to real estate companies. Hence the funds trust structure is problematic where the originator is a commercial bank or there are insufficient subscription proceeds.

In previous Quasi-REIT transactions, the private fund initially granted a loan to the obligor by way of an entrusted loan of a commercial bank. However, a recent regulatory document regarding entrusted loans issued by the CBIRC provides that collective investment schemes such as private funds are not eligible to grant entrusted loans. Therefore, the private fund has to directly grant a shareholder loan to the obligor in Quasi-REIT transactions. However, this gives rise to another issue as private funds cannot be registered as a mortgagee in some areas.

2.6.3. Future development and expectations

The PRC Quasi-REIT is different from the common REIT in two major ways. First, a REIT is an equity financing instrument while a Quasi-REIT still has the characteristics of debt financing. Second, a REIT is a publicly offered product while a Quasi-REIT is a product offered on the stock exchange market which can only be subscribed by qualified investors (the number of investors cannot exceed 200 and the minimum subscription amount is 1 million RMB per investor).

Despite that local regulators tend to encourage the use of REITs, the issuance of a common REIT product in the PRC may still be some time away. There are still some obstacles to be overcome under the PRC legal and regulatory regime. For instance, ABS with the same credit rating held by a public fund shall not exceed 10% of the total issue and the total market value of the ABS held by a public fund shall not exceed 20% of the net asset value of the fund. In addition, the current tax regime is quite penal resulting in significant tax leakage.

2.7. Cross-border structures

Cross-border quasi-securitisations involving PRC-based credit support first came back to the market towards the end of 2013. These structures fall outside of the existing securitisation framework in the PRC as they are made up of mostly offshore elements and involve the repackaging of secured offshore corporate loans owed by offshore subsidiaries of PRC corporates.

The only PRC connection is that these offshore loans are backed by onshore credit support in the form of a letter of credit or demand guarantee issued by an onshore branch of a major PRC bank. The loans are then repackaged into rated notes which can be rated and listed on an international stock exchange. Due to the onshore credit support given in connection with the loan, the notes tend to have a rating equivalent to the credit rating of the onshore credit support provider.

This structure translates to lower all-in borrowing costs for offshore subsidiaries of PRC corporates, and also allows financial institutions to offload such loans on their books to the debt capital markets.

Another attractive feature of this structure is that no PRC licensing requirements apply to any offshore financial institution arranging such a deal, given that most elements are offshore. However, there may need to be an onshore filing with the National Development Reform Commission ("**NDRC**") depending on the tenor of the offshore funding.

Late 2016 and early 2017 saw a handful of cross-border repackagings of PRC local government bonds which represented another important development to the PRC ABS market becoming truly cross-border.

To date, King & Wood Mallesons has been involved in virtually all of such deals that have been successfully launched in the market.

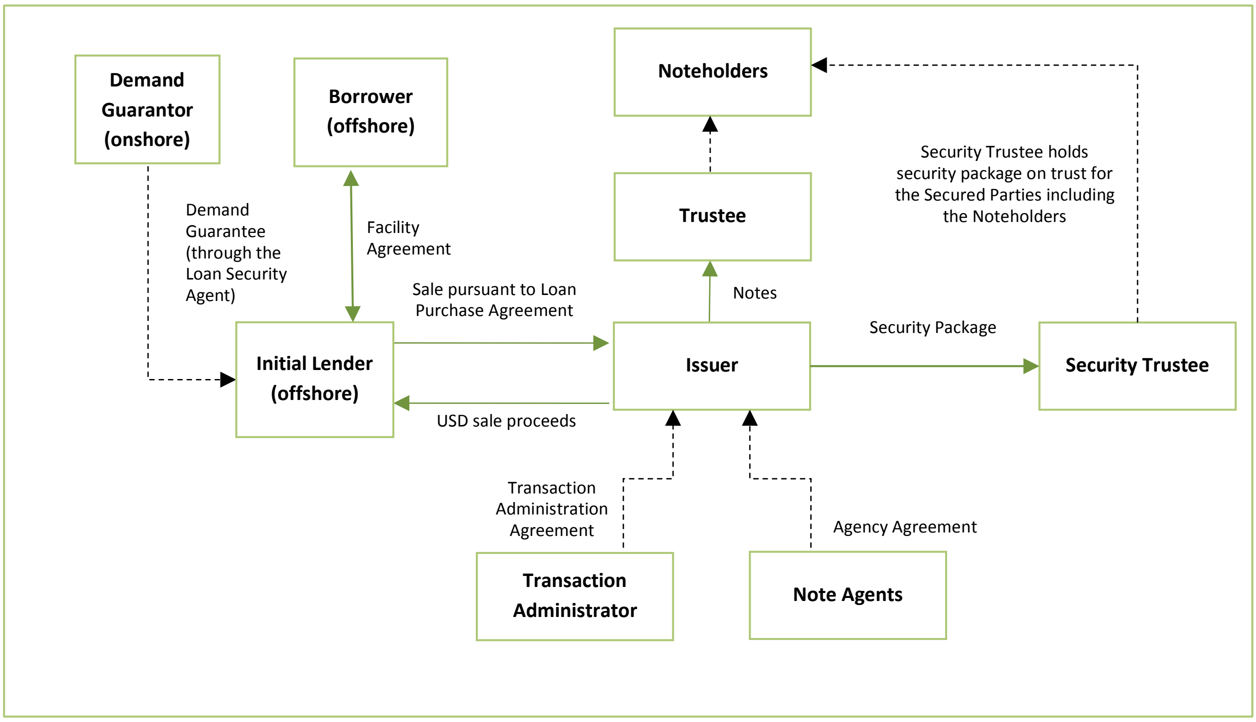

Figure 12

Arrangers	Usually financial institutions with existing PRC corporate clientele wishing to raise funds offshore.
Underlying assets	Offshore corporate loan owing by an offshore subsidiary of a PRC corporate, backed by onshore guarantee or letter of credit.
Regulatory approvals / registration	Depends on the structure. In most cases, no SAFE approval is required. NDRC filing may be required depending on the tenor of the offshore funding.
Originator skin-in-the-game rules	Since cross-border repacks are not regulated by the CBIRC/PBOC, no such requirements apply.
Trustee	Generally, a securitisation conduit established in an offshore tax haven (e.g. Cayman Islands).
Investors	Since this is a cross-border issuance, subscribers are generally offshore based investors.

Single investor cap	No
Rating	No mandatory requirements

Table 5 - Cross-border single loan repackaging – at a glance

3. Recent Market Trends

3.1. Asset types

In 2017, corporate ABS accounted for 55% of the issuance volume in the PRC. The underlying assets for corporate ABS are usually corporate debts and account receivables. During the same period, 41% of issuance in the PRC were credit ABS. The major underlying assets for credit ABS consisted of RMBS, auto loan ABS and CLOs.

Due to concerns over huge local government debt, the PRC government has in recent years encouraged the adoption of public-private partnership ("**PPP**"), a collaborative investment model between government and private companies in infrastructure projects. To attract more private capital and speed up return to investors, the NDRC and CSRC issued a joint statement in December 2016 encouraging PPPs to raise funds by issuing ABS products.

In February 2016, a pilot NPL securitisation programme was established in the PRC, which allowed six large PRC banks to issue a maximum of RMB 50 billion worth of NPL ABS. The six PRC banks were Agricultural Bank of China, Industrial and Commercial Bank of China, China Construction Bank, Bank of China, Bank of Communications and China Merchants Bank. The RMB 301 million worth of NPL ABS issued by Bank of China in May 2016 was the first NPL securitisation in the PRC since 2008. A total of 14 NPL ABS were issued by the six banks in 2016, raising RMB 15.61 billion in total. In 2017, the list of banks which can issue NPL-backed securities was expanded to include China Minsheng Bank, China Everbright Bank, China CITIC Bank, Industrial Bank and Bank of Beijing.

3.2. Key structural features in recent PRC securitisations

As mentioned above, we see an increasing number of domestic securitisation offerings with built in western-style structures. These are in part driven by rating agency requirements and regulatory developments.

Reserve account requirements

The latest structures have more stringent reserve requirements. For some of the new auto-loan securitisations, we've seen multiple reserve accounts to cover liquidity, tax, appointment of back-up servicers, and set-off risk. Reserve amount requirements invariably increase with the breach of each downgrade threshold.

Servicer downgrade mechanics

To address counterparty risk relating to the servicer of the receivables, most securitisations have varying downgrade triggers. The servicing obligations of the servicer will become more onerous following any downgrade of its credit rating (e.g. more frequent obligation to "sweep" all collections from existing collection accounts to a segregated bank account of the trustee) leading to an outright transfer of the underlying credit asset.

Clean-up call

Originators under PRC auto-loan receivables typically have a right to buyback all securitised receivables if the receivable pool balance falls below 10% of the original pool balance that was securitised. This is common feature for credit-card and auto-loan receivable securitisations in the region.

Skin-in-the-game/risk retention

For securitisations using the CBIRC SPT Structure, it is a regulatory requirement for originators to retain an amount not less than 5% of the overall credit exposure, in the form of junior tranche subscription (or otherwise combined with other senior tranche subscriptions).

3.3. Rating

PRC securitisations using the CBIRC SPT Structure are required to be rated by 2 different rating agencies – one appointed by the originator, and another independent rating agency. The qualified rating agencies in the PRC market are set out below.

List of domestic rating agencies in the PRC

- China Credit Rating Co., Ltd;
- China Chengxin International Credit Rating Co. Ltd (in partnership with Moody's Investors Service);
- China Lianhe Credit Rating Co., Ltd

- Dagong Global Credit Rating Co., Ltd;
- Golden Credit Rating International Co., Ltd; and
- Shanghai Brilliance Credit Rating & Investors Service Co., Ltd (in partnership with S&P).

Rating considerations

PRC rating agencies generally use similar rating criteria as major international credit rating agencies, such as Fitch, Moody's, and Standard & Poor's. The framework for analysing structure finance transactions would cover:

- the legality, validity and enforceability of the transaction structure;
- credit performance of the underlying assets (e.g. history, performance, eligibility criteria, static/revolving pool);
- tranching and over collateralisation;
- liquidity support, reserve accounts, priority of payments and expense cap; and
- counterparty risk (e.g. right to set-off/withhold, commingling risk, backup service providers, replacement triggers).

3.4. Recent deal list

KWM worked on the following recent ABS issuances:

- HSBC Bank (China)
  - HuiYuan 2015 No.1 CLO ABS Note
- Standard Chartered Bank (China)
  - ZhenChen 2015 No.1 CLOA ABS Note
- Bank of China
  - Zhongyin 2014 No.2 CLO ABS Note
- Bank of Communications
  - Jiaoyin 2014 No.2 CLO ABS Note
- China CITIC Bank
  - HuiYi 2015 No.1 CLO ABS Note
  - Xinyin 2015 No.1 CLO ABS Note
- Bank of Beijing
  - Jingyuan 2015 No.1 CLO ABS Note

    - Jingyuan 2014 No.2 CLO ABS Note
- Bank of Ningbo
    - Yongsheng 2016 No.1 CLO ABS Note
    - Yongqi 2015 No.1 CLO ABS Note
    - Yongyin 2015 No.1 CLO ABS Note
    - Yongyin 2014 No.1 CLO ABS Note
- Bank of Qingdao
    - Haiyuan 2015 No.1 CLO ABS Note
    - Qingyin 2015 No.1 CLO ABS Note
- Bocomm Trust
    - Guangzhou Shunde Bank 2016 No.1 RMBS
    - Hangzhou Housing Fund 2016 No.1 RMBS
    - Huzhou Housing Fund 2016 No.1 RMBS
- Bank of Baotou
    - Baoshang 2015 No.1 CLO ABS Note
    - Baoshang 2017 No.1 CLO ABS Note
- GMAC-SAIC Auto Finance Company, Ltd.
    - Rongteng 2016 Serial Auto Loan ABS Note – revolving structure
    - Rongteng 2015 Serial Auto Loan ABS Note
    - GMAC-SAIC 2014-1 AFC Auto Loan ABS Note
    - GMAC-SAIC 2012-1 AFC Auto Loan ABS Note
- Volkswagen Finance (China) Co., Ltd
    - Driver China Two 2015 No.1 Auto Loan ABS Note
    - Driver China Three 2016 No.1 Auto Loan ABS Note
- Dongfeng Nissan Auto Finance Company

  - Nissan 2014 No.1 Auto Loan ABS Note
  - VINZ 2016 Serial Auto Loan ABS Note
- Bocomm Leasing
  - Jiaorong 2014 No.1 Lease Receivables ABS Note
- Jiangsu Leasing
  - Suzu 2015 No.1 Lease Receivables ABS Note
- Huarong Leasing
  - Huazu 2014 No.1 Lease Receivables ABS Note
  - Huazu 2016 No.1 Lease Receivables ABS Note
  - Huazu 2017 No.1 Lease Receivables ABS Note
- CMB Leasing
  - Huazu 2017 No.1 Lease Receivables ABS Note
- Hebei Leasing
  - Jizu Wenjian 2017 No.1 Lease Receivables ABS Note
- Ant Financial
  - Micro Finance Lending ABS Note
- FarEastern Leasing
  - FarEastern 2016-4 Receivables ABS Note
  - FarEastern 2016-5 Receivables ABS Note
  - FarEastern 2017-4 Receivables ABS Note
- JuXin Leasing
  - Juxin No.1 ~5 Receivables ABS Note
- Baoxin Leasing
  - Baoxin Leasing No.1, Receivables ABS Note
  - Baoxin Leasing No. 2 Receivables ABS Note

- Baoxin Leasing No. 4 Receivables ABS Note
- Fenghui Leasing
    - Fenghui Leasing No.1~4 Receivables ABS Note
- Qinghui Leasing
    - Qinghui Leasing No.1, Receivables ABS Note
- Changde Bus
    - Shenwan - Changde Bus ABS Note
- Poly Real Property
    - Shenwan- Poly Property Management Fee Receivables ABS Note
- Shimao Real Property
    - Boshi Capital - ShiMao Property Management Fee Receivables ABS Note
    - China Universal Capital – Shimao House Purchase Receivables ABS Note
    - GreatWall – Shimao Factoring ABS Note
- Rongchuang Real Property
    - Boshi Capital – Rongchuang Property Management Fee Receivables ABS Note
    - GreatWall – Shimao House Purchase Receivables ABS Note
- Hopsen
    - GreatWall – Hopesen House Purchase Receivables ABS Note
- Country Garden
    - PingAn – Country Garden House Purchase Receivables ABS Note
- Suning REITs
    - Citic-Suning REITs
- HNA Group
    - Hengtai-Haihang REITs

- Wanxin Meida
    - o CITICS-Wanxin REITs
    - o Industrial Bank – Wanxin REITs
- Forte Real Property
    - o Shenwan-Forte Property Management Fee Receivables ABS Note

4. Participation in the PRC Securitisation Market

4.1. Offshore financial institutions

Originator	• Theoretically, yes. But the originator must be a CBIRC regulated entity. • Limited to the onshore assets available to the originator. Onshore credit assets held by foreign-invested financial institutions only represent a fraction of the total credit assets held by all PRC banks.
Underwriter	An underwriter must be a financial institution that meets the following conditions: • registered capital shall not be less than RMB 200 million; • relatively strong capabilities in distributing bonds; • qualified professionals engaging in the bond market business and bond distribution channels; • no material illegal activity and violations; and • other conditions as required by the PBOC.
Financial adviser	Yes. This is not a regulated activity requiring a specific licence.

Table 6 - Roles for an onshore subsidiary/JV of an offshore financial institution (CBIRC SPT Structure)

Originator	Generally no.
Underwriter / Distribution Agent	Yes - commercial banks are qualified to be engaged in the distribution during the offering of the ABSP.
Asset Manager	No – because so far only securities companies or subsidiaries of fund management companies with an asset management business licence can be an asset manager.
Financial adviser	Yes. This is not a regulated activity requiring a specific licence.

Table 7 - Roles for an onshore subsidiary/JV of an offshore financial institution (CSRC ABSP Structure)

Originator	Generally no.
Underwriter	Entities listed on the NAFMII List of Underwriters.
Financial adviser	Yes. This is not a regulated activity requiring a specific licence.

Table 8 - Roles for an onshore subsidiary/JV of an offshore financial institution (NAFMII ABN Structure)

4.2. Offshore investors

Based on current PRC rules and regulations, direct foreign investment into an onshore special purpose trust (as a holding vehicle for securitised assets) is not permitted, except for certain eligible investors described below. This is because regulatory approval is required for cross-border capital flows of this type and regulatory approval is generally not given for direct offshore investment into an offshore trust.

On 14 July 2015, the PBOC promulgated the *PBOC Circular on Certain Issues Concerning Foreign Central Banks, International Financial Institutions and Sovereign Funds Making RMB Investment into the NIBM* ("**Circular 2015**"). Pursuant to Circular 2015, foreign central banks, international financial institutions and sovereign funds are allowed, upon registration with the PBOC, to engage in bond trading, bond repurchase, bond lending, bond futures, interest rate swaps and other trades permitted by the PBOC, with approval or any quota restrictions.

On 17 February 2016, the PBOC promulgated the *Announcement of 2016 No. 3* which relaxed the rules applicable to foreign institutional investor accessing the NIBM. An entity's eligibility will be determined by onshore settlement agents in accordance with a set of guidelines and such onshore settlement agents will only be eligible to act as the settlement agents for entities whom they determined to be eligible. The significance of the *Announcement of 2016 No. 3* is the removal of prior approval and quota requirements for all eligible investors. Eligible investors are able to trade any products (including ABS products) available on the NIBM.

4.3. Bond Connect

Bond Connect was launched on 3 July 2017 and is a mutual access scheme for offshore investors to access the PRC bond market ("**Northbound Trading**") and for onshore investors to access the Hong Kong bond market through a market infrastructure linkage between the PRC and Hong Kong.

According to the Bond Connect Interim Trading Rules, the China Foreign Exchange Trade System & National Interbank Funding Centre will determine the eligibility of offshore investors in accordance with the criteria set out by the PBOC.

Offshore investors eligible to trade through Bond Connect include:

A. institutional investors:

- financial institutions such as commercial banks, insurance companies, securities companies, fund management companies or asset management companies incorporated outside of the PRC;
- medium and long-term institutional investors recognised by the PBOC including senior funds, charity funds and donation funds;
- QFIIs and RQFIIs; and
- institutional investors based in Hong Kong, Macau and Taiwan; and

B. central bank institutions:

- foreign central banks;
- international financial organisations; and
- sovereign wealth funds.

Eligible offshore investors under Northbound Trading may conduct spot trading of all cash bonds currently traded in the NIBM, including asset-backed securities. Based on the published rules, eligible offshore investors have access to the primary and secondary bond market through Northbound Trading. According to the rules and regulations published to-date, there is no investment quota limit for Northbound Trading.

In August 2017, just five weeks after Bond Connect was launched, Ford raised RMB 3.46 billion from listing its auto loan ABS. It was the first time that offshore investors were able to tap into the Chinese ABS market through Bond Connect.

4.4. NPLs

Market background

As China's economy enters the "new normal" and undergoes significant transformations and reforms, Chinese companies – both private enterprises and state-owned enterprises – are experiencing rising debt levels. As a result, both official statistics and unofficial estimates indicate that the amount of NPLs held by Chinese banks are on the rise.

Chinese commercial banks classify loans into five risk-based categories: normal, special-mention, substandard, doubtful and loss – the last 3 categories are referred to as NPLs. According to statistics published by CBIRC, as of the first quarter of 2018, Chinese commercial banks held a total of RMB 1.77 trillion NPLs (up from RMB 1.58 trillion as at the first quarter of 2017), and RMB 3.47 trillion of special-mention loans, which are one notch above NPLs. As part of its efforts to maintain financial and economic stability, the Chinese government is encouraging Chinese banks to effectively manage and dispose of their NPLs.

China's NPL market continues to be dominated by the big four state-owned asset management corporations ("**AMC**"), which were established by the Chinese government in 1999 to purchase NPLs from the big four Chinese commercial banks.

Access channels for foreign investors

Foreign investors can purchase NPLs in bulk (defined as 3 or more loans at a time) from the AMCs – generally through a competitive process. This is a well-established channel for foreign investors to acquire NPLs and has been available since 2001. Over the years, the process for obtaining Chinese regulatory approval in connection with an AMC's transfer of NPLs to foreign investors has become simplified and more streamlined.

Although purchasing NPLs from AMCs has been available for some time, foreign investors have not generally been able to purchase NPLs directly from Chinese banks. However, as discussed below, Chinese banks can now sell NPLs on a non-bulk basis to foreign investors pursuant to the NPL Pilot Program.

Other channels for foreign investors to access China's NPL market are also emerging. For example, certain qualifying foreign institutional investors can purchase NPL asset-backed securities in China's bond markets.

NPL Pilot Program

The NPL Pilot Program was established in June 2017 pursuant to SAFE's Notice regarding the Establishment of a Pilot Program by SAFE's Shenzhen Branch for the Cross-border Transfer of NPLs (HuiFu (2017) No. 24). As part of the NPL Pilot Program, SAFE headquarters authorised SAFE's Shenzhen office to approve, on a case-by-case basis, transfers of NPLs by AMCs and Chinese banks (regardless of whether they are located in Shenzhen) to foreign investors on the Shenzhen Qianhai Financial Assets Exchange ("**QEX**"). Under the NPL Pilot Program, Chinese banks located in Shenzhen do not have to go through the QEX and can directly sell NPLs to foreign investors.

Recent enhancements to the NPL Pilot Program – which include removing the program's one-year time limit and streamlining the related SAFE filing process – are designed to make it even more efficient for foreign investors to participate in China's NPL market.

These enhancements are part of China's efforts to address Chinese banks' NPL levels, enhance overall financial stability and promote financial market reforms and innovation in the Greater Bay Area, which includes Shenzhen. However, the existing rule regarding bulk transfers still applies, which means only AMCs are allowed to sell NPLs in bulk to foreign investors.

The QEX operates one of China's largest NPL trading platforms and has facilitated a large number of cross-border NPL transfers.

Guangdong Bureau of State Administration of Foreign Exchange has also recently set up a pilot cross-border NPL program to allow banks, financial institutions and individuals to transfer NPLs through the Guangdong Finance Assets Exchange Center.

Benefits of the NPL Pilot Program for foreign investors

One of the key issues that foreign investors of Chinese NPLs have to consider is the process and timeline for transferring NPL recoveries and proceeds from China to offshore. SAFE is the Chinese government agency directly responsible for administering China's foreign exchange system. The NPL Pilot Program is itself established by SAFE. These factors should provide greater certainty and efficiencies for foreign investors that purchase NPLs pursuant to the NPL Pilot Program and that wish to transfer their lawfully obtained NPL recoveries and proceeds offshore.

Under the original NPL Pilot Program, a foreign investor's purchase of NPLs (either directly from Shenzhen banks or through the QEX) was subject to case-by-case pre-approval by SAFE's Shenzhen office.

A Shenzhen bank that directly sells NPLs on a non-bulk basis to a foreign investor pursuant to the NPL Pilot Program can also apply directly to SAFE's Shenzhen office for approval. Alternatively, the Shenzhen bank can list its NPLs on the QEX, in which case the QEX will prepare and submit the foreign exchange application to SAFE's Shenzhen office. The QEX will also prepare and submit foreign exchange applications for transactions made by non-Shenzhen banks and AMCs that list their NPLs on the QEX.

Another benefit of conducting NPL transactions on the QEX is that the QEX's "Cross-Border Connect" (跨境通) platform provides centralised, online, one-stop-shop services to foreign investors, which can reduce transaction costs and save time. In addition to displaying information about the listed NPLs and preparing and submitting the foreign exchange application to SAFE's Shenzhen office, we understand that the QEX can also provide assistance and support services in connection with:

- execution of the NPL transfer agreement (including notarisation and witnessing services);
- transaction settlement;

- arrangements required to make and receive ongoing cross-border payments in connection with NPLs; and
- withholding and paying PRC taxes on behalf of foreign investors in connection with the NPLs.

Further benefits under the enhanced NPL Pilot Program

The foreign exchange-related benefits and efficiencies associated with the original NPL Pilot Program are expected to be further enhanced under the enhanced pilot program. The original NPL Pilot Program had an initial term of one year which was due to expire at the end of May 2018. The enhanced pilot program no longer has an expiration date. This should help alleviate concerns by foreign investors regarding how ongoing cross-border transfers of NPL recoveries and proceeds would be facilitated when the original program expires.

In addition, under the enhanced pilot program, "pre-approval" of cross-border NPL transfers by SAFE's Shenzhen Office has been replaced with a "pre-filing" process, which is expected to be a more streamlined process that involves less paperwork.

According to SAFE Shenzhen Branch's announcement, these enhancements to the NPL Pilot Program are designed to make it easier for Chinese financial institutions to dispose of their NPLs, reduce Chinese banks' credit risks, enhance the efficiency of China's financial markets and improve the ability of the financial services sector to serve the real economy.

The QEX's website includes information about the NPLs that are currently listed on the QEX. Foreign investors that are interested in the NPL Pilot Program or China's NPL market can also contact a member of KWM's cross-border NPL team for further information.

Cross-border NPL securitisations

Given these rapid developments, we believe there will be opportunities for cross-border ABS backed by NPLs acquired through the NLP Pilot Program to be issued in the near future. We are currently working with market participants to explore such deals.

5. Legal Issues in PRC Securitisations

5.1. Legal true sale

A securitisation transaction involves a true sale of the assets from an originator to a purchaser (usually a special purpose vehicle or a trust). Different requirements apply for legal true sale (which feeds into the insolvency claw-back analysis) and accounting true sale (which feeds into the off-balance sheet treatment analysis). The analysis here is limited to achieving a legal true sale.

The legal true sale analysis is different for the securitisations using the CBIRC SPT Structure/NAFMII ABN Structure and the CSRC ABSP Structure. As explained below, the CBIRC

SPT Structure and the NAFMII ABN Structure would provide a much more robust true sale analysis.

True sale analysis for the CBIRC SPT Structure and the NAFMII ABN Structure

Under the CBIRC SPT Structure and the NAFMII ABN Structure, the credit assets initially owned by the originator are entrusted to a trustee (usually a regulated professional trust company) pursuant to a SPT. Under PRC law, after the underlying assets are entrusted to a trustee pursuant to payment of a purchase price, the rights of the trustee as transferee in good faith will generally remain unaffected by subsequent insolvency proceedings involving the originator.

There are some key exceptions to this general principle under PRC insolvency law and trust law:

A. under article 31 of the PRC Bankruptcy Law, the bankruptcy administrator has the right to rescind any transactions relating to an originator's assets occurring within 1 year of acceptance of a bankruptcy petition relating to that originator, if such transaction falls within the following categories:

- a transfer without consideration;
- a transfer at an obviously unreasonable price;
- a guarantee of unsecured debts;
- a payment of debts which are not due; and
- the abandonment of a claim; and

B. under article 15 of the PRC Trust Law, if an originator is the only beneficiary under a trust, then the entrusted assets will form part of the originator's bankruptcy estate, even if the originator became bankrupt after the entrustment of the aforementioned assets.

While there has been no legal precedent in the PRC market of an originator under a securitisation becoming insolvent, the general consensus in the PRC securitisation industry is that the existing trust framework is sufficiently robust to confer upon a trustee good title to any entrusted assets even after the insolvency of the originator.

True sale analysis for the CSRC ABSP Structure

The ABSP in comparison envisages a contractual transfer of credit assets from an originator into an ABSP. The ABSP is not a separate legal entity from the originator and such transfer is merely contractual (as opposed to being an entrustment).

Accordingly, investors in securitisations under the CSRC ABSP Structure are unlikely to receive a clean true sale legal opinion usually expected in traditional securitisations.

5.2. Bankruptcy remoteness

Traditional securitisation structures contemplate the transfer of assets to either (a) a bankruptcy-remote securitisation SPV; or (b) a trust. As there is no specific PRC legal framework for the establishment of a securitisation SPV, the use of a trust is the preferred approach. The CBIRC SPT Structure and the NAFMII ABN Structure specifically contemplates this trust approach.

CBIRC SPT Structure & NAFMII ABN Structure – Insolvency of Trustee

While a SPT created under the CBIRC SPT Structure or NAFMII ABN Structure is not, by itself, a separate legal entity, trust assets are generally held and managed by a trustee on behalf of the SPT, so the impact of the insolvency of this trustee is an important consideration as well.

In this regard, article 15 of the PRC Trust law provides confirms that where a trustee (in its personal capacity) becomes insolvent, the trust assets held by it will not form part of the trustee's insolvent estate.

CSRC ABSP Structure

The analysis is much weaker for the CSRC ABSP Structure. As mentioned above, the ABSP is not a separate legal entity, but rather, a separate asset management plan established by the originator.

5.3. Perfection requirements for a transfer of receivables

Under PRC law, there is a distinction between (i) the perfection of a sale of receivables as between the seller (i.e. the originator) and the purchaser (i.e. the trustee under a SPT); and (ii) the perfection of a sale of receivables as between the purchaser and the underlying obligor. Generally speaking, for (i) above, there are no specific perfection requirements prescribed by law, and for (ii) above, notice to the underlying obligor is required pursuant to PRC contract law. Failure to perfect the assignment under (ii) above will not affect the validity of a transfer of receivables under (i) above.

Transfer from Originator to a special purpose trust

For securitisations using the CBIRC SPT Structure or the NAFMII ABN Structure, the execution of the trust agreement documenting the transfer of the credit assets from the originator to the SPT is generally sufficient to ensure that such transferred credit assets will be beyond the reach of the originator's other creditors.

There is no precedent of an originator trying to sell the same pool of receivables to two different persons. If this happens, the general view is that priority will be determined by the time of execution of the trust agreement (i.e. the first in time prevails).

Perfection as against the underlying obligor

In relation to a transfer of receivables, article 80 of PRC Contract Law requires notice to be given to the underlying obligor for such transferred receivables. If such notice is not given, the transfer will not be effective as against the underlying obligor – from a practical perspective, this simply means that the buyer of such receivables will not be able to sue the underlying obligor directly to recover amounts owed without first notifying the underlying obligor of such transfer.

For the avoidance of doubt, failure to give notice will not invalidate the transfer of receivables as between the seller and the purchaser of such receivables – and there is judicial precedence confirming this point.

Perfection as against the underlying obligor – current market practice

The common market practice for PRC securitisations is that notice to the underlying obligor is not given until the occurrence of certain trigger events, such as a downgrade or insolvency of the originator or servicer. Prior to the occurrence of such trigger event, the originator of the receivables will also be the servicer of the receivables (i.e. responsible for collections under the receivables, with a duty to transfer such receivables to the purchaser at regular intervals).

This tracks the general market practice for most securitisation deals in the region (Australia, Korea, Hong Kong, Singapore), where notice to the underlying obligor is given upon the occurrence of certain "perfection events".

5.4. Transfer of security interest connected to a receivable

In most securitisation transactions involving the sale of receivables which are secured by underlying assets (e.g. auto loans, residential mortgage loans), the nature of such underlying assets will determine the additional perfection formalities, if any, that is required to transfer the security interest.

Auto-loan receivables

In relation to a securitisation of auto-loan receivables, PRC Property Law provides that the underlying vehicle mortgages are transferred together with the sale of the auto-loan receivables. However, for the transferred mortgages to be effective against bona fide third parties, they need to be further registered as a first-ranking mortgage by the originator with the relevant vehicle management bureau. The specific registration requirements differ based on the applicable provincial or city-level regulations.

Based on existing market practice, most PRC auto-loan securitisations do not involve the registering of new first-ranking mortgages in relation to the securitised auto-loan receivables due to the operational burden of such registration process. Instead, investors rely on over-collateralisation and mandatory repurchase undertakings from the originator for protection.

Residential mortgage loans

In contrast, for residential mortgage loans, the transfer of an existing property mortgage cannot be automatically transferred with the sale of the relevant residential-mortgage loan; the existing property mortgage will need to be re-registered in favour of the purchaser of the loan receivable. In this regard, the market practice in the PRC securitisation market is not to require any such re-registration on the date of the asset transfer. Rather, re-registration is only necessary upon the occurrence of certain trigger events, such as a downgrade in the credit rating of the originator.

5.5. Commingling risk

In securitisation deals, it is common for the originator to double up as the servicer in relation to the securitised receivables. Often such collections will be commingled with collections from other receivables in the originator's own collection account. Under PRC law, in the event of the originator's insolvency, such commingled amounts will form part of the originator's bankruptcy estate.

It is not always practical for an originator to establish segregated collection accounts for securitised receivables. This is because such an arrangement will involve the originator implementing new payment arrangements, and notifying the underlying obligors of the same, which can be an operational hassle. Based on existing market practice, commingling risk is mitigated by the following operational arrangements:

A. the originator making arranging for periodic transfers of collections from the originator's own collection account to the purchaser's (i.e. the trustee's) account. The time period between such periodic transfers will be shortened if the credit rating of the originator falls below a certain threshold; and

B. an additional requirement for the originator to send notify each underlying obligor to pay directly to the purchaser if the originator's credit rating falls even further, or if the originator becomes insolvent.

6. Considerations for Future Reform

Despite the explosive growth of ABS issuances in the PRC, perhaps it is noteworthy that existing laws only permit a limited class of investors to subscribe for ABS issuances adopting the CBIRC SPT structure. This closed group mainly consists of domestic banks, insurance companies, securities companies and mutual funds.

To the extent that credit assets originated by a commercial bank are repackaged into ABS sold to other commercial banks on the NIBM, there is no true transfer of risk. Rather, the situation seems to be more akin to an exchange of risk within the banking industry, with no real offloading of risk to the capital markets.

The most common proposals for future reform of the PRC securitisation industry are summarised below.

6.1. Single securitisation framework

There have been calls for a streamlined securitisation framework for all companies, thus removing the SPT/ABSP distinction. This would bring uniformity in addressing common legal risks (e.g. commingling, true sale, transfer of security) across all securitisation offerings within the PRC.

6.2. Tax treatment

On 30 August 2018, the State Council announced a 3-year exemption of withholding and value-added-tax on interest derived by foreign institutional investors from onshore bonds. This is a major development to facilitate more international investment into the PRC bond market as such tax leakage has been an impediment to the PRC securitisation market becoming truly cross-border. We hope that this measure will be implemented on a more permanent basis in the future

6.3. Direct foreign investment

Existing regulations do not permit direct foreign investment into an onshore trust holding securitised assets. Also, existing routes for foreign investors to access domestic ABS issuances are restrictive.

To facilitate cross-border foreign investments into an onshore trust holding securitised assets, it will be up to PBOC to promulgate specific regulations allowing this (existing regulations do not permit this), subject to some basic requirements that the investment is made in RMB and the investment scope and plan of the trust is mainly focused on asset securitisation. By denominating investments in RMB, this would not attract the additional regulatory oversight on SAFE and provide a more direct and attractive route for direct foreign investment in domestic ABS issuances.

IV. State of Securitisation UK, US and Rest of Asia (ASIFMA and MUFG)

1. US and Europe

Regulatory Perspective

The United States and Europe have seen numerous regulatory developments enacted or proposed over the past few years in response to the financial crisis. These developments had and continue to have a significant impact on the regulatory treatment of securitisation transactions.

US

In the United States, the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd Frank Act"), from July 21, 2010 has been the major regulatory reform impacting securitisation transactions but continues, till today, to require substantial ongoing rule-making in order to implement its specific provisions. The aim of the Dodd-Frank Act was to define broad goals but then delegate specific regulatory reform to the various United States financial regulatory agencies.

As a practical matter, post the global financial crisis (GFC), a mix of better risk disclosures, greater risk retention on balance sheets and simpler securitisation structures are all features of the current securitisation & structured finance landscape. While at one level, the application of higher capital charges, more stringent credit quality assessment of underlying securitisation pools and the non-viability of certain types of securitisation structures post the GFC, has adversely impacted securitisation volumes, this has been more than offset by the fact that investors' reach for yield in a low interest rate environment has resulted in ABS/securitisation gaining at the expense of plain vanilla bonds & loans.

EUROPE

There were many new regulations in Europe over the recent years, which impacted deeply the markets, including securitisations (especially ABS). The Basel II and III Accords, various capital requirements including the latest Capital Requirements Directive and Capital Requirements Regulation (together the "CRD"), the Credit Agency Regulation (the "CRA Regulation"), the Alternative Investment Fund Managers Directive (the "AIFMD") and the Solvency II Directive are some of those regulations. However, this patchwork of legislation is set to change as part of the EU's Capital Markets Union (CMU) agenda.

Two Regulations, which came into force on January 17, 2018, will apply, going forward:

- Regulation (EU) 2017/2402 of the European Parliament and Council, laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation – such securitisations are aimed at providing significant capital relief

- Regulation (EU) 2017/2401, amending Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms

As of January 1, 2019, these two new pieces of European securitisation legislation replace the different pieces of legislation above governing European securitisations and introduce a new framework of rules. The SPR replaces the provisions of the Capital Requirements Regulation (CRR) relating to the regulatory capital treatment of securitisation exposures held by EU credit institutions and investment firms.

Under the Securitisation Regulation, the sector-specific approach to regulation is replaced with a set of rules that applies to all European securitisations, regardless who invests and whether the transaction is private or public.

Market

US

The securitisation market in the US represents 60% of the global market today. The crisis impacted heavily the volumes of US securitisation which felt from over EUR 2.0 trillion in 2007 to EUR 915.8 billion in 2008 (inclusive of ABS, CDOs, Agency MBS and Non-Agency CMBS/RMBS) and have since recovered fully to EUR 1.9 trillion for all of 2017. All the asset classes (but private label MBS – which is nevertheless off its lows) showed an impressive rebound.

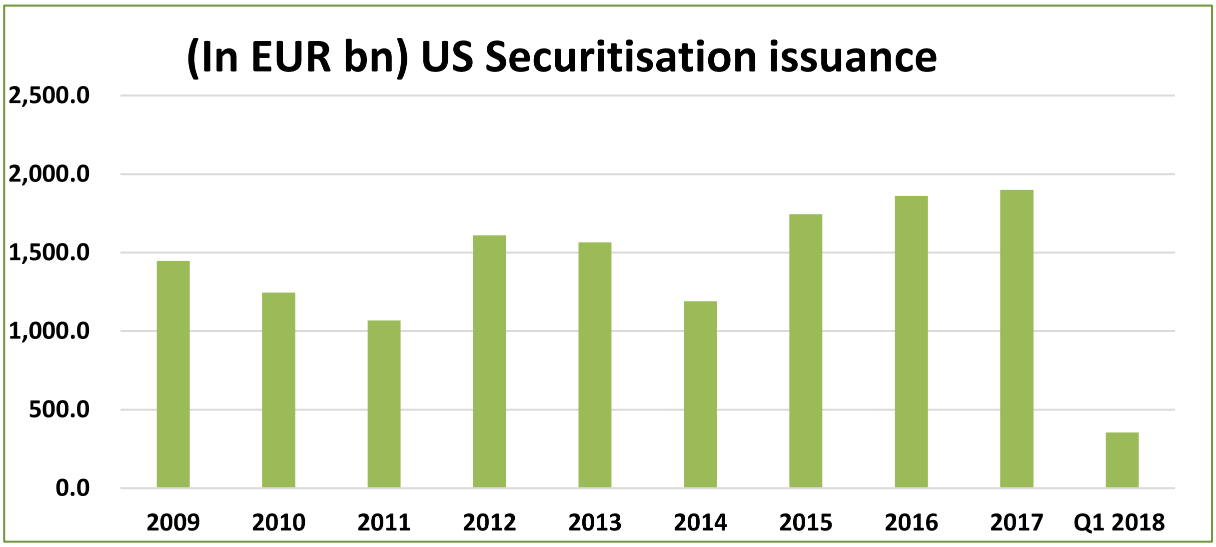

Chart 1, Source: SIFMA/AFME Securitisation Quarterly Report

Europe

The securitisation market in Europe was rather undeveloped till the late 1990s. Since then, there has been a significant increase in securitisation activity. Many of the securitisation products widely used by the financial industry across the world have been developed in the UK. The UK securitisation is the largest market in Europe.

The financial crisis in Europe made securitisation plunge from EUR 819 billion in 2008 to EUR 423 billion in 2009 and steadily decreased to EUR 180 billion in 2013, before finally recovering at EUR 237 billion in 2017. It is interesting to highlight that European securitisations have held up very well through and since the crisis in both credit and pricing terms. European policymakers are making every effort to revive the market, since the rationale for securitisation and the benefits it provides remain strong.[7]

Europe saw a general spread compression which pushed investors to look for yield and hence supported deals with better pricing such as peripheral paper, CLOs, CMBS & non-prime RMBS

In Europe, there are mainly three types of investors interested in securitisation: a) institutions without deep multiple funding sources (e.g. challenger/smaller banks, non-bank FI's and PE houses off the back of acquisitions) or that have a strategic reason to securitise (i.e. showing liquidity for an IPO or deleveraging), b) peripheral jurisdictions, c) arbitrage players (e.g. CLO managers or bank underwritten CMBS), and d) the auto sector where spreads are very tight.[8]

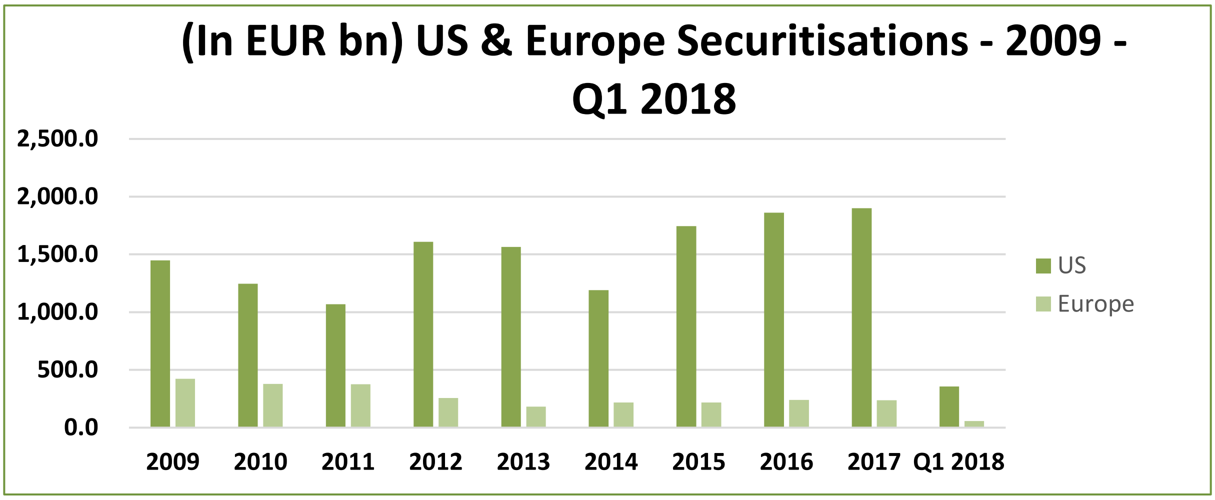

Chart 2, Source: SIFMA/AFME Securitisation Quarterly Report

[7] AFME / SIFMA / http://www.john-crosby.co.uk/pdfs/CCCO_WhyDoBanksSecuritise.pdf

[8] http://www.asifma.org/uploadedFiles/Events/2014/Structured_Finance_Conference/Singapore_ASIFMA20Conference_Sent.pdf

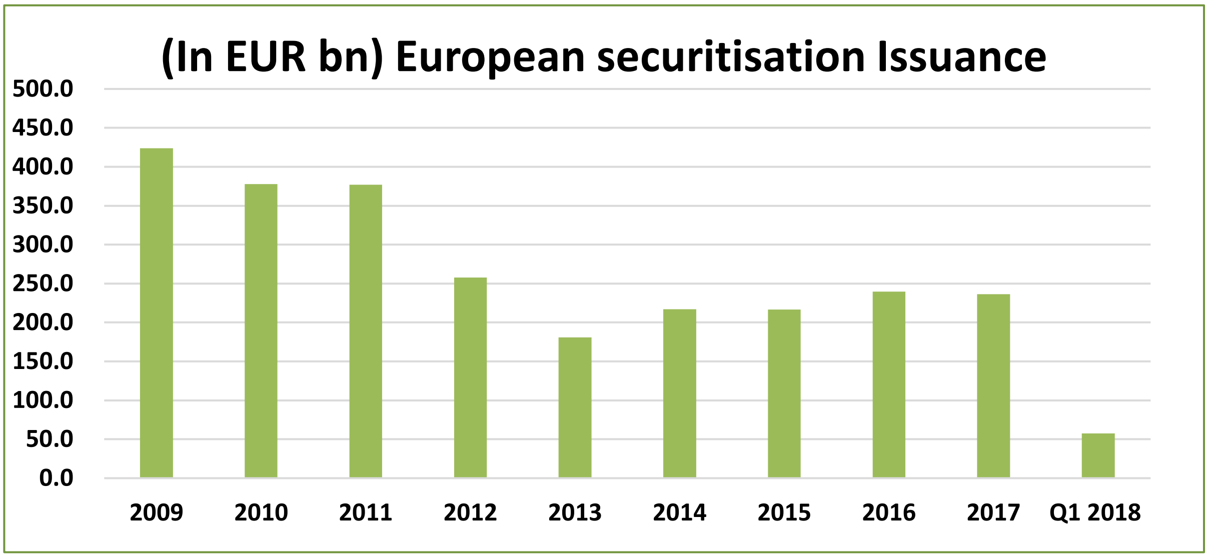

Chart 3, Source: SIFMA/AFME Securitisation Quarterly Report

2. Rest of Asia

In Asia, the regulatory and market frameworks governing securitisation are relatively nascent. Domestic securitisation markets are more active relative to their cross-border counterparts. Cross-border issuance, which is only a fraction of US and European issuance, dropped sharply post 2008 as the market for CDOs (which accounted for the bulk of Asian issuance pre-2008) virtually shut down.

It is worth noting that, as long as Asian companies will be able to obtain cheap funding in their local capital markets, they will not look to cross-border securitisation deals.

2.1. South Korea

Regulatory Perspective

South Korea' Securitisation really took off in the aftermath of the financial crisis in 1998 with the passage of the Asset-Backed Securitisation Act (ABS Act) on 16 September 1998 to facilitate the restructuring or disposal of non-performing loans of financial institutions and the Korea Housing Finance Corporation Act (KHFC Act) enacted on December 31, 2003 to facilitate securitisation of mortgage loans and student loans by the Korea Housing Finance Corporation (KHFC).It enables KHFC to issue two types of mortgage-backed instruments: MBS and Covered bonds. The ABS act allowed the establishment of a "True Sale" framework, and the legislation enabling the issue of covered bonds, has led to considerable development of the Korean cross-border ABS market.

In South Korea, Securitisations are usually performed within the framework of the ABS Act (ABS Act securitisations, which include securitisations by the KHFC) or outside the ABS Act (non-ABS Act securitisations).

The South Korean securitisation market has expanded since the introduction of ABS transactions but the size of the non-ABS Act securitisation market remains much larger than the ABS Act securitisation market. This is mainly due to the fact that ABS Act securitisation involves certain procedural requirements under the ABS Act, such as registration of a securitisation plan. Thus, unless the deal is looking for special benefits under the ABS Act, such as more lenient perfection requirements; most securitisations are non-ABS Act securitisations.[9]

It is worth noting, while covered bonds in South Korea are based on the current Korean covered bond legislative framework, RMBS issued by the Korea Housing Finance Corporation (KHFC) is effectively similar to a covered bond. Since investors in covered bonds have recourse to both the issuer and the underlying "cover pool" of assets, these structures are attractive from the viewpoint of international investors. For the moment, KHFC has issued RMBS in the domestic markets and has also issued USD-denominated covered bonds in the international market. These deals, according to ratings agency Moody's, are comparable to other Korean RMBS transactions. [10]

Market

The Securitisation domestic market in South Korea has developed into one of the most sophisticated in Asia-Pacific. Today, South Korea has one of the most developed securitisation frameworks in Asia. Cross-border Securitisation transactions remain quite low because originators can source local currency funding by issuing bonds and because the Korean government has encouraged Korean companies to reduce their foreign exposure due to the volatility of the global economy (The Korean cross-border securitisation market is discussed in greater detail below).

In Korea, the big players in the securitisation market are mostly financial institutions. They are very sensitive to funding cost for securitisation and structured finance deals which are quite costly and require a lot of work. That is why clients tend to not seek structured deals unless they see significant benefits on those.[11]

Central bank liquidity schemes and retained securitisations have not been common in South Korea. Securitisation is concentrated mostly in residential mortgage-backed loans, credit card receivables, auto instalment loans and loan receivables relating to real estate project finance. The mezzanine tranches of CLOs with investment grade ratings are also particularly attractive for Korean insurance companies who have guaranteed high payouts on insurance policies and other products sold to investors in the past.

New securitisation products have been introduced recently in Korea such as the securitisation of franchise trade receivables and there is also an increasing demand for allowing derivatives structures, such as synthetic collateralised debt obligations (CDOs).

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9 http://uk.practicallaw.com/6-381-1640?source=relatedcontent

10 https://www.moodys.com/research/Moodys-upgrades-KHFCs-two-covered-bonds-to-Aa1--PR_269744

11 http://www.iflr.com/Article/3093937/How-recent-legislative-proposals-impact-South-Korean-structured-finance.html

Asset-backed securities (ABS) were first issued in Korea in 1999 and grew rapidly till 2001 but then saw a decreasing trend till 2008. It was relatively less affected by the crisis than other products, which explains the good figure in 2009 but declined again in 201o due to the suspension of P-CBO issuance for bond market stabilisation funds. It rebounded in 2011 and we can see a growing trend till now.

Asset-backed Commercial Paper (ABCP) is divided in two classes in Korea: ABCP issued pursuant to the ABS Act and the ones issued pursuant to the Commercial Code.

Perspectives

The ABS Market in Korea developed thanks to the government which enabled the legal framework (ABS act & other acts) to remove the existing legal obstacles to securitizing assets. The regulatory authority also helped to promote rapid, but not excessive, market development.

In Korea, the ABS Act provides the means for properly regulating the ABS market but additional measures to supplement the current rules and regulations on ABS are required following the financial crisis.

Some concerns have been raised over the fact that ABCPs are not governed by the ABS Act as they are largely issued based on mortgage loans, it is highly likely that the risks of the depressed real estate sector will pass through into other sectors, undermining the stability of the overall financial market. Therefore, in order to stabilise the market, additional regulatory measures against the ABCP are also required.

The government plans to take appropriate steps to improve the market system in order to prevent asset-backed securities risk from spreading throughout the market, while also promoting the future growth of the asset-backed securities market. As asset-backed securities are an effective and stable tool for corporations and financial institutions to finance capital and an attractive investment vehicle for investors, the government plans to continue taking supportive measures for the promotion of the asset-backed securities market.

In addition, the government needs to come up with comprehensive legislation for governing a wide range of securitised products, including asset-backed securities and credit derivatives, in order to minimise the side effects of asset securitisation, while maximizing its proper functions in the financial market.

Korea has also enacted Covered Bond legislation (See Chapter 5 below). Some significant amendments done in the Trust Act of Korea in 2012 also gave more flexibility for trusts to issue bonds and debt instruments.

The main issue for foreign investors in Korea is the foreign exchange controls. On one hand it might appear onerous and burdensome to foreign investors but on the other hand it contributed to the stability of Korean financial industry which economy is highly affected by the volatility of the foreign exchange market.[12]

Cross-Border Activities

Following the first Korean cross-border ABS in 2001 by a capital company, Korea's cross-border securitisation market grew rapidly and turned into one of the few securitisation markets in Asia Pacific where active participation by international banks are seen. Owing to its historical route as a private market and the relatively small size of approximately USD 2-3 billion in annual issuance volume, the Korean cross-border securitisation sector has not evolved into a capital markets public distribution model but rather has predominantly been funded via private placements.

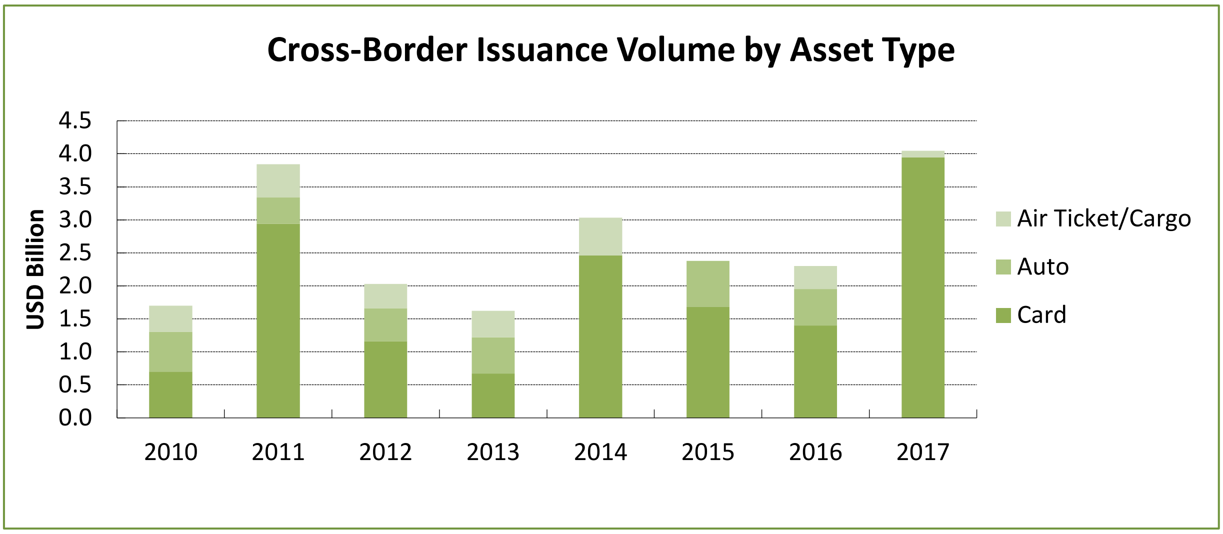

Chart 4, Source: www.fss.or.kr

With the exception of a few RMBS issuances prior to the global financial crisis and the airline ticket/cargo future flow transactions, Korea's cross-border securitisations to date have typically been placed privately with one to three investors at a time. One key reason for this tendency is that the aggregate issuance volume of this segment has not reached a threshold level that would be sufficient to attract sizable interest from overseas public investors on a consistent basis. No major changes are expected in the foreseeable future, partly due to the ongoing policy of the Korean government to maintain the foreign currency funding amounts of Korean companies to confined levels.

The underlying asset classes for Korean cross-border deals to date have been limited to credit card, auto, residential mortgage and air ticket/cargo. Credit card receivables have consistently been the major asset class followed by auto receivables. There has not been any RMBS since late 2009. The relatively large issuance volume seen in 2011 indicates a recovery/rebound in the securitisation market which had slowed down dramatically in 2009 after the global financial crisis.

12 http://www.iflr.com/Article/3093937/How-recent-legislative-proposals-impact-South-Korean-structured-finance.html

Korea's domestic securitisation market, on the other hand, has continued to evolve solely in KRW with a greater variety of asset classes including agency residential mortgage via Korea Housing Finance Corporation (government entity), mobile handset receivable and non-performing asset, etc. Aside from Korea Housing Finance Corporation, credit specialised financial companies (most cross-border ABS issuers belong to this category) and non-financial companies account for a large portion of the aggregate issuance volume. With an average annual issuance volume equivalent to approximately USD 50 billion, the domestic securitisation market is considerably larger than the cross-border segment, and public distribution is widely seen.

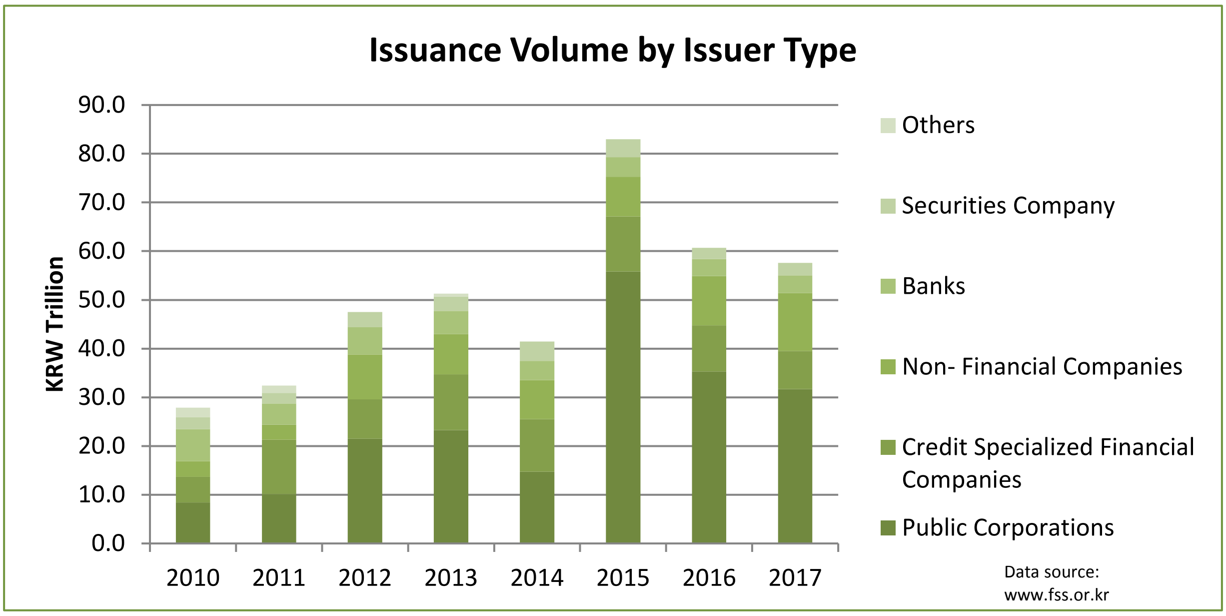

Chart 5

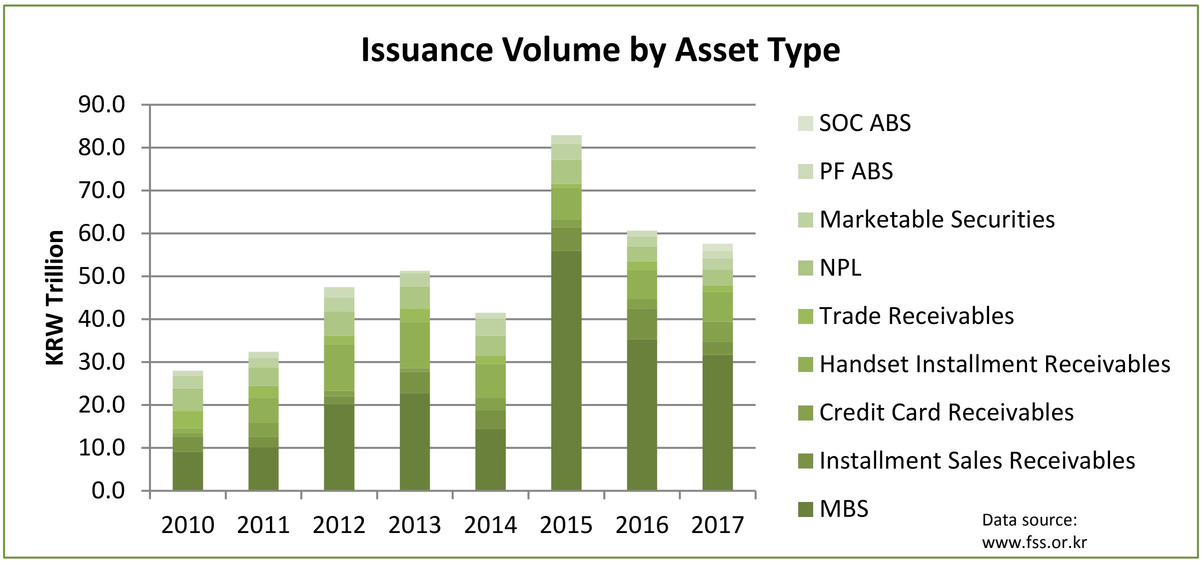

Chart 6

2.2. Singapore

Regulatory Perspective

Based largely on the English common law system, the development of a legal framework for securitisation in Singapore gained momentum in the late 1990s, as the government sought to develop an active secondary bond market. In 1999, the Singapore government enacted regulations that permitted individuals to invest their pension funds in bonds with a minimum Standard & Poor's rating of 'A'[13]. These regulations governing eligible investments for the Central Provident Fund (CPF), Singapore's pension system, increased the universe of eligible investments for those contributing into the CPF and also conferred advantages on local issuers. This created a very favourable atmosphere for securitisations in Singapore, as issuers could now take advantage of both a favourable regulatory framework, coupled with a class of investors with an affinity for a natural long position in Singapore Dollar denominated instruments.

Specific legislation governing securitisation in Singapore was enacted by the MAS in September 2000, when MAS Notice 628 (as amended in 2006 & 2007) was promulgated.[14]

Strong internal managerial control and the establishment of systems for managing and monitoring risk, in relation to asset-based transactions are critically important and regulated bodies must obtain the approval of the MAS before entering into ABS transactions. Some of the key disclosure requirements to investors include the following:[15]

- The securities do not represent deposits or liabilities and are subject to investment risk;

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[13] S&P Ratings Services

[14] MAS Website http://www.mas.gov.sg

[15] IFLR.com – article by Clifford Chance dated Nov. 2nd 2000

- The seller of the securities does not stand behind the capital value or performance of the assets/securities – except in certain cases, for permitted credit enhancement or liquidity facilities; and
- The SPV is independent from the bank (although related directors are permitted in certain circumstances).

The regulations also set out the criteria for a clean sale of assets to a SPV, for capital adequacy purposes. Some of the key features are[16]:

- The requirement that there should be a full transfer of risk and reward – essentially, the beneficial interest in the assets must be transferred;
- The transfer of the assets may not contravene any restriction in the documents relating to the underlying assets;
- There can be no obligation to repurchase assets, other than if there has been a breach of representation or warranty;
- The seller must not be obliged to make a market in the securities; and
- Any rescheduling arrangements entered into by the servicer must bind the SPV.

Additionally, the seller must obtain legal and accounting opinions that the regulations have been complied with. The regulations also define the requirements for banks acting as servicers, credit enhancements, liquidity facilities and the relevant capital treatments.

Transfer of receivables from an originator to an SPV is usually undertaken by way of assignment. Assignment can take two forms: “Legal” or “Equitable”, depending on the nature of the underlying transaction.

Among other important features of the legal framework governing Singapore securitisations, the assignment of actionable claims requires that the debtor be served a legal notice under sec. 4 (6) of the Civil Law Act. As a consequence, if debtor notification is to be avoided, assignments in Singapore will have to be “equitable assignments”. Another consequence is that not being the legal owner of the receivables, the securitisation SPV cannot bring claims in its own name and would have to depend on the originator.[17]

Finally, Goods and Services Tax (GST) is not applicable on the transfer of debt securities/securitised instruments/notes. Only the assignment of mortgages attracts stamp duty while the securitisation of other receivables will not be subject to this duty.[18]

Market trends and developments

Commercial Real Estate (CRE) has been the mainstay of securitisation activity in Singapore, with the bulk of the structures consisting of on-balance sheet MBS, CMBS and REITS. The fist

[16] IFLR.com – article by Clifford Chance dated Nov. 2nd 2000

[17] http://www.vinodkothari.com

[18] http://www.vinodkothari.com

securitisation structures date back to the late-1990s, when real estate receivables were securitised, with the funding for this structure carried out through the issuance of long-dated fixed rate mortgage-backed bonds. Other securitisation structures include credit card receivables, asset-backed CP and loans. The REIT (Real Estate Investment Trust) structure has been especially popular, with the Capita Mall and Ascendas REITs among the more well-known of the several REITS that have been listed on the SGX. Another unique feature of the securitisation market in Singapore is the buy-back option embedded in the asset backed securities (ABS).[19] This feature allows the originator to retain a contingent claim on the upside potential of the asset price.

Up to 2006-07, in the years prior to the Global Financial Crisis (GFC), securitisations in Singapore were focused on structures that incorporated Structured Investment Vehicles (SIVs) and conduits. Post the GFC however, the market went into hibernation for a period of about 5 years till 2013, when the need for funding diversification on the part of issuers looking at more efficient capital structures, has become the key driver. Instead of having a mix of straight loans, bonds and equity, issuers are looking at securitisation to diversify their sources of funding as banks run up against single-borrower limits and as they review their risk-weighted assets amid tighter banking regulations.[20] Yet another difference from the past is the structuring of deals aimed at a local investor base (thus shielding them from currency fluctuations – a key consideration at a time of increased currency volatility) and the carrying out of more private placements – thus shielding investors from mark-to-market risks.

2.3. India[21]

Regulatory Perspective

The financial sector in India has witnessed a series of reforms and changes since the early nineties, when the government initiated a series of economic reforms, among which was the removal of a number of hurdles standing in the way of foreign direct and indirect investment in India. The need for a legal framework on securitisation was also recognised at this time, when various committees tasked with looking into the development of securitisation pushed for the establishment of a legal architecture governing this key asset class.

The development of securitisation in India received a major boost over the 2002-05 period, following the enactment of the Securitisation and Reconstruction of Financial Assets & Enforcement of Securities Interest Act (SARFAESI), 2002 ('the Act'). The Act encompasses the areas of: securitisation of financial assets; reconstruction of financial assets; recognition to any security interest created for due repayment of a loan as security interest under the Securitisation Act, irrespective of its form; banks and financial institutions have the power to enforce the security

[19] Sing, Tien Foo and Ong, Seow Eng and Sirmans, C. F., Asset-Backed Securitisation in Singapore: Value of Embedded Buy-Back Options. Journal of Real Estate Finance and Economics, Vol. 27, No. 2.)

[20] http://JakartaGlobe.beritasatu.com

[21] Sources: ASIFMA, ICRA

without intervention of the courts; setting up the Central Registry for registration of the transaction of securitisation, reconstruction and creation of security interests.

On specificity and problem with Securitisation in India is that securitisations follow a trust structure i.e. the assets are transferred by way of sale to a trustee, who holds it in trust for the investors. In this situation, a trust is not a legal entity in law but it is entitled to hold property that is distinct from the property of the trustee. Therefore, the trust performs the role of the special purpose vehicles (SPV).

A number of clarifications and guidelines were published by the RBI over the last decade, such as:

In early 2006, the RBI issued guidelines on regulatory capital treatment for securitisation which had an adverse impact on the securitisation market. While the RBI guidelines did provide a robust regulatory and institutional framework for the orderly development of the securitisation market in the long term, these guidelines did eliminate some of the incentives for securitisation in the short term. This led to reduction in issuance volume.

In February 2013, the RBI clarified the taxation of securitisation trusts.

In May 2013, the RBI broadened the scope of limits under 'Agriculture' and 'Micro and Small Enterprises (MSEs)' sections of the overall PSL classification, which would have also contributed to an extent towards banks' ability to source greater PSL volumes on their own and reduce dependence on securitisation route to meet their overall PSL targets.

The RBI, in July 2013, put released guidelines for reset of credit enhancement (CE) in securitisation transactions for banks, which was subsequently extended to cover NBFCs as well in the guidelines of March 2014. Pursuant to these guidelines, some amount of reset of CE in securitisation transactions is possible (prior to these guidelines, no reset in CE was permitted), subject to certain criteria being met.

In May 2013, the RBI broadened the scope of limits under 'Agriculture' and 'Micro and Small Enterprises (MSEs)' sections of the overall PSL classification, which would have also contributed to an extent towards banks' ability to source greater PSL volumes on their own and reduce dependence on securitisation route to meet their overall PSL targets.

In the 2016-17 budget, the Indian government provided a major tax reprieve, which provided an impetus to mutual funds to invest in Pass Through Certificates (PTCs). Rather than taxing distributions at the mutual fund level, the tax would be levied in the hands of investors – based on the end investors' marginal tax rates.

In February 2017, SEBI permitted Investments by Foreign Portfolio Investors (FPIs) in unlisted debentures and securitised debt instruments (SDIs) issued by Indian companies, following a similar notification by the RBI in November 2016.

Market

India is one of the first countries in Asia Pacific to develop a securitisation market, with the first transactions as early as the 1990s.

In the early 1990s, securitisation was essentially a device of bilateral acquisitions of portfolios of finance companies. Back then, securitisation of auto loans remained the mainstay throughout the 1990s. The securitisation market in India has then developed till the 2000s and spread into several asset classes – housing loans, corporate loans, commercial mortgage receivables, future flow, project receivables, toll revenues, etc. that have been securitised.

The growth in the Indian securitisation market has been largely fuelled by the repackaging of retail assets and residential mortgages of banks and Financial Institutions. This market has existed since the early 1990s but really matured, only post-2002, following the passage of the SARFAESI Act, as pointed out earlier. Over the next three years, growth in RMBS, MBS and CDOs fuelled the rapid growth of the securitisation market through 2005, as new classes of investors and issuers gained confidence in the stability of and prospects for the further development of the market. Furthermore, investor familiarity with the underlying asset classes, stability in the performance of past pools and the relatively short tenor of issuances also helped boost the market.

After a brief dip in 2006, caused by the tightening of RBI capital requirements, strong growth in ABS and CDO volumes boosted the Indian securitisation market through the first half of 2009, when the after effects of the global financial crisis did have a negative impact. Even so, the absence of transactions involving complex derivatives and CDS in the Indian context meant that Indian securitisation volumes id stay relatively robust, in the immediate aftermath of the financial crisis.

The structured issuance volumes have grown considerably in the last few years in India. ABS is the largest product class driven by the growing retail loan portfolio of banks and other FIs, investors' familiarity with the underlying assets and the short maturity period of these loans. The MBS market has been rather slow in taking off despite a growing housing finance market due to the long maturity periods, lack of secondary market liquidity and the risk arising from prepayment/repricing of the underlying loan.

On account of an unfavourable tax regime introduced in 2013 (which has since been reversed – see above) during FY2014 (Financial Year 2014), the overall securitisation market (including rated bilateral transactions) in India shrunk further by 5% over the previous year, in value terms. The number of transactions was also lower by 4% in FY2013 than that in the previous fiscal. While the number and volume of ABS transactions declined by about 14%, the number of RMBS transactions more than doubled in FY14, (an increase of 75% in value terms).

However, following the various liberalisation measures introduced by the Indian government, in FY2017, the Indian securitisation market registered healthy growth for a second consecutive year as pass through certificates (PTCs) issuance volume soared to INR 430 billion in FY2017, compared to INR 250 billion in FY2016 (which in itself was an improvement relative to FY2015). This growth of 72% year on year (y-o-y) was mainly driven by the growing appetite of (existing and new) banks for priority sector qualifying assets; however, the year also saw a substantial increase in securitisation of non-priority sector assets.

Taking a more granular look at the growth in PTC issuance volumes, the last two years have seen the PTC market grow on the back of regulatory developments such as the revised Priority Sector Lending (PSL) guidelines which decreed banks to achieve various sub-targets within the overall PSL target and also progressively increased the PSL target for foreign banks. The year saw a growing number of non-banking finance companies (NBFCs) investing in PTCs primarily due to the higher yields attached to those instruments. NBFCs and (Asset Management Companies) AMCs, accounted for the bulk of the investments in non-PSL securitisation.

However, securitisation volumes fell back again in FY2018, dropping 7.2%. The cause of this drop in volumes was twofold: a) The issuance of Priority Sector Lending Certificates (PSLCs) grew strongly – these certificates are effectively a substitute for securitisation, since financial institutions can meet their PSL targets through the use of these certificates – without having to buy portfolios of securitised PSL assets, which would achieve the same objective. b) Uncertainties with respect to the applicability of GST to securitisations (which have since been clarified) also contributed to this y-o-y drop.

Trend in Securitisation Issuance by Value, in INR Millions, per Financial Year

	FY 14		FY 15		FY 16		FY 17*		FY 18**	
	Amount	**Share**	**Amount**	**Share**	**Amount**	**Share**	**Amount**	**Share**	**Amount**	**Share**
ABS	235,040	82%	163,300	95%	246,860	99%	281,700	31.3%		
RMBS	52,960	18%	8,400	5%	2,700	1%	145,800	16.2%		
Total Retail Securitisation	**288,000**	**100%**	**171,700**	**100%**	**249,560**	**100%**	**427,500**	**100%**		
Vehicle Loans*	-	-	-	-	-	-	324,000	36%		
Microfinance + others *	-	-	-	-	-	-	148,500	16.5%		
Overall total	**288,000**	**100%**	**171,700**	**100%**	**249,560**	**100%**	**900,000**	**100%**	**836,000**	**100%**
Growth	*-5%*		*-40%*		*+45%*			*NC.*		
Avg. Deal size	*1,490*		*1,040*		*1,170*			*NC*		

Table 9. Financial Year 2013 - 17, i.e. April 1, 2013 to March 31, 2017. FY2017 data are estimates
** Data available for FY2017 only*
*** Only aggregate data available without sectoral breakdowns*
Source: ICRA

Issues and Recent Developments

Nowadays, India's budget is prioritizing growth over deficit reduction and India's growth is expected to remain stronger than the global average and more robust than the median for similarly rated sovereigns. India will have long-term funding needs which could be provided by the securitisation market to finance housing, infrastructure and urbanisation projects.

The legal framework for securitisation is at a nascent stage in India as it is restricted to certain institutions namely, banks and financial institutions only. The Securities Contracts Regulation (SCR) Act is certainly a futuristic step and well-deserved appreciation must be given towards this step. It is hoped that in the future, more and more transactions may be included under the Act so that the market matures and reaches an advanced stage like the UK or the US, as this process will support economic growth.

The Act is an important step by Indian government as it provides the much-needed legal sanctity to securitisation by recognizing the securitisation instrument as a security under the SCR Act. Development of the market for securitisation in India will need efforts of the Central Government, State Governments, RBI and SEBI, has permitted mutual funds to invest in these securities. To galvanise the market, FPIs can also be allowed to invest in a wide range securitised debt instruments – a process that has already begun. FPIs are already familiar with these instruments in other markets and can, therefore be expected to help in the development of this market. However, the measures taken in India are still incomplete and more dedicated efforts would be necessary for a robust growth of asset securitisation market in India.

- There are several issues facing the Indian securitisation market such as:
- Stamp duty: In India, stamp duty is payable on any instrument which seeks to transfer rights or receivables. Therefore, the process of transfer of the receivables from the originator to the SPV involves an outlay on account of stamp duty, which can make securitisation commercially unviable in states that still have a high stamp duty. A number of states have reduced their stamp duty rates, though quite a few still maintain very high rates ranging from 5-12 per cent. To the investor, if the securitised instrument is issued as evidencing indebtedness, it would be in the form of a debenture or bond subject to stamp duty, and if the instrument is structured as a Pass Through Certificate (PTC) that merely evidences title to the receivables, then such an instrument would not attract stamp duty. Some states do not distinguish between conveyances of real estate and that of receivables and levy the same rate of stamp duty.
  SEBI has suggested to the government on the need for rationalisation of stamp duty with a view to developing the corporate debt and securitisation markets in the country, which may going forward be made uniform across states as also recommended by the Patil Committee.
- Foreclosure Laws: Lack of effective foreclosure laws also prohibits the growth of securitisation in India. The existing foreclosure laws are not lender friendly and increase the risks of MBS by making it difficult to transfer property in cases of default.
- Taxation related issues: There is ambiguity in the tax treatment of MBS, SPV trusts, and NPL trusts. However, one positive development is that the taxation structure has been changed from distribution tax at SPV level to taxation in the hands of investors, thereby increasing total after-tax returns. This has led to a boost in securitisation/ABS issuance through FY2017.
- Issues under the SARFAESI Act: A security receipt (SR) gives its holder a right of title or interest in the financial assets included in securitisation. This definition holds good for securitisation structures where the securities issued are referred to as pass-through certificates (PTCs). However, the rationale fails in the case of pay through certificates with different classes of primary and secondary rights to the cash flow.
- Legal Issues: Investments in PTCs are typically held-to-maturity. As there is no trading activity in these instruments, the yield on PTCs and the demand for longer tenures especially from mutual funds is dampened. Till recently, PTCs were not explicitly covered under the Securities Contracts (Regulation) Act, definition of securities. This was however amended with the Securities Contracts (Regulation) Amendment Act, 2007 passed with a view to providing a legal framework for enabling listing and trading of securitised debt instruments. This will bring about listing of PTCs which will hopefully help to resolve the "lack of liquidity" issue.

Securitisation requires a stable and predictable operating environment. India must establish clear legislative, legal and regulatory guidelines for market participants, incentivise the development of high-quality data for proper risk assessment, and increase foreign participation.

To this end the RBI has carried out an amendment to the rules governing investment by FPIs in India by expanding the list of areas in which FPIs can invest. FPIs can now invest in securitised debt instruments, including (i) any certificate or instrument issued by a special purpose vehicle (SPV) set up for securitisation of asset/s with banks, FIs or Non-bank Financial Companies (NBFCs) as originators; and/or (ii) any certificate or instrument issued and listed in terms of the SEBI “Regulations on Public Offer and Listing of Securitised Debt Instruments, 2008”.

On reading of the above text, it is quite clear that FPIs will be able to invest in both listed and unlisted certificates/ instruments issued by SPVs set up for securitisation of assets. Here it is also important to note that the originators of the assets should be either banks, FIs or NBFCs.

In February 2017, SEBI explicitly permitted FPIs to invest in securitised debt instrument (“**SDI**”). The SDIs include (i) certificate or instrument issued by a special purpose vehicle set up for securitisation of assets where banks, financial institutions or NBFCs are originators; and/or (ii) certificate or instrument issued and listed in terms of the SEBI (Public Offer and Listing of SDIs) Regulations, 2008.

(Sources: ASIFMA, ICRA, Vinodkothari.com)

V. International regulation and disclosure (Clifford Chance)

An outward looking securitisation market naturally needs to have regard to the rules of the jurisdictions in which it wishes to operate, and as issuers in Asia look to the capital markets in Europe and the US as a source of funding, the regulations that apply in those markets are brought into sharp focus.

Following the global financial crisis, the pace with which regulation in these markets has been introduced grew, though in recent years there has been a degree of consolidation, as those rules have settled in and been adjusted to more accurately fit the markets to which they apply and the benefits they are seeking to bring about.

Regulation in Europe and the US must be considered from two important angles when an issuer in Asia is looking to market their transaction to investors in these locations.

First, to what extent might the European or US rules be applicable to a transaction established an operated in Asia and second, what are the applicable disclosure standards?

1. Regulatory Considerations – Europe

Very broadly, European rules impose requirements on (i) investors in securitisations, (ii) originators or sponsors of securitisations and (iii) certain third parties involved in the securitisation process.

When an issuer in Asia is considering issuing to investors in Europe they first consider whether or not their transaction is a "securitisation" under the European rules – if it is not, then the European rules will generally not apply; if it is, then the European rules will need to be taken into account. The EU Securitisation Regulation, which will replace the EU Capital Requirements Regulation in January 2019, defines "securitisation" as follows:

> *"securitisation" means a transaction or scheme, whereby the credit risk associates with an exposure or a pool of exposures is tranched, having all of the following characteristics:*
>
> - payments in the transaction or scheme are dependent upon the performance of the exposure or of the pool of exposures;
> - the subordination of tranches determines the distribution of losses during the ongoing life of the scheme; and
> - the transaction or scheme does not create [a specialised lending exposure].

It may be the case that some of these features are not present – e.g., there is no tranching of the credit risk or the subordination does not determine losses during the ongoing life of the scheme – although this will need to be assessed on a case-by-case basis.

Where the transaction does fall within the definition, the transaction will need to meet certain requirements. In many cases these are not problematic, and the requirements may already be present in the proposed transaction. The two requirements which typically receive the most attention are:

- the risk retention requirement – by which an appropriate person (usually the originator) must retain 5% of the risk in the transactions. There are multiple ways this risk can be retained – for instance, by having the originator hold a 5% vertical slice of the credit risk, by having the originator accept the first 5% of losses or by having the originator retain a separate pool of exposures which could have been securitised but were not. Where the rules apply to transaction in Asia, the first loss retention is the most commonly seen method of compliance; and
- the dual-rating requirement –which provides, if the issuer, the originator or the person liaising with the rating agencies is located in Europe, that where a rating agency has been appointed to provide a rating, a second rating must also be appointed to provide a rating.

A further commonly asked question is whether the EU rules on simple, transparent and standardised securitisation can apply to Asia securitisation. These provide favourable capital and regulatory treatment to originators and investors. In nearly all cases these rules are not applicable to a transaction involving an originator based in Asia – the rules explicitly exclude transaction unless the originator, the sponsor and the SPV are all established within the EU.

On further point to note is that the EU rules apply throughout the life of the securitisation, so if they apply, the transaction must be structured so that the requirements are met until the end of the transaction.

2. Territorial Considerations – US

The US securitisation rules also impose a risk retention obligation upon the transaction's "sponsor" (which can broadly be equated to its originator). Broadly the rules apply to:

> *…fixed income or other securities collateralised by any type of self-liquidating financial asset (including a loan, a lease, a mortgage, or a secured or unsecured receivable) that allows a holder of the security to receive payments that depend primarily on cash flow from the asset…*

On its face this is a broader test than the EU test, however, the US rules do provide for a wider variety of exceptions. In particular, there are a variety of exceptions available to certain CMBS and CLO transactions. The most exception which sponsors in Asia most frequently avail themselves of, however, is referred to as the foreign safeharbour. If the transaction meets the following criteria, it will be exempt from the rules:

- the transaction is not required to be registered under the US Securities Act of 1933 (the "**Securities Act**");
- neither the sponsor nor the issuer is chartered, incorporated or established under US law;
- no more than 10% of the notes and other interests are sold or transferred to "US persons". Note, however, that this definition of "US persons" is wider than the equivalent definition under Regulation S and captures, among other people, off-shore funds of US entities; and
- no more than 25% of the assets were acquired from a majority owned affiliate of the sponsor or issuer that is chartered, incorporated or organised under US law.

While the first, second and fourth elements above are unlikely to be present in a securitisation in Asia, it is the third element, the presence of US investors, which is most typically considered in more detail. In availing themselves of this exception, sponsors in Asia become more involved in the investor vetting process and seeking to make themselves comfortable that the investors are, in fact, not U.S. persons within the definition.

The US risk retention rules are, in contrast to the EU rules, a day-one test. That is to say they are relevant only on the issuance date. One important point to consider in this respect, however, is where a tranche (e.g., the Class C Notes) are retained by the sponsor or a lead manager out of the initial issuance and only distributed to the market at a later date, it is that later date which will count as the issuance date for the purposes of testing compliance with the US risk retention rules.

3. Disclosure Requirements

In the US, the offer and sale of securities is regulated in the Securities Act which requires the registration of all offers and sales of securities with the Securities and Exchange Commission (the "**SEC**") unless there is an available exemption. Rule 144A under the Securities Act provides a safe harbour for the resales of securities by initial purchasers to "qualified institutional buyers" (as defined in Rule 144A). Rule 144A is generally considered the most efficient and effective method to offer asset-backed securities to US investors. A Rule 144A offer is subject to the anti-fraud liability provisions of the US Securities Exchange Act of 1934 as amended (the "**Exchange Act**") and, in particular, the broad provisions of Section 10(b) of the Exchange Act and Rule 10b-5 thereunder. Rule 10b-5 provides that it is unlawful for any person in connection with the sale of a security "*to make any untrue statement of material fact or to omit to state a material fact necessary in order to make statements made, in light of the circumstances under which they are made, not misleading*". Rule 10b-5 imposes potential civil liability on the managers as well as the issuer for incorrect or incomplete disclosure in connection with a sale of securities.

As a result of the breadth of Rule 10b-5 liability, market practice has developed to insist on enhanced due diligence in the context of Rule 144A offerings when compared to the level of diligence typically undertaken in Regulation S-only offerings, where the standard will be aligned to local requirements. By contrast, Regulation S provides that offers and sales in offshore transactions outside of the US with no directed selling efforts in the US are not subject to Securities Act registration requirements. Regulation S-only offerings will, of course, still be subject to local regulation in the jurisdiction where the offering takes place.

One of the primary differences between a Rule 144A and Regulation S-only offering is the documentary due diligence exercise undertaken in most Rule 144A offerings. In the US, documentary and legal diligence procedures have developed over time through case law and SEC guidance to involve the collection and review of information relating to the securitised assets, the originator and its underwriting or sourcing processes, the servicer and the issuer. This exercise is particularly important because US case law cautions against taking management’s representations and statements at face value.

The process generally begins with legal counsel to the managers preparing a document request list, which is sent to the originator, servicer and their legal counsel. Once the scope of the review is agreed, documents are compiled and are reviewed by both legal counsels. The purpose of the review is to verify that there are no material structural or legal impediments to the proposed transaction, confirm the accuracy of the offering documents and minimise the reputational risk of the managers. The documents provided in response to the diligence request list are reviewed, missing documentation and information is identified and requested and any issues which may impact on the offering disclosure are discussed and addressed.

Both Regulation S-only and Rule 144A offerings typically include diligence of the underlying assets, which is conducted in accordance with market standards relating to the applicable asset class. Such review may, for example, include a thorough review of commercial mortgage loans or reliance on third party reports for pools of residential mortgages. While there is not generally a notable divergence between the approach to the standard of the asset-level diligence exercise when comparing a Rule 144A and Regulation S-only transaction, from a Rule 10b-5 perspective such exercise will have pronounced importance in supporting the disclosure materials relating to the assets and providing comfort on the accuracy and strength of the representation and warranty package delivered by the seller of the assets.

Additionally, diligence sessions between senior management of the relevant originator and servicer and the managers are generally undertaken for both Rule 144A and Regulation S-only offerings. The purpose of these sessions is to ascertain in detail the scope of the business of the originator and the servicer, the markets in which they operate, relevant strategy, risks and other material information relating to the offering. Historically the intensity of management diligence in a Rule 144A context was seen to be higher than for a Regulation S-only offering. However, over time the trend has been to move towards the Rule 144A approach for Regulation S-only offerings also.

Lastly, auditors are generally required to provide comfort assurance to the managers and originators on both Regulation S-only and Rule 144A offerings. This comfort typically takes the form of a pool audit letter reflecting the results of sample testing the actual assets in the pool against the data tape and an “agreed upon procedures letter” providing comfort to the managers on the statistical information contained in the prospectus. There may however be certain nuanced differences in the form or substance of the comfort given by the auditor depending on whether the offering is made in reliance on Regulation S or Rule 144A. These differences will derive largely from the internal procedures of the auditor (that themselves normally take account of national professional practice guidelines) and the level of comfort that is required by the managers for that transaction given their enhanced liability under Rule 10b-5.

Regulation S-only and Rule 144A offerings have in common the use of due diligence to protect against legal liability and reputational risk and to stress test the viability of a transaction. While in many respects the lines drawn between the standards of a Regulation S and Rule 144A offering have become blurred over time, there remain some differences in the approach to due diligence. Issuers balance the significant benefits of accessing the US capital markets against the additional costs and time requirements associated with the enhanced diligence effort. Whether an offering is made in reliance on Regulation S or Rule 144A, it is clear that the appropriate level of diligence required to claim the status of "duly diligent" and to open the door to establishing a defence will depend on an analysis of the particular offering and the challenges that it presents.

4. Liability Comparison Table

	Rule 144A standards and practices	**Regulation S-only standards and practices**
Timing of liability for prospectus disclosure	Attaches at the "time of sale" to all disclosure materials (i.e., the red prospectus and any pre-pricing supplements thereto) delivered to investors as of such time.	Attaches at the point of publishing the back prospectus.
Negative assurance/10b-5 letter	Delivered by both counsels to issuers/originators and managers.	Not required.
Documentary diligence	Conducted by counsel in support of the negative assurance letter.	Not required.
Diligence of underlying assets	Conducted by counsel in accordance with market standards relating to the applicable asset class. Written reports are not generally prepared.	Conducted by counsel in accordance with market standards relating to the applicable asset class. Written reports are generally delivered.
Management due diligence	Conducted by counsel and managers.	Conducted by counsel and managers.

Table 10

VI. Covered Bonds (Fitch Ratings)

1. What is a Covered Bond?

A "covered bond" is a debt instrument with dual recourse: first, to a financial institution, and, second, to a pool of assets that can change over time. Covered bonds have traditionally been used to facilitate long-term funding for financial assets – mainly residential mortgages – and public-sector loans. They have also been used to fund commercial real estate mortgages, ship loans and, less frequently, unsecured SME loans as well as aircraft financings.

Fitch Ratings' analysis focuses on this dual-recourse nature, and the ratings address a bond's probability of default (PD; timely payment) and, following a hypothetical default, recoveries from the cover assets. Covered bonds in some jurisdictions benefit from a privileged position over an issuer's senior unsecured debt in a resolution scenario. In the event of an issuer default, collateral may allow for the ongoing payment of obligation, as well as for recoveries from the cover pool. Covered bonds also benefit from structural features that mitigate specific risks, such as interest rates and liquidity. As such, they can be rated above an issuing bank's Long-Term Issuer Default Rating (IDR) which generally represents the default risk of senior unsecured debt to third-party, non-government creditors.

2. Development of Asian Covered Bonds

Covered bonds have been viewed historically as a purely European funding product, but the reach has extended from Europe for the best part of almost a decade. A number of countries such as Australia, Chile, Canada, New Zealand, Singapore, South Korea and Turkey have now established their own covered bond markets. This expansion has been driven partly by events at the time of the 2008 global financial crisis that limited liquidity and funding where wholesale debt markets were effectively shut. The European covered bond market was credited with remaining open at the height of the crisis, or (depending on the country) being the first to re-open, allowing banks to access funding, albeit heavily supported by the European Central Bank. This experience prompted other regulators and governments, whose banking systems were affected by the shutdown of funding markets during this time, to take a closer look at the issuance of covered bonds for their domestic banks.

The development of covered bonds in Asia has been driven by market participants, regulators and lawmakers to enact a set of rules where a covered bond market can be established and provide a functional, reliable and consistent long-term funding tool. Non-European regulators continue to look at covered bonds as an alternative contingent funding tool for their markets.

Each country has developed a covered bond framework in its own way. It is evident, though, that they have taken what exists in other frameworks and used the best of those parts that suited their requirements. In the case of South Korea, the framework followed the integrated issuance template based on the German Pfandbriefe model. By contrast, Monetary Authority Singapore (MAS) used a principles-based approach on the guidance for covered bond issuance – the "asset segregation" method – monitoring and eligible assets, yet it allowed issuers to commercially agree aspects of the structure and contractual obligations. In both cases, the regulators looked to restrict covered bond issuance via a 4% limit relative to the total of a bank's assets, to avoid large asset encumbrance due to covered bond funding. Compared with other countries with a similar cap, this is on a par with the issuance cap set in Canada and is lower than Australia and New Zealand where caps are 8% and 10%, respectively.

Most jurisdictions are silent on the use of excess collateral in covered bond programmes. The Australian covered bond framework, however, is the most prescriptive. It stipulates that excess cover assets not required for the repayment of covered bonds belong to the issuing bank. This ensures that excess collateral is available to repay depositors of the issuer, and therefore cannot be relied upon by covered bond investors. The strictness of the Australian regulator on asset encumbrance resulting from covered bond issuance reflects its position of preventing depositor subordination. This aspect has not been transposed in regulation to other jurisdictions in Asia so far, although it is structurally possible to achieve the same – through a feature called a "demand loan" that manages the excess collateral in programmes (see Section 3.7).

2.1. Development Timeline of Covered Bonds in Asia

2.1.1. South Korea

The first Asian covered bond originated from South Korea in 2009 through a structured covered bond issued by Kookmin Bank under the Korean Securitisation Act. The transaction was a single issuance secured by mortgage assets as well as credit card receivables. In 2010, Korean Housing Finance Corporation (KHFC) issued its first covered bond under its programme governed by the Korean Housing Finance Act. Each covered bond issuance from KHFC is backed by a distinct pool of mortgage assets, each purchased from an originating bank. Using the KHFC's mortgage purchase programme where KHFC originates its loans through Korean banks as the origination channel, participating Korean banks could access covered bond funding without needing a separate covered bonds programme. KHFC has issued in total KRW 4,784bn (equivalent to USD4.5 billion) mortgage-backed bonds as of end-June 2018, which comprised a combination of onshore and offshore issuance.

In 2012, the South Korean authorities proposed the Covered Bond Act, which coincided with the government's concerns regarding high household debt. Along with the Financial Services Commission (FSC), it hoped that covered bonds, representing long-term fixed-rate funding, would enable the banks to offer longer-term fixed-rate mortgages. This measure was to help curb the risk of households with high short-term debt suffering an interest-rate shock. It was intended that covered bonds would help banks to manage interest-rate risks as well as enabling the banks to meet the FSC's fixed-rate mortgage target. The Covered Bond Act along with the presidential decree was enacted on 15 April 2014. In June 2015, Kookmin Bank issued its first covered bond under the legal framework. It has issued up to USD1 billion as of end-June 2018. No other bank has issued covered bonds out of South Korea to date under the Covered Bond Act.

2.1.2. Singapore

Singapore's MAS started developing a covered bond framework in 2012 with the release of a proposal to introduce rules to allow covered bond issuance by Singaporean incorporated banks. Unlike the legislative route taken in South Korea, MAS preferred to issue regulation under the existing Banking Act. The regulation for covered bonds outlined in MAS Notice 648 was issued in December 2013. This notice was updated further in June 2015 to clarify parts of the original notice and to provide banks with the flexibility to segregate the cover assets through either an asset-owing special purpose vehicle (SPV) or by way of a declaration of trust. This last change was to enable to banks to comply with specific obligations relating to the Central Provident Fund (CPF) for mortgage assets where the borrower elected its use.

Finally, in June 2015 DBS Bank Ltd issued its inaugural covered bond. United Overseas Bank (UOB) and Oversea-Chinese Banking Corporation Limited (OCBC) issued their first covered bonds in March 2016 and March 2017, respectively. As of June 2018, the equivalent of USD9.5 billion of bonds had been issued.

2.1.3. China

China made its first attempt to issue a structured covered bond in 2016, through Bank of China Limited's London branch. The structure was a single issuance connected to a discrete pool of People's Republic of China (PRC) domestic "green bonds" issued by Chinese corporates. This issuance was in light of the Chinese government's initiative to encourage green bond funding. The cover assets and structure that were used deviated substantially from the accepted covered bond market norms seen in other countries. Nevertheless, the issuance was supported by the various Chinese regulators in respect to bank and market supervision. Only USD500 million has been issued in total, and there has been no further issuance from China to date.

Key Characteristics of Asia Covered Bonds	Singapore	South Korea	South Korea	China
No of issuers	3	1	1	1
Legal framework	Legislative (MAS Notice 648)	Legislative (Covered Bond Act)	Legislative (KHFC Act)	Structured
Pool type	Mortgage	Mortgage	Mortgage	Bonds
Issuance type	Soft bullet	Soft bullet	Hard bullet	Hard bullet
Multi-issuance/single issuance programmes	Multi -issuance	Multi -issuance	Single issuance	Single Issuance
Asset encumbrance limit	4% of total assets of the bank	8% (4% via presidential decree)	n.a.	n.a.
Minimum legal OC	3%	5%	Contractual	Contractual
Asset segregation	SPV/declaration of trust	Legal ring-fencing of assets	Legal ring-fencing of assets	Pledge over the assets
Asset valuation method	Asset coverage test	Asset coverage test	Asset coverage test	Asset coverage ratio
Asset monitor	Yes	Yes	Yes	Yes
Maximum Covered Bond Rating by Fitch	AAA	AAA	n.a.	n.a.

Source: Fitch, Issuance documents

Table 11

2.2. Other Countries and Challenges

Other notable jurisdictions that are actively in the process of developing covered bonds frameworks are India, Malaysia and Thailand. Each of these countries is at a relatively preliminary stage of discussions with market participants, regulators and governments. These markets could possibly manage to start with a structured covered bond while a satisfactory framework is developed.

Whether other Asian countries start to develop their own covered bond framework will depend mostly on the success of the two established markets of South Korea and Singapore, as well as the cost/benefit of issuing covered bonds and whether this is consummate with a bank's funding-cost profile. In Fitch's view, one of the main hindrances in the development of covered bonds in Asia is the large differential of funding costs between covered bonds and the highly liquid Asian banking system, funded mainly through deposits and local term funding. Second, the cost and availability of interest and currency swaps to issue in offshore currencies is more difficult in smaller markets, where such exposures do not already exist, or are too small to absorb the size of the transactions needed to attract investors. Costs associated with the mitigation of potential transfer and convertibility risks through currency swaps can be also prohibitive (see Section 3.5). This may limit the size and capacity of smaller issuing markets.

In markets where local banks' funding is mainly through deposits, the need for local-currency covered bonds is not a high priority for issuers while deposits remain cheaper in comparison. As a result, the lack of local-currency covered bond funding may limit the perceived market liquidity of the asset class. This could have an impact on covered bonds' use as highly liquid assets for local regulatory purposes, as regulators would need to satisfy themselves that such assets could be liquidated as required in periods of stress.

Fitch's analysis of new covered bond jurisdictions takes into consideration whether these markets have additional risks that will have an impact on the ability of repayment on covered bonds. These risks differ between emerging and developed markets but are driven by liquidity, sovereign, market and counterparty risks. Most of the markets considering covered bonds in Asia are classified as emerging markets, hence they exhibit greater risks by virtue of their size and limitations – which could trigger a default of covered bonds. Fitch gives greater scrutiny to non-mature banking markets; those where issuing banks have only limited exposure to the assets used as collateral for covered bonds with a lack of liquidity for them; risk of capital controls being imposed; or where there is a limited swap market for the type of swaps used in the covered bond programmes. Should the risk be deemed material, these aspects can limit any uplift above a bank's IDR in Fitch's analysis.

If a developing covered bond market has previously securitised, there is no difference in our analytical treatment of the risk assessment compared with a market that has had no previous experience. However, markets that have already securitised have an advantage allowing for time and cost savings. Issuers can leverage off existing technology to help streamline the data gathering and processing for regular reporting, which is one of the largest burdens in setting up a new covered bond programme. Furthermore, the use of existing securitisation legal ring-fencing arrangements on cover pools is generally easier and quicker as they have already been tested and proven where there is no specific covered bond legal framework in place. This is especially true when dealing with the same assets, i.e. residential mortgages in mortgage-backed securities.

2.3. Regulatory Recognition of Asia-Pacific (APAC) Covered Bonds

Covered bonds issued outside of Europe have not benefited historically from specific risk-weights among European investing banks, which are the largest investors of covered bonds. This fact has incentivised Europe-based investors to prefer holding European covered bonds, and as a result provides pricing advantages for Europe-based issuers over other covered bonds markets. However, this is potentially set to change with regulated covered bonds from OECD jurisdictions around the globe. They will benefit from the proposed Basel III risk-weight provisions due to be implemented in 2022, for so long as they comply with a minimum overcollateralisation (OC) of 10%. Fitch believes the implementation of increased minimum OC on a regulatory basis would strengthen programmes further against adverse credit risks. Even so, the proposed changes to EU capital requirements continues to maintain the favourable treatment for EU covered bonds, provided mandatory OC is at least 2% or 5% depending on the cover asset type.

Separately, under the EU's covered bond draft directive, third-country recognition for covered bond markets in Australia, New Zealand, South Korea and Singapore could be possible. The explanatory memorandum leaves open the decision on "third countries". Once the directive is passed and transposed into domestic law, which is expected in 2020, the European Commission and the European Banking Authority will have a three-year period to formulate recommendations for an equivalence regime and report to the European Parliament. The length of time to confirm regulatory equivalence is long; but should third countries be accepted, Fitch believes the frameworks of APAC covered bond markets compare well enough with those of their European counterparts for regulated covered bonds issued out of these countries to tick all the boxes for recognition.

Covered bonds are generally considered highly liquid assets, and most countries adhering to Basel III liquidity standards have allowed them to count towards the banks' liquidity coverage ratios. In Singapore and South Korea, covered bonds rated 'AA-' or higher are eligible as level 2a HQLA under their respective LCR regulations. Euro-denominated covered bonds issued from the APAC region are also considered eligible level 2a high-quality liquid assets (HQLA) under the European liquidity coverage ratio (LCR) regulations. Under the European regulation there are specific requirements that must be met in order for covered bonds from "third-countries" to be considered eligible under its regime, including the requirement of a minimum 'AA-' rating. Conversely, in Australia regulations around HQLA are limited to level 1 only – meaning covered bonds are not considered eligible HQLA under the Australian LCR regime. Despite this, Australian covered bonds are repo-eligible assets and can be used as qualifying collateral for the committed liquidity facility with the Reserve Bank, which can be used by banks to meet their LCR requirements.

3. Structural Features and Risks of Covered Bonds

3.1. Covered Bond Structures and Frameworks

Covered bond frameworks can be based either on contractual arrangements, principles-based regulation, specific legislation or a combination of all three. The frameworks are developed by regulators using existing laws or by implementing dedicated covered bond legislation to protect the claims of investors over the cover pool. In Singapore, they rely on a principles-based regulation, whereas in South Korea there are specific legislation and additional regulation for covered bonds.

Based on the type of covered bond frameworks that are in place, there are two distinct covered bond template types in Asia: the asset-owning SPV and the integrated issuance template.

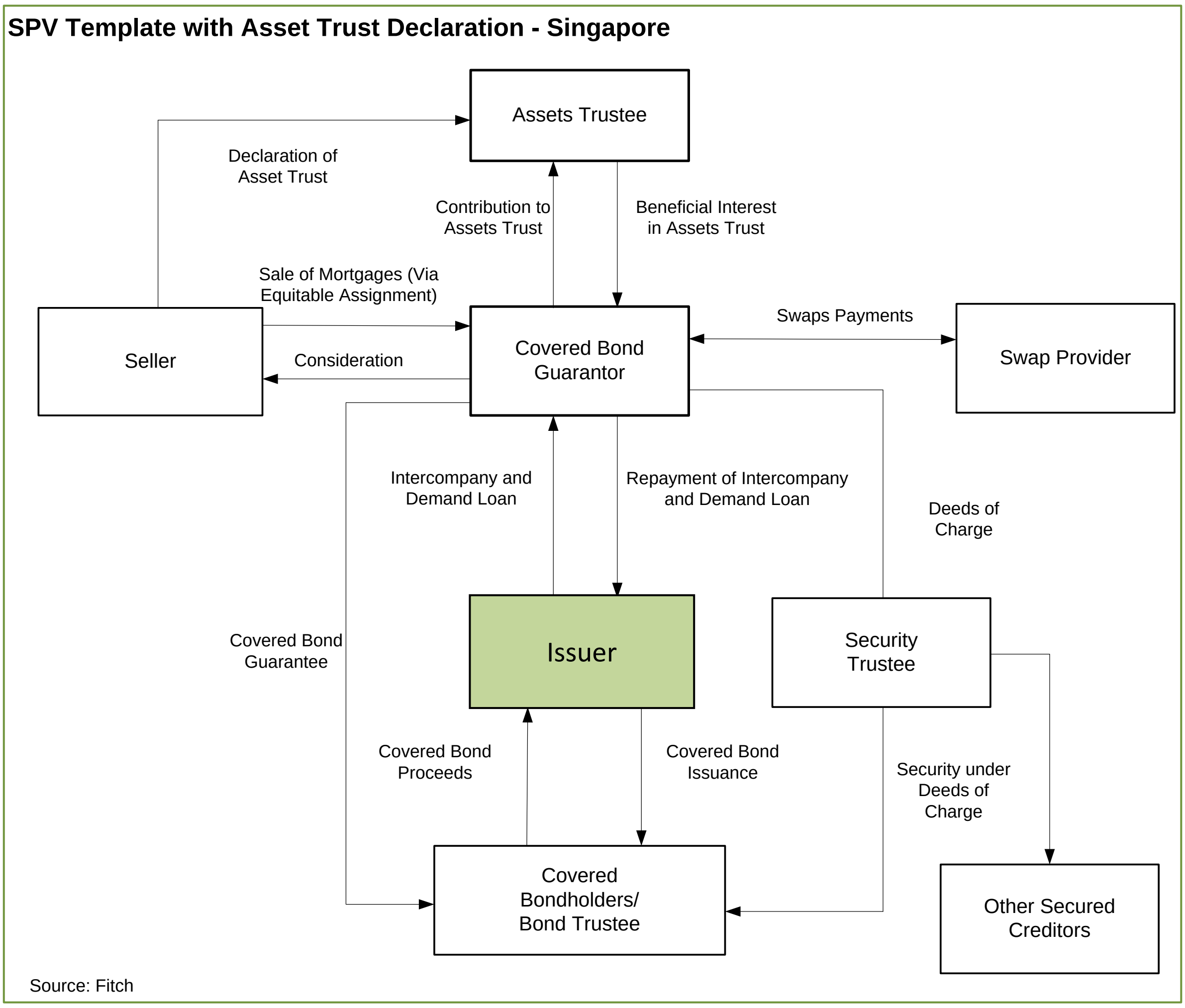

Figure 13

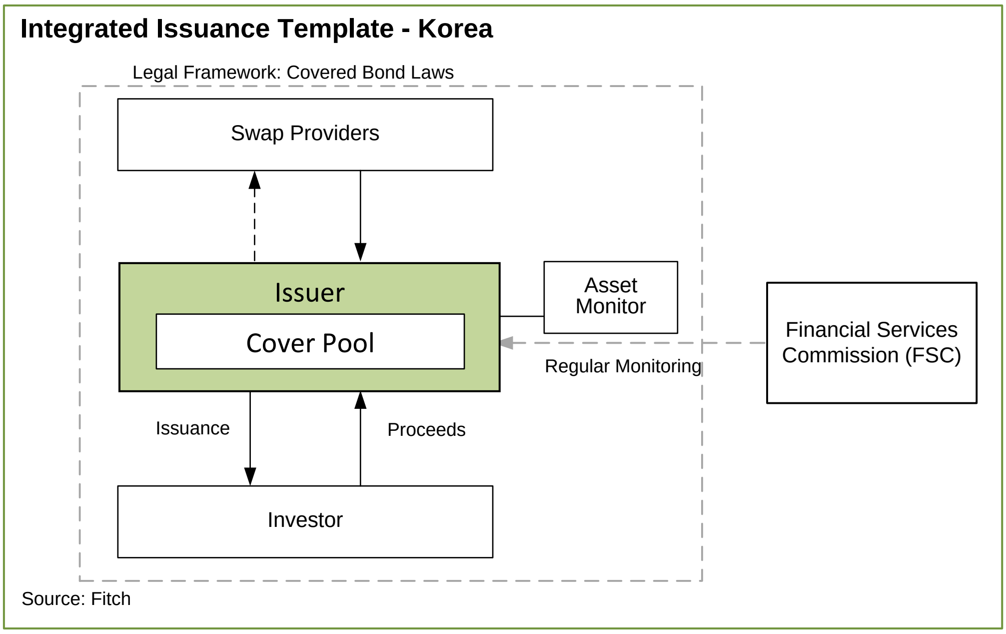

Figure 14

Covered bond issues can be a bullet, either a “hard bullet” or a “soft bullet” (extension period of 12 months) or conditional pass-through (CPT). The soft bullet and CPT issuance type have been more recent additions to the covered bond market, mainly to address specific cost issues of bank-held liquidity. The majority of covered bond issuance globally is soft bullet. In addition, as there is no need to sell assets under a CPT programme, it allows for more efficient use of collateral for issuance where the size of the cover pool is restricted in programmes.

Bank of Queensland Limited (BOQ) issued the first sequential CPT covered bonds in Australia. A particular aspect of the structure is that it allows for faster repayment of the bonds once an extension event had occurred. Once the first maturing bond has been extended and fully repaid, the next due bond will immediately convert to pass-through, even if it has not reached its expected maturity date. BOQ’s programme is the only CPT structure issued in APAC so far. Outstanding covered bond issuance in Asia is mainly soft bullet, however all multi-issuing programmes have the ability to issue hard bullet covered bonds as well. Fitch expects that smaller banks are likely to give CPT a closer look as covered bonds grow as a funding tool, as a means to diversify funding sources.

3.2. Resolution and Risk of Bail-In

Some countries have a bank resolution regime, including the bail-in tool, which specifically outlines what debt can be bailed in as part of the resolution process. For example, under Europe’s Bank Recovery and Resolution Directive (BRRD), senior debt could be subject to bail-in while covered bonds are exempt from it. In contrast, Singapore exempts both covered bonds and senior debt from bail-in under its regime where contractual bail-in terms are not contemplated. Both covered bonds and senior debt are exempt from bail-in, which means they both will rank pari-passu in a resolution scenario. In most other jurisdictions, even if covered bonds have a preferential position in resolution, the risk of enforcement of recourse to the cover pool may be possible if the programme becomes under-collateralised. In our analysis we look at the risk of under-collateralisation of covered bonds and whether there are mechanisms in place to safeguard the collateral so that it is sufficient in amount to meet the timely payment of covered bonds.

In general, the risk of under-collateralisation is minimised through legislative and programme contractual-specific safeguards that provide either a mandatory amount of OC, limitations on low-quality assets, and specify maximum loan-to-value (LTV) for mortgage assets.

3.3. Cover Pool Asset Segregation

Segregation of assets pledged as part of a cover pool can be effected through a transfer to an asset-owning SPV acting as guarantor of the issued bank debt, or via a legal ring-fencing mechanism which uses an asset register, or a transfer to a specialised covered bonds issuing subsidiary. This segregation from the remainder of an issuer’s balance sheet is a prerequisite for any payment to be directed to covered bondholders and to rate a programme above the issuer’s senior unsecured debt rating. Certain risks of set-off, commingling and claw-back can be addressed in either case via specific legislation or through contractual obligations set in programme documentation. The validity and enforceability of these features in mitigating leakage risk is generally confirmed through a legal opinion.

There is usually only one method of asset segregation in each country, as is the case in South Korea which relies on legal ring-fencing mechanisms as outlined in the covered bond legislation. However, in the case of Singapore, two types of segregation have been used. This is because by transferring certain mortgage assets linked to funds from the Central Provident Fund (CPF) would alter the ranking of proceeds to covered bond investors from the realisation of the secured property on those loans.

The use of pension funds to purchase residential property is a feature unique to Singapore compared with other covered bond markets that Fitch rates. The CPF board must give permission for any resident individual to use the funds from their account for the purchase of a residential property. Fitch's understanding is that, as per CPF's regulation, the funds used will rank first in priority for repayment to CPF upon subsequent realisation of the mortgaged property. Despite this, CPF's ranking varies depending on the consent with banks that provide mortgage finance; that the banks would have prior ranking as creditors ahead of CPF for the proceeds from the sale of the mortgaged property. Without consent from CPF, we understand that any transfer of a linked mortgage asset to a third party (including SPVs) may mean the ranking could revert to CPF first. As consent has not been granted for CPF-linked mortgages used as cover assets currently, a declaration of trust is used as a way of legally segregating these cover assets, without affecting the ranking of covered bondholders who hold beneficial rights over those assets. Depending on the programme in Singapore, the declaration of trust may be used alone for segregation or a combination of both the SPV and declaration of trust mechanisms. We believe that both are equally effective methods of segregation.

3.4. Cover Pool Asset Types

The types of assets eligible to serve as collateral for regulated covered bond programmes are often set at the framework level, which is true for both South Korea and Singapore. Their respective frameworks specify what is eligible as cover assets, but also outline any respective limits on those eligible assets – such as LTV limits on mortgage loans or limits on liquid assets included in the programme. For programmes not regulated or where no eligible assets are specified in the framework, the cover assets will be defined in the programme's contractual documents. Assets included in cover pools analysed by Fitch in Asia thus far are residential mortgages. In Europe, we also rate mortgage covered bonds secured by commercial real estate loans, and covered bonds secured by public-sector assets.

Eligible Assets for Asia Covered Bond Programmes

Assets	Singapore	South Korea[a]	South Korea[b]
Cash	Yes, limited to 15% as proportion of all cover assets (subject to exceptions)	Yes, limited to 10% of the cover pool	Yes
Bank bills/certificates of deposit (maturity shorter than 100 days)	No	Yes, limited to 10% of the cover pool	No

Government bonds/notes/debentures	Yes, limited to 15% as proportion of all cover assets (subject to exceptions)	Yes	No
Mortgage backed securities	No	Yes, limited to KHFC issued mortgage bonds and MBS	No
Residential mortgages	Yes, loan to value ratio limited to 80%	Yes, loan to value ratio limited to less than 70%	Yes, loan to value ratio limited to less than 70%
Commercial mortgages	No	No	No
Aircraft/shipping loans	No	Yes, loan to value ratio limited to less than 70%	No
Exposures to public sector entities	No	Yes	No

[a] Korean Covered Bond Act
[b] Korean Housing Finance Corporation Act
Source: Fitch, Issuance documents

Table 12

In most covered bond programmes internationally, cover pools tend to have homogeneous assets, although several frameworks allow mixed residential and commercial mortgage loans in the same cover pool, as in Germany or Spain, or to mix mortgage and public-sector assets, as in France and Sweden. This is also possible in South Korea as its framework lists multiple types of similar eligible assets, but we think it is unlikely as those assets are refinanced through other forms of funding. Meanwhile, the regulation in Singapore allows for the inclusion of mortgages on secured property from outside of Singapore as cover assets. Fitch feels that this raises the potential for foreign-exchange risks in cover pools to emerge, and which would need to be mitigated. At the time of this publication, only Singapore-based assets are included in the cover pools of the three programmes currently established.

3.5. Privileged Swaps

Privileged derivatives are used in covered bond programmes to transform cash flows of assets and liabilities, and these are also deemed to form part of the cover pool. Unlike non-privileged swaps which banks execute in the normal course of business, privileged derivatives are intended to survive the insolvency of the issuing bank and continue to provide hedging of the cover assets or the covered bonds after the payment source has switched from the issuer to the cover pool.

Derivatives used for covered bonds can be a combination of interest-rate and currency swaps for cross-border issuance. On the cover pool, some programmes in the region use total return swaps or a combination of basis and fixed-floating swaps to transform all asset cash flows and interest on cash held into a specified rate plus a margin.

In certain countries with less developed capital/banking markets there is a greater risk of governments imposing restrictions and capital controls around local currency being converted into foreign currency. This can have an impact on the ability to repay investors located in other countries. Covered bond derivatives have been used in South Korea to mitigate this potential risk. Upon the imposition of capital controls, we understand from the programme documents that the currency conversion of the payment under the swap would occur offshore via an eligible counterparty. This helps maintain the continuity of payments despite capital controls being in place.

The extent of benefit afforded to these swap arrangements in our analysis depends on the structure of the covered bond programme. CPT covered bonds are less affected by market-value events on the assets as asset sales are not needed and may therefore be able to withstand higher stresses. This allows for greater credit to these swap arrangements in respect to timely payment compared with programmes that issue bullet bonds or have short extension periods of up to 12 months.

3.6. Over-Collateralisation and Asset Valuation

OC between cover assets and covered bonds, which can be expressed as an asset percentage (AP), is the main source of credit enhancement. This means that the cover assets value exceeds the covered bonds outstanding. Minimum OC for covered bond programmes may be stipulated at either the framework level and/or at the programme level. Under the Covered Bond Act in South Korea and the MAS regulation in Singapore, the minimum OC is 5% and 3%, respectively. Mandatory regulatory OC used in our analysis would generally not be sufficient to support stresses in high-rating scenarios, so it is usual to find programmes holding more OC to support these higher rating levels.

Issuers are likely to maintain a certain level of OC at any time, although the valuation of the cover assets compared with the covered bonds can be conducted periodically, e.g. this can be contractually required on a quarterly basis in programmes or less often as prescribed by law. The asset valuation method may be outlined in specific regulation or defined in the programme documentation. In the case of South Korea and Singapore, while the regulations specify the requirement of asset valuation, the specific parameters and calculations are outlined in the programme documentation.

The provisions included in programmes that we rate in the region limit the LTV that are given credit – in most cases this is 70% for South Korea and 80% for Singapore – and gives no credit to defaulted assets. The asset-valuation calculation ensures that there are sufficient assets in the cover pool to support cash flows and cover maturity mismatches to pay covered bond obligations should the payment source switch to the cover pool from the issuer. It is usual in programmes to stipulate that a switch to the cover pool could occur where there are breaches in these calculations and if they remain unrectified. In some programmes where the payment source has switched to the cover pool, a breach on asset-sufficiency calculations could trigger a cross-acceleration requiring repayment on all covered bonds on a pro-rata and parri passu basis.

3.7. Demand Loan/Note Funding Excess OC

Among programmes issued under an SPV template, the demand loan feature (which can also be a note) is used mainly outside of Europe. It is seen in programmes from Australia, Canada, New Zealand and Singapore, with the concept originating from Canada. The demand loan allows the issuer to vary the amount of voluntary OC in the programme over and above that required under the asset-coverage test. In general, the repayment of the demand loan ranks ahead of covered bond investors, and therefore cover assets secured by this demand loan will not be available for the benefit of covered bond investors. Therefore, we do not rely on the proportion of OC funded by the demand loan in our analysis.

In Fitch's opinion, the demand-loan redemption can have an impact on the liquidity of a covered bond programme when it needs it the most. In most cases the demand loans are repayable in kind with mortgages upon a trigger of the mandatory repayment. Where the programme only foresees the repayment of the demand loan in cash, Fitch believes this would limit the programme's ability to repay upcoming maturities, as it could necessitate further liquidation of cover assets after the enforcement of recourse to the cover pool has led to a switch from the issuer to the cover pool as the source of payment.

3.8. Liquidity Protection Mitigating Mismatches

The asset and liability mismatches (maturity, interest rate and currency) inherent in most covered bond programmes mean that their documentation or applicable frameworks will contain features to mitigate short-term liquidity risk and principal payment risk. For instance, a regulatory liquidity provision may require issuers to hold on an ongoing basis, as part of the cover pool, cash or liquid assets covering cash flow shortfalls scheduled over the next 180 days. Other protections can be in the form of extendable maturities periods on bonds, allowing for a work-out period of up to 12 months (soft bullet bonds) following the maturity date. There could also be pre-maturity tests on hard bullet bonds, which if breached (typically if the short-term rating of the issuer falls below a certain threshold) leads to the cash-collateralisation of upcoming maturities within a 12-month period. The time given to liquidate assets where needed and the level of liquidity of the cover assets determines whether a programme can successfully overcome the asset and liability mismatches.

Almost all programmes in Asia have robust liquidity-protection mechanisms in place. This allows us to assign a Payment Continuity Uplift above the bank's IDR up to six notches on hard and soft bullet programmes secured by residential mortgages, and eight notches for CPT programmes secured by residential mortgages.

Typically, public-sector assets are considered the most liquid, only needing up to a few months for liquidation, whereas residential and commercial mortgages are generally thought to be less liquid. Invariably the liquidity of these assets is dependent on investors' appetite for these assets. In our analysis, we assume that part of the cover assets is sold to bridge the modelled gaps between the assets and liabilities. We assess a stressed market value for the cover assets, applying a higher discount for pools of assets with adverse characteristics or to reflect the impact of large exposures that are unable to be readily absorbed by the market. Some jurisdictions make it possible for the asset-owning entity to repo cover assets directly to a central bank or to issue new covered bonds that can equally be repo'ed to obtain short-term liquidity for an upcoming maturity.

Almost all frameworks allow for liquid assets up to a certain percentage of the programme total assets or bond outstanding, for example 5%-15% of the cover pool or as part of a separate reserve. These liquid assets are available to mitigate any payment interruption that could result from default of the issuer or servicer on the assets.

3.9. Ongoing Supervision and Administration

Ongoing monitoring on covered bond programmes is performed by a cover asset monitor, an independent third party appointed in accordance with the framework or programme documents. Their responsibilities can include ensuring that the covered bond programme is being operated in a manner that is in accordance with the programme documents, error-checking of calculations required to be performed by the issuer and confirming that the issuer is in compliance with the requirements of the regulatory framework. The cover asset monitor provides investors with an additional layer of protection, in addition to the regulator's oversight of the issuer.

Covered bondholders' claims against the cover assets would be handled by a third-party manager in the event that recourse against the cover pool is enforced. The framework and/or the programme documents will outline who is responsible and the requirements for the management of the cover pool. In our analysis, we take into consideration the framework or contractual clauses governing the appointment of a substitute manager, any potential conflict of interest (where an administrator in a bankruptcy takes care of both secured and unsecured creditors), the manager's responsibilities in the servicing and liquidation of the cover assets to meet payments due, and any further protection due to oversight or potential support for regulated covered bonds. In addition to the theoretical provisions that allow an alternative manager to step in, we take into consideration the availability of suitable alternative management parties in a given market.

In countries such as Germany, Ireland and South Korea, among others, the legislative framework is very prescriptive on the appointment and duties of a special programme administrator. Most frameworks, however, are less prescriptive on this topic; and as a result, it is generally left to either the interpretation of the regulations and/or reliance on contractual obligations in the underlying programme documents, as is the case in Singapore. While the transfer to an administrator is practically untested, Fitch believes the sooner an administrator can act, gain access to required systems and manage the cover assets, the better the outcome will be for investors.

VII. The Ratings Framework for Securitisation (Moody's)

The credit risk in Asian emerging market securitisation transactions depends on multiple factors, including the legal and regulatory requirements, the quality of the underlying assets, the strength of third-party service providers, structural features, currency and interest rate issues and political and economic factors. This report highlights some of the key factors that determine credit risk in securitisation transactions in China specifically and other emerging markets in Asia generally.[22]

- The legal and regulatory situation in different countries influences credit risk. One of the most fundamental legal issues in respect of the level of credit risk posed by structured finance transactions is whether the transactions have sufficient bankruptcy remoteness protection. In Asian emerging markets, laws and regulations can vary considerably.
- Underlying assets are key drivers of credit risk. The probability of default on the assets, the chance of recovery in the event of default and the uncertainties associated with these default probabilities and recoveries influence the credit risk posed by transactions.
- Operational and counterparty risk influence credit quality. In securitisation transactions, issuers retain third party servicers to administer day-to-day operations. Transactions are therefore subject to the performance of such third parties. In addition, commingling and set-off risks may arise due to the presence of the counterparty risk.
- The structure of transactions affects the risk profile of issued notes. One key structural element is the payment waterfall. The degree of protection afforded to investors from different types of payment waterfalls can vary drastically.
- Currency and interest rate risks apply to securitisation transactions. In particular, the depth of the foreign exchange market and the volatility of exchange rate movements can influence credit risk in emerging market securitisation transactions. Furthermore, securitisation transactions might have interest rate mismatches because of the use of different interest rate benchmarks.
- Political and economic factors may pose credit risks. Risks arising from political and economic factors can materialise either from within a particular country or externally.

1. Legal and Regulatory Situation Influences Credit Risk

The legal and regulatory situation in specific emerging markets countries influences the level of credit risks posed by securitisation transactions.

One of the most fundamental legal issues in respect of the level of credit risk posed by structured finance transactions is whether the transactions have sufficient bankruptcy remoteness protection, including the establishment of a bankruptcy remote special purpose vehicle and protection from the potential bankruptcy of the transaction sponsors or sellers.

Asset ring-fencing, asset transfer and security perfection are important because transactions must ensure a well-established claim on the collateral, as well as timely enforcement of the collateral

[22] This report focuses on securitisation transactions other than transactions categorised as structured credits.

that is not subject to a delay because of the insolvency or bankruptcy proceedings of any transaction parties.

Factors that can reduce the likelihood of an issuer becoming insolvent or bankrupt are extremely important in respect of the credit risk posed by structured finance transactions. Moreover, legal precedents showing the enforceability and applicability of the bankruptcy remoteness of the issuing vehicle used in securitisations can enhance understanding of these risks. However, in Asian emerging markets, laws and regulations can vary considerably, even across different jurisdictions within the same country.

In China, securitisations issued by banks and financial institutions regulated by the People's Bank of China (PBOC) and the China Banking and Insurance Regulatory Commission (CBIRC) under the Credit Asset Securitisation (CAS) program in the interbank bond market must have a special purpose trust structure. The use of a special purpose trust incorporated under the Trust Law provides strong protection for the ring-fencing of the entrusted assets from the bankruptcy estate of a defaulted originator or issuer. The CAS framework is regulated by the PBOC and the CBIRC.[23]

Chinese corporations, including financial institutions registered with the Ministry of Commerce, can also issue securitisations in the interbank bond market through the Asset Backed Notes (ABN) program, which is regulated by the National Association of Financial Market Institutional Investors. Similar to deals issued under the CAS program, special purpose trust structure has been used in some of the ABN deals.

However, asset securitisations in China can also be issued outside of the interbank bond market through the Asset Backed Specific Plan (ABSP) framework, which the China Securities Regulatory Commission regulates.[24] The ABSP is based on an assignment concept between a principal and agent. However, questions remain over how the assets can be ring-fenced. For example, it is unclear how the assets can be separated in the event of the bankruptcy of the project manager.

On the regulatory side, factors that influence credit risk include whether prior regulatory approval for issuance, asset transfer and security perfection is required, or whether restrictions are present that could affect the ability of trustees or investors to possess, manage or sell the securitised assets. If such regulatory restrictions are evident, the level of credit risk may depend on how the transaction addresses them without compromising the interests of investors.

In China, one example is foreign exchange control, which the State Administration of Foreign Exchange regulates. For transactions involving the conversion and transfer of renminbi into foreign currencies to offshore investors, prior approval from the State Administration of Foreign Exchange

[23] See Further Direction Needed on Bankruptcy Ring-Fencing in China Securitisation Transactions, 19 November 2014.

[24] See Further Direction Needed on Bankruptcy Ring-Fencing in China Securitisation Transactions, 19 November 2014.

reduces credit risks. Without such approval, there can be no guarantee that the free cross-border flow of principal and interest can be safeguarded for offshore investors, which is credit negative.

2. Underlying Assets are Key Drivers of Credit Risks

The credit quality of the underlying assets is the most important driver of the credit quality of securitisation notes. The probability of default on the assets, the chance of recovery in the event of default and the uncertainties associated with these default probabilities and recoveries influence the credit risk posed by transactions.

Macroeconomic conditions and market dynamics, as well as the business strategies and business operations of the sponsor, affect the probability of default and the chance of recovery.

The lack of a well-tested, transparent bankruptcy and loan workout process may also complicate loan recoveries.

The historical performance of the assets, in particular performance during a period of economic distress, may provide some indications of how they will perform in future. The availability of historical data and the quality and integrity of the data are therefore important determinants of the credit quality of transactions. In Asian emerging markets, data may have shortcomings that can pose credit risks in securitisation transactions, including:

- Comprehensive historical data on defaults, prepayments and recoveries on the underlying assets may not be available. For example, there may be no static pool data.
- The data that originators provide might cover only a relative short time, because of a short operating history or a change in information technology systems.
- The available data period coincides with strong economic growth. As a result, it does not provide insight into any potential performance deterioration by the relevant receivables during a period of economic distress. In China, for example, a benign macroeconomic environment has prevailed since the country adopted its open-door policy a few decades ago.
- Even if data on the underlying assets is available, audit procedures might not be sufficient to ensure its accuracy and reliability. This factor is particularly important for small originators that might not have robust information technology systems and audit procedures.
- Market-wide data on the region, such as a property price information, may not be available.

When data in a particular market is not available, the performance of similar assets in other developed and emerging markets can be a useful guide to how assets may perform in a distressed situation. This could mean, for example, that default forecasts for Chinese auto asset-backed securities (ABS) could be higher than historical default rates.

3. Operational and Counterparty Risk Influence Credit Quality

In securitisation transactions, the issuer often has no employees or facilities of its own and therefore must retain a third party as the servicer to administer the day-to-day operations of the transaction.[25] As a result of this arrangement, the strength of a securitisation depends not only on the creditworthiness of the underlying pool of assets, but also on the performance of all third parties in the transaction, such as the servicer, cash manager and trustee. A number of transaction parties may not be rated locally or internationally. A disruption in the performance of any of these parties can hurt the transaction.

For example, the bankruptcy of the servicer could lead to a commingling loss if the servicer has not transferred the collections from the securitisation pool to the transaction trust account. In addition, a servicing disruption might weaken collection activities, leading to increased delinquencies, lower recoveries and ultimately, higher losses on the collateral in the securitised pool.

In Asian emerging markets, operational and counterparty risks often present weaknesses in structured finance transactions. For example, there may be no back-up servicing arrangement or the arrangement is untested. In China, the lack of replacement servicers and the risk this would pose if there was a disruption in servicing, is heightened by the diversified nature of the collateral pools that characterise many outstanding auto loan ABS transactions.

Some transactions lack upfront, fully-funded liquidity protection, such as a liquidity reserve or a liquidity facility. This may increase the risk of a temporary cash disruption in the case of a disruption in servicing, or the bankruptcy of any other counterparty in the transaction, with some potential adverse consequences for the rated notes. As a result, the credit quality of the original servicer, its parent and parental support is very important in respect of the credit quality of the transaction.

Set-off risk will arise if the originator owes reciprocal payment obligations to the underlying obligors and there is no perfection of loan transfer against the obligor. If the borrower can offset the loan it owes to the originator against the obligations due from the originator, set-off risks could be present in the transaction. Deposit-taking originators, such as banks and deposit-taking companies, are prone to such risk. Deposit insurance schemes can mitigate set-off risk, in countries where such schemes exist.

4. Structure and Credit Enhancement Affect Risk

The structure of a transaction has a significant effect on the risk profile of the issued notes. One key structural element is the allocation of cash flow in the transaction and the priority of payments, otherwise known as the payment waterfall. The degree of protection afforded to investors from different payment waterfalls can vary drastically.

Auto loan ABS transactions in China have different types of payment waterfalls, such as:

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[25] These operations include routine asset portfolio administration duties, such as determining interest rates on assets, managing the flow of payments from borrowers to issuers and collecting late payments. Other responsibilities might include advancing funds to provide liquidity and temporarily reinvesting idle cash.

- full turbo payments in which the transactions will use all principal collections and any excess interest collections for early repayment of the rated notes in a sequential manner, and until the transaction fully repays each class of notes[26]
- excess spread to cover principal loss caused by underlying defaults.[27]

Korean credit card ABS transactions provide another example of different waterfall structures. The issuer can use collections from the underlying securitisation pool to purchase new receivables from the originator during the revolving period. In such cases, the early amortisation triggers in revolving deals are important, because different trigger levels could have significantly different effects on the credit profile of transactions.

Other structural features — including portfolio substitution, rating trigger components of internal credit enhancement (such as the reserve account), excess spread and over-collateralisation — are also crucial factors that influence credit risk.

5. Currency and Interest Rate Risks Apply to Securitisation Transactions

The depth of the foreign exchange market and the volatility of exchange rate movements can influence credit risk in emerging market securitisation transactions, because trading in the currencies of emerging market economies tends to be illiquid and volatile. The regulatory approval requirements for currency conversions and transfers can also influence credit risks. The hedging of currency mismatches is therefore important in cross-border securitisations.

Furthermore, securitisation transactions might have interest rate mismatches because of the use of different interest rate benchmarks or different interest rate reset dates.

In some Chinese securitisation transactions, the underlying loans pay fixed-rate interest to the originator. However, the interest rate on some classes of notes might be linked to the benchmark deposit rate that the PBOC sets and which changes in accordance with changes in monetary policy. If deregulation of interest rates occurs in China, which would allow market forces to determine deposit rates, such a mismatch could be amplified.

In addition, the swaps market of an emerging market economy might not be liquid or deep compared with more mature markets. As a result, there could be a risk for the originator or issuer in finding replacement swap providers which, in turn, may increase the degree to which the credit quality of the transaction depends on the swap provider.

6. Political and Economic Factors May Pose Credit Risks

Risks arising from political, institutional, financial and economic factors either within a particular country or externally, can influence the credit risk of securitisation transactions. These factors

[26] See Chinese Auto ABS: Not All Structures Are Created Equal, 4 December 2014.

[27] See Chinese and Indian Auto ABS: Two Very Different Markets When it Comes to Forms of Credit Enhancement, 12 August 2015.

include political instability, conflict risks and regulatory and legal uncertainty over, for example, the enforceability of contracts.

Other country risks include the risk of government intervention, such as the expropriation or nationalisation of local assets, as well as the risk of systemic economic disruption, severe financial instability, currency redenomination under adverse circumstances and natural disasters.

We take account of country risks in our local currency country risk ceiling (LCC) and foreign currency country risk ceiling (FCC). In the case of China, our LCC and FCC are both Aa3.

The LCC captures non-diversifiable country risks, which affect all issuers and assets in a country. The FCC signifies the risk that a defaulting government would adopt a moratorium on the foreign currency debt repayments of domestic issuers. Moratorium restrictions refer to two separate risks: restriction on moving foreign exchange offshore (transfer risk) and restrictions on freely

converting local currency to foreign currency (convertibility risk). Korean ABS transactions usually have a cross-currency swap with an offshore swap provider, which covers the moratorium risk. Under such an arrangement, the swap provider will continue to swap the local currency into foreign currency, notwithstanding the imposition of a moratorium.

VIII. Taxation Issues in Securitisation (Ernst & Young)

Executive Summary

Tax neutrality and tax certainty are needed to assist the growth of the Asian securitisation market, which has recently picked up especially on domestic issuances. The market would likely further grow where securitisation transactions can be more accurately priced and rated, thus contributing to the development of an efficient securitisation market. Tax neutrality should help in removing the obstacles of additional or accelerated taxation with the result that, both, participants and revenue authorities are neither better nor worse off from a tax perspective. Examples of these types of laws can be found in certain Asian countries, with India joining the club of Malaysia and Thailand. Additionally, tax certainty for participants is necessary for greater confidence in market outcomes. These objectives (i.e. tax neutrality and tax certainty) may be achieved through comprehensive tax rules or, alternatively, through the issuance of specific tax guidance by the revenue authorities.

1. Taxation of Securitisation Arrangements

To support the growth of the Asian securitisation market, tax policy for securitisation transactions should be set with the primary objective of achieving tax neutrality, irrespective of the nature of the taxpayer. Tax neutrality means that the same amount of tax should be paid at the same time in a securitisation structure as it would otherwise have been paid had the securitisation transaction not been entered into. Additional tax costs in a securitisation structure are a significant economic disincentive for a securitisation market.

In addition, taxpayers (i.e. the different participants in a securitisation transaction) should have certainty for the amount and timing of the tax that needs to be paid in a securitisation transaction.

Both tax neutrality and tax certainty need to be considered in both wholly domestic securitisation transactions and securitisation transactions involving cross border payments that can lead to additional layers of complexity.

This section of the report considers the tax policy objectives (neutrality and certainty) for securitisation transactions, and the current status of taxation of such transactions in select jurisdictions.

2. Tax Policy Objectives (Neutrality and Certainty)

Under a securitisation arrangement, there are several areas where tax consequences can typically vary when compared to a scenario where the underlying assets have not been securitised. The tax policy for securitisation would typically need to consider the following key aspects. These include:

- The sale of the assets to the securitisation vehicle (whether it is a true sale or otherwise)
- Income from the assets (e.g. interest)
- Bad debts
- The tax treatment of the securitisation vehicle and the issuance of notes to investors

- Payments to investors (e.g. coupons)
- Transaction taxes (e.g. stamp duty, VAT / GST)

Specific tax rules that deal with securitisation transactions can achieve tax neutrality by alleviating unintended tax consequences and inefficiencies such as tax leakage e.g. providing clarity regarding the timing of taxation, nature of income from underlying instruments, according pass through status wherever necessary etc. This approach should help eliminate unexpected tax consequences which can result in mispricing securitisation transactions, requirements for complex tax indemnities and/or warranties and difficulties for ratings agencies to accurately rate the securitised assets and securitisation vehicle.

In the absence of specific rules that explicitly address the above issues, there exist uncertainties for taxpayers which are impediments to the growth of the securitisation market. An alternative to specific rules is the issuance of guidance on the taxation of securitisation transactions. This alternative approach will allow participants in the securitisation market to appropriately plan for the tax consequences of the securitisation transaction which will allow efficient pricing and rating of the transaction.

Ultimately, these rules should result in the same tax outcome which would otherwise arise in respect of the securitised assets (i.e. they should be tax neutral). We consider this objective in light of the origination, life and termination of a securitisation transaction.

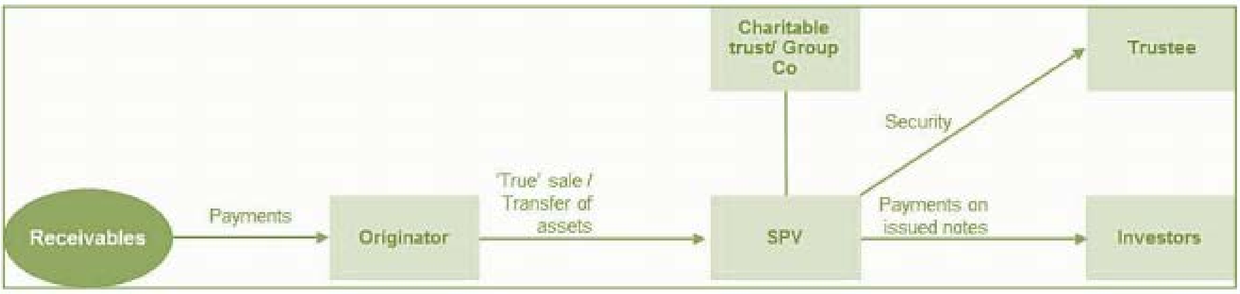

Figure 14

3. The Origination of the Securitisation Transaction

On origination, the securitised assets are transferred to a special purpose vehicle. The transfer of the securitised assets may give rise to a taxable profit or loss.

In Singapore, typically in the banking context, where the securitised assets are transferred to a special purpose vehicle (“SPV”) at book value, there will be no accounting gain/ loss and therefore, no taxable gain/ loss event arises on such transfer. In Malaysia, asset backed securitisation regulations provide originators of securitisation transaction a specific set of rules that deal with the taxation of gains and losses from the disposal of trade receivables and stock in trade. Broadly, the taxation of such gains or losses is spread across the period of the securitisation transaction. This treatment prevents upfront tax costs that may otherwise arise on the origination of the securitisation transaction. Both of the mentioned examples are that of tax neutrality on origination of the securitisation transaction.

In addition to the above, the indirect and transaction tax consequences (including GST, VAT, stamp duty) of the origination of securitisation transactions need to be considered and addressed. For instance, transfers of mortgage backed securities can have a complex interaction with existing stamp duty laws. It is foreseeable that the transfer of mortgages over land could give rise to stamp duty costs which, in a securitisation transaction, can be difficult and complex (if not impossible) to calculate due to the large number of mortgages in a single transaction. Such laws should be updated to take into consideration the nature of securitisation transactions such that the complexity and uncertainty is eliminated. This can be achieved through exemptions and/or clarifications on the application of such laws. For instance, under the Singapore GST legislation, the assignment of receivables to an SPV in Singapore is an exempt supply for GST purposes. The assignment of receivables to a foreign SPV is a zero-rated supply (GST at 0%). In either case, an assignment of receivables from a Singapore originator to the SPV should not be subject to Singapore GST. However, the exempt or zero-rated GST treatment could impact the input tax recovery of the Singapore originator if it is GST-registered. Notwithstanding the exemption for GST, the remission of stamp duties on the instrument relating to transfer of assets to the Approved Special Purpose Vehicle (“ASPV”) for approved asset securitisation transactions will lapse after 31 December 2018. Rest of the ASPV scheme continues and was extended till 31 Dec 2023 according to the Singapore Budget 2018.

4. The Life of the Securitisation Transaction

The taxation of income and expenses during the life of a securitisation transaction can depend on the tax residency of the special purpose vehicle, type of vehicle chosen and the relevant taxation regime. It is to be noted that special purpose vehicles in securitisation transactions are intended to be profit neutral (income matches expenses). Accordingly, tax laws should provide symmetrical treatment between the income and expenses of the special purpose vehicle. That is, either both are taxable / deductible or both are exempt. In Malaysia, regulations exist for the taxation of income and expenses for the special purpose vehicles. Namely, gross income includes income from all sources and any deductible expenses incurred by the special purpose vehicle for acquiring trade receivables or stock in trade are spread across the period of the securitisation transaction. These regulations match the timing of the income or gains of the originator with the expenses of the special purpose vehicle.

In Thailand, a special purpose vehicle is granted an exemption from tax on income derived from a securitisation transaction which has the necessary approvals. Additionally, the operation and allocation of cash inflow for the settlement of debts and expenses must follow the approved plan.

The added complexity of cross border securitisation transactions also needs to be considered. During the life of a securitisation transaction, it is possible that the originator, securitisation vehicle, investor and debtor under a securitisation transaction are tax residents in different jurisdictions. In such scenarios, withholding taxes, permanent establishment issues and tax treaty claims are relevant and can be complex. Whilst appropriate tax planning may reduce tax leakage in these circumstances, rules that support tax neutrality and tax certainty can provide participants’ increased confidence to enter into securitisation transactions. For example, where a collective investment vehicle is used as the securitisation vehicle, withholding tax exemptions on relevant interest payments and distributions will minimise complexities arising from the interpretation of tax treaties. In this regard, Singapore currently has a withholding tax exemption for payments on over the counter financial derivatives in connection with an asset securitisation transaction (subject to meeting the conditions of being an approved securitisation company). Exemptions such as these remove the economic disincentive of additional tax costs in a securitisation market.

A specific tax regime was introduced in the UK in 2007 in order to simplify the taxation of securitisation companies. Under the specified UK tax regime, a company that meets the definition of a securitisation company is in summary taxed on the small amount of "retained profit" rather than on the profit shown in its accounts. - in other words, the standard rules on taxable income and deductible expenses starting from the financial statements of the company do not apply (securitisation vehicles were previously taxed in this manner, and this led to complexities such as the SPV could have tax liabilities (based on its accounts) that exceed its cash surplus available to settle such liability).

The "retained profit" can be an amount or margin chosen by the directors of that company, provided that it is clearly identified in the securitisation documents, such as in the "priority of payments schedule". Eligible securitisation companies that meet the conditions are charged corporation tax on their retained profit, that being the amount left after the operation of the payments waterfall (with adjustments for certain dividends received and paid by the SPV). Where an SPV does not have available funds equal to its retained profit, corporation tax will be calculated on the amount of profit actually retained.

5. The Termination of the Securitisation Transaction

On termination of the securitisation transaction, the securitised assets are transferred back to the originator (to the extent they still exist). In addition, any profits in the special purpose vehicle are required to be dealt with. The taxation of these events on termination should be considered and addressed within the context of tax neutrality and tax certainty.

6. Current Taxation of Securitisation Transactions – China

In 2006, a tax circular was released which provides China's position on business tax, stamp tax and corporate income tax on the transferred assets, during the process of credit asset securitisation under the trust method.

The circular provides exemptions from stamp duty when the relevant assets are being transferred to the securitisation trust. This is an example of a tax neutral outcome as there is no additional stamp duty burden for the participants in the securitisation transaction.

The circular confirms that originators of securitisation transactions are subject to enterprise income tax laws on the gains and losses made on the transfer of the assets to the securitisation trust.

The securitisation trust is exempt from enterprise income tax on gains that it distributes to the investors in the same year the amounts are derived. The securitisation trust is however, subject to enterprise income tax on undistributed amounts. Once these amounts are distributed, institutional investors will benefit from the current policies on after-tax proceeds.

The tax treatment of institutional investors depends on the nature of the gain. Previously untaxed amounts received from the securitisation trust are subject to enterprise income tax on an accruals basis. As stated above, such institutional investors will benefit from the current policies on after-tax proceeds if enterprise income tax was previously paid by the securitisation trust. In addition, institutional investors will be subject to the enterprise income tax on trading gains and losses on an accruals basis.

7. Current Taxation of Securitisation Transactions – India

A specific tax regime in relation to securitisation transactions was introduced in India in 2017. This regime is applicable for instruments issued in relation to securitisation of both, standard and non-performing assets. The securitisation trust is exempt from income-tax on the income earned by it, if any, and the same is taxable in the hands of the investors as if the investments by the securitisation trust has been directly made by the investor.

The law also requires that the characterisation of the income ought to be determined first in the hands of the securitisation trust itself. Accordingly, each investor is required to analyse the implications in its hands in the like and same manner as that of the securitisation trust. In this regard, the securitisation trust is required to report the amount received by it in relation to the underlying loans to the investors and the Indian tax authorities in a specified manner which includes details of income to be disclosed under the specific heads of income.

No withholding is required to be made at the time of payment to the securitisation trust, however, the securitisation trust is required to withhold tax while making the distributions or crediting the account of the investors, where applicable.

Further, transfer of loans in favour of asset reconstruction companies for the purpose of asset reconstruction/ securitisation is specifically exempt from stamp duty.

On the other hand, there is no specific income-tax exemption for the banks/ financial institutions transferring the loans to the asset reconstruction companies/ securitisation trust. Normal income-tax principles apply to these institutions on transferring of the loans.

IX. The Regulatory Toolbox (Clifford Chance)

As the global financial crisis showed in the US and Europe, there are risks and dangers involved in financial system which becomes too interconnected and in which there are overconcentrations of risk. As a tool which, if not used properly, could contribute to this interconnected and overconcentration of risk, Securitisation needs to be regulated. The form that regulation takes does, however, need to strike a delicate balance. It should not be product specific, preferring one particular financial product to another, but rather be focussed on the activities – does a particular use of securitisation result in a possible negative effect. This chapter outlines a number of regulatory tools which are used by regulators to help establish, foster and maintain an economically and socially beneficial securitisation market. The next chapter then explores how these tools are being employed in Asia to ensure securitisation markets continue to develop in a stable and robust manner before the following chapter considers how the regulations adopted in the US and Europe effect the way securitisation transactions are structured in Asia.

The regulatory tools which regulators adopt typically target either particular entities or particular activities:

- entity focused rules – whereby certain users of securitisation are regulated; and
- activity focused rules – whereby certain features which might be present in securitisation are regulated.

1. Entity Focused Regulation

As banks and other financial markets participants are likely to be significant users of securitisation technology it is important to consider what toolbox of regulatory options they could be constrained by. In the context of securitisation, it is banks and financial markets participants which are subject to entity focussed securitisation regulation.

Entity-focussed regulation generally falls into the following categories.

Capital Requirements

Capital requirements are designed to ensure that entities undertaking bank-like activity, such as leverage or maturity transformation, hold a sufficient amount of capital in order to mitigate the negative effect of losses. In general, the riskier a financial asset, the greater the capital which needs to be held against it. Capital requirements seek to make riskier positions more expensive for entities to hold and less risky positions cheaper for entities to hold.

This, however, leads to the complex question of how the "riskiness" of a securitisation position is determined and how the model on which that riskiness is assessed is built.

Large Exposures

Large exposure rules seek to reduce the overall reliance of an entity on repayments from a single source or group of interconnected sources. The rules are often expressed by reference to an entity being able to have an exposure to a single debtor (or group of connected debtors) no greater than a certain percentage of its capital.

The idea behind the enforcement of a large exposure rule is to minimise the risk of one insolvent entity having a domino effect and resulting in the insolvency of a chain of entities. It is a rather blunt tool for ensuring there is a minimum level of diversity in the loans or investments made by an entity to which the rules apply.

Large exposure rules should, however, take into account specific features or certain markets or business models of particular financial markets participants. For instance, a specialised lender in a naturally concentrated market might struggle to operate within the boundaries of low-set large exposure thresholds but could provide a valuable alternative for borrowers to other, more general, providers of finance. In such an instance, such specialist lenders could help increase financial stability rather than hinder it.

Liquidity Ratios

Basel III introduced the liquidity coverage ratio and net stable funding ratio. Rather than looking at an entity's overall assets compared to its liabilities, these ratios are designed to ensure that, on a day-to-day basis, an entity has a ready supply of cash or other liquid assets sufficient to cover its expected outflows. Liquidity ratios help reduce the overall level of maturity transformation within the financial system.

"Maturity transformation" – this is the process by which a bank or other market participant incurs a short-term liability (for instance by taking a deposit from a customer which is repayable on demand) and then generating a long-term asset (for instance granting a loan for the amount of the deposit which is repayable in a number of years). On the one hand the bank's assets match its liabilities in value terms, but if the customer comes to withdraw the deposit, the bank would have no cash available as it is not due the money back from its borrower for a number of years.

For instance, the liquidity coverage ratio requires banks to hold liquidity assets against expected outflows over the following 30-day period.

Key to the operation of a liquidity ratio is the assets which a financial institution can identify as being "liquid". In principle, cash or a security which can readily be sold to generate cash is a sensible test, however, in practice, whether or not a security can readily be sold to generate cash is a difficult question. To what extent must there be an active secondary market for that security? What is the historic performance of that, or similar, securities? Does that security have a credit rating? Are there any types of securities which should be excluded even if they have a rating? These questions lead to difficult decisions for regulators, who risk creating bubbles in certain securities by allowing them to be included in such ratios to the exclusion of other securities.

Leverage Ratio

A leverage ratio essentially limits the overall level of an entity's exposures compared to its capital to be under a particular percentage. This helps limit the build-up of leverage.

However, as riskier exposures carry higher returns, in isolation, a leverage ratio encourage entities to invest in riskier assets in order to generate higher returns on the limited level of exposures they can hold. For this reason, regulators are often keen to stress that a leverage ratio should only ever be one of a number of measures used to reduce risk.

2. Securitisation Focused Regulation

Regulation focussing on the activities which are securitisation-like in nature can be targeted, ensuring the types of use of securitisation which led to increases in systemic risk and risk concentration within the financial system in the lead up to the global finance crisis are less likely to occur.

There are a number of ways securitisation-like activities can be regulated – most such ways look at the features of securitisation transactions which are understood to have increased systemic risk and limit the use of those features.

Rating Agencies

A number of approaches taken by regulators to regulating ratings agencies are as follows:

- **Conflicts of interest –** where, in the context of a particular transaction, the issuer/arranger (rather than an investor) is paying the rating agencies' fees, regulation can be used to ensure that there are internal procedures in place at rating agencies requiring the individuals who agree and negotiate fee arrangements with issuers/arrangers are not also the same individuals who analyse the transaction and provide the rating.
- **Multiple rating agencies –** requiring a securitisation issuance to be rated by multiple rating agencies means that additional analysis and censure is given to the structure in question.
- **Barriers to entry/alternative rating agencies –** in order to encourage competition and newer entrants, securitisation issuers/arrangers could be required, when appointing a rating agency, to consider appointing other rating agencies (both large and small) which are able to rate the transaction, not necessarily just a rating agency which they have worked with before.

Ratings are perceived by investors as important benchmarks as to the quality of a product and rating agency-based regulation is a method of ensuring that rated securitisation transactions have consistent standards applied to them.

Investor Diligence

Regulators can impose requirements on certain investors in securitisation transactions to ensure they undertake certain minimum levels of diligence themselves.

Such regulations generally require investors to maintain records to show they have considered a range of risk related issues. For instance:

- the risk characteristics of the security being issued under the securitisation;
- the risk characteristics of the exposures underlying the securitisation (e.g., the residential mortgages, trade receivables, auto-loans or other assets);
- the reputation and loss experience of earlier securitisations of the particular originator, arranger and asset class;
- the methodologies and concepts on which the underlying exposures have been valued; and
- structural features of the securitisation, such as the waterfall, trigger events, credit enhancement, liquidity enhancement and the point when an underlying asset is considered to be defaulted.

In practice many of the investors to which these rules apply do not consider them particularly onerous as they already have procedures in place to ensure their credit assessment process is robust and, in many cases, already goes beyond the minimum required by the regulations.

Risk Retention

Risk retention rules have been in place in Europe for a number of years and are currently being implemented in the US. The essence of such rules is to align the interests of a person who is doing the securitisation (e.g., an originator or arranger) with the investors in order to provide comfort to the investors that the originator or arranger has a vested interest in ensuring the securitisation and the underlying assets perform as expected. A particular business model which operated prior to the global financial crisis was an "originate-to-distribute" model where an originator advanced loans to borrowers with the intention of fully securitising those loans whereby investors would take all the risk in those loans following the securitisation, leaving the originator with no risk. In such an instance there was no incentive on the originator to ensure the credit policies used to originate the loans were robust enough to provide loans of the quality the investors were expecting.

The way alignment of interests between and originator or arranger and an investor is achieved is through ensuring the originator or arranger continues to be exposed to the credit risk of the underlying asset – the present rules, applicable in various jurisdictions, generally provide that the originator or arranger should retain a 5% interest in the securitisation – i.e., if there are defaults in the pool, the originator or arranger must share at least 5% of the loss.

Reducing Complexity

An initiative currently being taken forward and implemented by European authorities involves looking at the complexity of a securitisation transaction and, if the securitisation is sufficiently simple, transparent and standardised (also called simple, transparent and comparable in Basel-level documents), allowing those with exposures or interests in the securitisation to be subject to capital rules and regulation more favourable than they would be were the securitisation classified as more complex.

The features which regulators might consider as being present in a simple, transparent and standardised securitisation include matters such as the following:

- the securitisation does not have any underlying exposures which are themselves securitisation positions;
- the eligibility criteria for the securitisation's underlying assets should be predetermined and clearly defined and there is no element of active portfolio management on a discretionary basis;
- the securitisation involves a "true sale" of the underlying assets and should not include severe "claw-back" risks;
- the underlying assets should be homogenous in terms of their asset type and currency;
- the underlying assets should be performing;
- the securitisation should include insolvency related triggers with regard to the originator and servicer;
- the securitisation should include triggers related to the level of defaults experienced by the underlying assets;
- the servicer or administrator of a securitisation should be able to demonstrate expertise in servicing or administering the particular type of underlying asset;
- including a minimum level of disclosure and information in the prospectus applicable to the securitisation; and
- where legally possible, ensuring investors have access to all underlying transaction documents.

"true sale" – an expression used in the context of a transfer of assets (whether residential mortgages, corporate loans, trade receivables or otherwise) by an originator to an SPV which means that the transfer will be construed as a sale and recognised as such by all third parties, including an insolvency official of the originator. If an originator has properly transferred and sold the assets then they will not form part of its insolvency estate upon the originator's bankruptcy.

"claw-back" – an expression which generally means upon the insolvency of an originator that originator's insolvency official, or any of its creditors, can argue that assets it has sold were not actually sold and should, instead, be brought back into that originator's insolvent estate. For instance, in many jurisdictions if the assets were sold at an undervalue or were sold with the intention of preferring a particular creditor of the originator, they can be "clawed-back" and will form part of the originator's insolvency estate and be available for distribution to the originator's creditors.

The scope and consequences of a securitisation constituting a simple, transparent and standardised securitisation do need to be carefully considered. For instance, if a securitisation does not meet the criteria it does not necessarily mean it is a bad securitisation – the regulators should not (and, in opinions and reports published in this context, are clear that they are not seeking) to prohibit or stigmatise securitisations which do not meet these criteria, but rather allow simple, transparent and standardised securitisations to benefit from more favourable regulatory treatment.

3. Definitional Issues

Trying to crystallise in words the nature of a securitisation has proved difficult for both regulators and market participants who believe certain transaction should or should not fall within that definition. The Basel II definition is, for instance, both over and under inclusive in the types of transaction which it applies to. For examples, layered corporate debt of an operating company in a leveraged financing can constitute a "securitisation" where a single class of debt serviced by a ring-fenced portfolio of assets may not.

Basel II defines a traditional "securitisation" as "*…a structure where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Payments to the investors depend upon the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures. The stratified/tranched structures that characterise securitisations differ from ordinary senior/subordinated debt instruments in that junior securitisation tranches can absorb losses without interrupting contractual payments to more senior tranches, whereas subordination in a senior/subordinated debt structure is a matter of priority of rights to the proceeds of liquidation.*"

Another problem with the potential breadth of the definition of securitisation lies in the regulatory effort to reduce or prohibit the "bad" securitisations which are widely perceived as contributing to the financial crisis while recognising "good" securitisations and encouraging those as an essential and healthy part of a growing economy. Appreciating the consequences of labelling a particular transaction as a securitisation is important and should very much relate to the nature of the individual type of product or transaction in question – a definition which covers a broad spectrum of financial techniques under a single heading will be, and has proved, in practice difficult to operate.

This is because there is no unifying concept of what a securitisation is – as outlined in Chapter 2, securitisation is far less of a particular product and more a tool box of techniques which can be put together as part of a transaction. A "one-size-fits-all" approach to regulation of securitisations will always be elusive.

4. Overlap and Over-Regulation

A final point to consider in the context of ways securitisation can be regulated is the overlap with other areas of regulation. A wide range of participants engage in securitisation transactions – among them are a number of entities which are already subject to regulation such as banks, insurance companies and funds.

As the regulation of each of these areas overlaps it is often unclear which regulations take precedence, whether they are mutually exclusive or whether they can coexist. Before any new regulation is introduced the questions should certainly be asked as to whether existing regulation in place, already binding on the participants involved, is already sufficient.

There is no doubt that certain types of securitisation can be positive force to help encourage growth in economies and over-regulating securitisation or securitisation participants may hinder its beneficial economic effect.

X. Regulation in Asia (Clifford Chance)

This work has looked at securitisation from a number of perspectives – taking in the history and development of securitisation in other markets, the features that make a particular transaction a securitisation, why there is a case for an active securitisation market in Asia, how securitisation is operating and being developed both legally and practically in Asia and the various regulatory options available in order to regulate it.

What this chapter will do is explore how securitisation should be regulated in Asia in order to derive the beneficial effects it can bring to its economy.

1. Economies in Asia

There are a number of unique features of the economies in Asia which differ significantly from the economies in the US and Europe. It would have been wrong to think US and European regulation should (or even could) have simply been imported into countries in Asia and achieve the desired effect. First, there is already debate over whether that regulation works as efficiently as it could in the US and Europe and second, the differences in economies in Asia means tailored approaches would result in a much better fit.

Some of these features of economics in Asia include:

- a heavy historic reliance on bank funding;
- international capital markets are relatively undeveloped (while domestic capital markets are strong, in jurisdictions such as Singapore and Korea);
- capital markets have a significant pool of retail investors;
- some banks have high leverage and limited risk-distribution channels;
- banks rely significantly on customer deposits for funding, and are able to rely on this due to the high deposit rates in the region;
- complex credit intermediation structures and sophisticated financial engineering techniques are relatively rare;
- a high proportion of borrowing is used for investment rather than consumption;
- borrowing is largely driven by corporates rather than individuals and government; and
- there is very little data on the historical performance of regional securitisation transactions.

2. How Can Securitisation Help

Chapter 2 outlined a number of ways in which securitisation can bring benefits to an economy. In Asia there are some of these benefits which are particularly relevant.

Deleveraging of Banks

In some economies around Asia banks are highly leveraged (arguably creating systemic risks) and there is a desire on the part of governments, regulators and the banks themselves to reduce that leverage. Securitisation can be a very useful tool to help achieve that.

In shifting risk away from the banking system securitisation techniques can be used to attain accounting and regulatory capital relief for institutions which originated portfolios of loans (whether performing or not) thereby freeing up their capital and reducing their leverage.

The securitisation of loans in this way also connects non-bank investors with underlying borrowers meaning that the delivery of credit is being moved outside of the regular banking system. Delivery of a proportion of credit in this manner can be beneficial – it is generally far less leveraged than credit delivered to the economy by banks and it is generally non-maturity transformed (i.e., the maturity of investors' assets generally matches the borrower's liabilities). This builds on the resilience of the financial system.

In many economies in Asia, where borrowing tends to be for investment rather than consumption, long term assets, such as infrastructure and home loans do not fit as naturally with banks, which rely on short term funding sources, but can fit well with other types of investors, such as insurance companies or pension funds, who would be seeking exposure to those longer-term assets.

Deeper and More International Capital Markets

While domestic bond markets are growing and developed in a number of countries in Asia (for instance, China, Korea and Singapore), international capital markets are generally seen as not having the depth and liquidity of equivalent markets in the US and Europe. Securitisation can help in three respects on this front.

First, securitisation creates an alternative investment product for investors. By repackaging assets which would otherwise be illiquid (such as auto-loans or infrastructure debt) a securitisation opens up these types of investments to a range of participants in the capital markets who would otherwise not have been able to have that exposure. In the face of equity market turmoil, fixed income securities, such as securitisation bonds and notes may well provide a popular choice.

Second, securitisation provides a very different type of risk to a corporate or government bond – it gives exposure to a pool of assets, rather than the credit of an operating business. This different type of investment product can help investors diversify their risk.

Third, securitisations, within a regulatory framework, can be very transparent and provide a significant amount of data and information about the underlying exposures. This means investors can make very informed investment decisions and lends credibility to securitisation as an investment product.

Diversification

Any time banks seek to deleverage there is a concern among borrowers that there will not be sufficient credit to meet their borrowing needs. This has been seen especially sharply in the US and Europe since the global financial crisis where a number of banks have simply removed product lines from their businesses and stopped lending in certain jurisdictions they saw as too high risk. Small and medium sized business in the "real economy" have been particularly affected by this reduction in credit.

To countenance against a risk of a reducing level of credit being provided by banks, if a non-financial institution or a corporate is able to access the capital markets it provides them with an alternative source of funding. Securitisation techniques allow corporates to have that access to capital markets which they would not otherwise have and consequently keeps credit flowing to the real economy.

Equally, banks in Asia (which have a heavy reliance on customer deposits for funding) can diversify their funding sources and take a proportion of their overall funding requirement from the capital markets through securitisation. By having alternative sources of funding, particularly when compared to short-term liabilities such as customer deposits, banks can become more resilient to financial shocks.

A Case for More Securitisation in Asia

As reflected by its ongoing use, there is clearly a case for securitisation in Asia. The existing legal and regulatory regimes also recognise this, for instance a variety of securitisation regulation is now in place around Asia:

- in Hong Kong, the Banking (Capital) Rules (Cap. 155L), most recently updated on 1 January 2018;
- in Singapore, Monetary Authority of Singapore Notices 628 (Securitisation) and 648 (Covered Bonds);
- in Korea, the Asset-Backed Securitisation Act (No. 5555) and the Korea Housing Finance Corporation Act (No. 7030); and
- in Japan, the Act of Securitisation of Assets; and
- in China, the CBIRC SPT structure, the CSRC SAMP structure and the NAFMII ABN structure (all as discussed in more detail in Chapter III).

But as the securitisation markets continue to grow, in particular, as they become more international, thought needs to be given to how these regimes will interact.

3. Types of Securitisation

This work has highlighted the different types of asset classes typically securitised around Asia and has also identified the types of entities which have been undertaking securitisation transactions.

What is clear is that the types of securitisation transactions being undertaken generally fell into two categories:

- transactions which essentially provide investors with ownership rights in an assets portfolio (e.g., the CSRC SAMP structure or Singapore covered bonds)– what we might term asset ownership in securities form; and
- transactions, which essentially provide a funding line from investors to a financial institution, non-financial institution or a corporate secured over certain assets of that entity – what we might term lending on assets in securities form.

Other securitisation structures, which are more common in the US and Europe are not common at all in Asia. For instance:

- banks in Asia have not implemented secured treasury funding platforms (often structured as "master trusts") where asset portfolios are used as collateral to raise on-going finance for a bank's treasury function. A particular feature of these platforms requires the originator to continually replenish the assets in the structure and make new issuances. An exception to this may be the Singapore covered bonds programmes established by a number of Singapore bank, however, the issuances from those platforms form only a small part of those banks' mortgage funding operations;
- more diverse investment products, which involve the repackaging and retrenching of a portfolio of underlying bonds, are also uncommon; and
- synthetic risk acquisition products, using derivatives to transfer risks relating to portfolios of assets from an originator to investors, are often used by US and European banks to achieve regulatory capital relief but are little seen in Asia.

It is interesting that the securitisation structures which are thriving in Asia are those which most accurately match the benefits securitisation technology can bring to economies in Asia:

- allowing investors to own asset portfolios in securities form (i) assists banks in deleveraging by sharing the risk they hold with investors and (ii) contributes to a broadening and deepening of the capital markets by providing additional investment products for investors to invest in; and
- secured lending in securities form secured on asset portfolios provide additional diversity to non-financial institutions which would otherwise be reliant, possibly over-reliant, on bank funding.

The absence in Asia of other securitisation structures which are seen in the US and Europe is less a function of markets in Asia needing to "catch-up" and more a function of how the economies around Asia have developed to date and what their individual requirements and characteristics are.

XI. The Case for Blockchain in Securitisation in Asia (MUFG)

Not many people imagined the dominant rise of global technology companies post the dot-com bubble of the early 2000s. Yet, today, not many of us can imagine living in a world without the technology afforded to us by these same firms such as Amazon, Facebook and Google.

Some of us have read news relating to "blockchain" and how it might revolutionise the financial industry. There are also a number of use cases being cited across the banking industry and how the "blockchain" is helping drive further efficiencies. A wide spectrum of players has also jumped onto the bandwagon to try to extract value from deploying "blockchain" solutions, including central banks, financial institutions, technology firms, consulting firms, accounting firms, and even hobbyists. Is this truly a technology that can already be deployed or is it going to take more time before living up to its potential?

This article starts by giving a brief introduction on the blockchain technology. Following that, we would attempt to pinpoint potential aspects where the blockchain technology can be deployed to generate efficiencies for securitisation transactions. Lastly, we explore some of the projects and players focused on deploying the technology in its early days that might be relevant to the securitisation industry.

1. What is Blockchain?

When we think about blockchain, we usually relate to cryptocurrencies such as Bitcoin, Ethereum, Ripples and others. As a first step, we would like to encourage you to decouple the blockchain technology from cryptocurrencies because blockchain platforms do exist without a related cryptocurrency.

The blockchain is also very often termed a "distributed ledger technology" (DLT). In essence, the technology requires a network of users or nodes. Participants in the network are allowed to generate, share and safeguard information in a secure, auditable, and immutable manner. Blockchains (to be used interchangeably with the term DLT) can be either public (where anyone can join) or private (restricted to selected participants with possibly varying levels of authority to view, create and share information).

This article focuses on the private blockchain systems. In the closed environment, participants are invited to join the network. There are usually no cryptocurrencies involved. Such networks are also usually controlled by a single administrator or a group, which decides the level of authority to grant to the participants. For example, employees from the organisation hosting the network might have a higher level of authority to view all recorded transactions on the platform, where participants such as clients are only able to view related transactions.

Essentially, on a blockchain platform, all the transactions within a certain timeframe are packaged into a "block" and added onto the prior "block" in the chain with a time-stamp. Each block contains a digital signature of the previous block (also termed a "hash"), making it extremely difficult to change the data within one "block" without changing all the others that came after it. The security of a blockchain is enforced by using cryptography techniques to secure the information processed through the network, ensuring that the information is only viewable by the intended recipients. Copies of the data on this blockchain is subsequently updated and shared with all the nodes (or participants) in the network, ensuring that a node that got hijacked or destroyed would not compromise the network.

Blocks are added to the blockchain based on consensus among its nodes. There are a number of blockchain consensus protocols such as “proof of stake”, “proof of activity”, “proof of burn”, and more. Without going into the details, for private blockchain platforms, consensus could be achieved in various ways, including being based on a majority of nodes agreeing to add the new-minted blocks onto the blockchain.

2. How Can We Tap on Blockchain in Securitisation

There are multiple ways that blockchain can potentially be deployed in the securitisation market in Asia. We believe that the following areas would most likely see blockchain driving changes to the securitisation industry.

- Real-time performance monitoring
- Smart contracts to monitor transaction covenants and triggers
- Driver towards greater standardisation of transaction terms
- More efficient settlement and deeper trading liquidity

We would tread briefly across each area of interest and highlight the potential efficiencies that can be generated if Blockchain can be deployed in that specific area. Also, it would be paramount to remember that some changes would arrive much faster than the others, mainly because of the pace of innovation across the spectrum of various financial instruments. For example, secondary trading on a blockchain could become the norm much faster than tracking and monitoring asset performance if Blockchain is deployed by market participants in the debt capital markets.

2.1. Asset Origination and Performance Monitoring

“Is real-time asset performance available?” The answer “yes” would be a dream-come-true for many securitisation investors. Imagine being able to access the mortgage loan or lease contract in detail, being able to gauge the obligor’s ability to service the loan (with confidentiality ensured for certain fields) and being able to witness each payment made towards interest and principal for a single asset. Taking this one step further, imagine being able to access this data for the entire pool of obligors in any particular asset pool that you have invested into or have done a pool cut on.

The scenario above would revolutionise the securitisation industry, cutting out the inefficiencies (e.g. cost of information) that sometimes plague securitised assets, and create trust among industry participants. Blockchain could potentially achieve this, going towards solving one of the root problems that led to the Global Financial Crisis (GFC).

One key reason why industry participants assess the asset performance by monthly, quarterly or even annual vintages are to check for potential loosening or tightening of underwriting criteria over time by the Originator. Having access to the original contracts allows for faster verification and checks. The due diligence process can also become more efficient as a result.

As the securitised asset pool amortises, investors are able to review loans that are written-off, if they so wish. Delinquencies can also be better managed by the Servicer and Originator. Ideally, besides being able to view the obligors' payment towards interest and principal, the blockchain should also capture how the delinquent receivables are being managed. For example, investors would be able to assess if the delinquent obligor was reminded by email or text to make payments, or if they were visited by the collections team to follow up on the delinquency.

The images conjured might sound utopian and highly impossible, but that is exactly what blockchain could achieve, to store and share this information in a secure, transparent, and immutable manner to all participants within the network with varying degrees of access authority.

In fact, some market participants have already started embracing trials relating to such usage of the blockchain in the US mortgage industry.[28] There is much efficiency that can be achieved in this area but sweeping changes would likely be slow in coming, especially given the diverse choices of blockchain platforms for this DLT to be built.

2.2. Transaction Covenants and Triggers

"Smart contracts" are programs that would execute what it has been coded to do when certain conditions are being met or triggered. Interestingly, the idea of a smart contract has been around for more than 20 years already.[29]

We expect that deploying smart contracts execution would result in a faster, more secure and cost-efficient way to enforce on covenants and triggers. There is no need for trusted third parties to ensure that the terms are being performed by using a smart contract. So long as the terms are agreed on prior to the event happening, smart contracts are programmed to ensure that execution happens.

Building on the earlier scenario that real-time asset performance is available on the blockchain, we can use smart contracts to track and monitor the transaction performance. When the delinquency ratio of a transaction asset pool reaches an unhealthy level, smart contracts can be set up to send alerts to the various stakeholders such as the investors and the originator. This would save cost to have operational staff constantly monitoring all the transactions.

If the delinquency ratios continue rising and certain triggers are breeched, the smart contracts can automatically initiate action such as ensuring that originators or sellers fund certain reserves as

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[28] https://www.bloomberg.com/news/articles/2018-01-18/blockchain-eyed-for-mortgage-bundling-that-caused-2008-crisis

[29] http://ojphi.org/ojs/index.php/fm/article/view/548/469#1

buffer against the rising delinquency levels. Of course, this scenario can also go towards moving the transaction into an Early Amortisation Event phase if the asset performance continues to deteriorate.

While the perks of using Smart Contracts are many, there are plenty of hurdles to overcome. For one, smart contracts have to be deployed on a blockchain which is interoperable with other platforms. For example, the blockchain must be linked to the sponsor's bank account so that funds can be drawn down automatically when there is a need to fund reserve accounts. Such interoperability currently does not always exist.

In addition, while blockchain has often been touted as a secure system, there are security vulnerabilities to smart contracts. A recent study relating to analysing nearly 1 million Ethereum smart contracts has led to the flagging of 34,000 contracts as vulnerable.[30] The contracts do act in unintended ways at time and it is still early days.

2.3. Standardisation of Transaction Terms

The more varied regulatory landscape in Asia makes it difficult for practitioners to fully understand all the laws and frameworks relating to securitisation in details. This nature of the regional landscape has made securitisation a bespoke financing instrument in Asia. Many potential issuers have often heard about securitisation and the concept behind how it can be used but are hesitant to try it.

With blockchain, securitisation in Asia has a higher chance at having more standardised terms and conditions. The standardisation would likely make it much easier for the transaction to be recorded and executed on the blockchain.

While the various securitisation markets in Asia have varying legal frameworks catering to securitisation market, having a uniting blockchain network might hopefully drive a convergence of regulations towards more similar terms as well. Regulators would be able to factor in unique circumstances relating to their national policies, while benchmarking against their regional counterparties in assessing which rules are beneficial or detrimental to their own securitisation markets.

[30] https://www.technologyreview.com/s/610392/ethereums-smart-contracts-are-full-of-holes/

2.4. Settlement and Trading Liquidity

Interestingly, several governments have already started establishing Proof-of-Concept initiatives to test their own digital currencies. We would touch on this further in the later part of the article. Behind this drive is the unlocking of value for swift settlement of financial instruments and cash management synergies.

In Asia, securitised bonds and notes are usually held-to-maturity. Secondary trading of securitised instruments is usually done over-the-counter. Even for markets with budding secondary trading platforms, transactions are not often seen. Against this background, the benefits of having blockchain-based securitisation transactions can be easily established.

The potential for settlement of primary and secondary securitisation transactions on the blockchain would likely follow the development of the mainstream debt capital markets. The benefits are many.

The first useful characteristic of the blockchain is the deployment of smart contracts in settlement. Buyers and sellers greatly lower their credit risk because the securities and monies are simultaneously exchanged and delivered in a swift and efficient manner.

Settlement and trading details can be recorded on the blockchain, adding transparency and pricing information to the market. For private trades, the pricing information can still be recorded but only available for viewing by the seller, buyer and perhaps even market regulators.

Lastly, for amortizing securitised products with a pass-through schedule, the blockchain would allow sellers to have the required information to assess the estimated collections and give an accurate pricing including the accrued yield on a day-to-day basis.

3. Notable Initiatives and Projects

There are multiple Blockchain proof-of-concept and pilot projects being launched globally. Many of these initiatives would likely have a “build-on” accumulative impact to blockchain being deployed in securitisation. Given the direction of our article, our focus would be on developments in Asia.

A. Monetary Authority of Singapore’s (MAS) Project Ubin

The Singapore central bank, MAS, has been working with a panel of banks on a blockchain project titled ‘Project Ubin’. The project aims to explore the use of Distributed Ledger Technology (DLT) in achieving greater efficiency for financial transactions and involved a tokenised, digital Singapore Dollar being deployed for payment and settlement testing.

In March 2017, Phase 1 of the project was successfully completed with the digitalised Singapore Dollar been transferred successfully among participants on a DLT platform involving the Ethereum blockchain protocol. In October 2017, Phase 2 of the project was completed successfully, with three other different blockchain software protocols being used for the initiative.

Some projects were launched after the second Phase of Project Ubin. One of these projects involves the Singapore Exchange (SGX) looking into how to facilitate the trading and settlement of fixed income securities via DLT. This would be an important step towards a potential blockchain trading platform for securitised products going forward if the DLT proves useful.

B. Hong Kong Monetary Authority (HKMA) Trade Finance Platform

The HKMA has been working on various blockchain-related projects, largely in the trade finance space.[31] The trade finance segment has been identified as one plagued by inefficiencies such as heavy paper workloads that could be automated and digitised. This regulator-led effort would first focus on creating a platform in Hong, followed by efforts for cross-border trade with other central banks and regulators.[32]

This development is encouraging in that while the blockchain technology for blockchain trade finance improves, many aspects such as the cutting down of paper-oriented work would likely be transferrable. Building on precedents, a future blockchain securitisation platform would like also be safer against potential fraud and more efficient.

4. Parting Message

We are at an exciting crossroad of sorts. There are many blockchain projects and platforms being driven and tested. It is not a question of whether blockchain technology would come to impact securitisation, but rather when. In that, we hope participants would be well-prepared and welcome the many positive changes to come.

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31 https://www.reuters.com/article/us-blockchain-trade/hong-kong-regulator-banks-launch-blockchain-based-trade-finance-platform-idUSKBN1K70AP

32 https://www.gov.sg/~/sgpcmedia/media_releases/mas/press_release/P-20171115-1/attachment/Joint%20media%20-%20Singapore%20and%20Hong%20Kong%20launch%20a%20joint%20project%20on%20cross-border%20trade%20and%20trade%20finance%20platform.pdf

XII. Outlook and Conclusions (ASIFMA)

As we have seen in the course of our extensive discussions above, it is worth noting that regulatory and market frameworks governing securitisation, especially in China, are evolving rapidly. Moreover, generally speaking, we have demonstrated that Asian domestic securitisation markets are more active relative to their cross-border counterparts. Indeed, Asian cross-border issuance, which was (and still remains) a fraction of US and European issuance, dropped sharply post 2008 as the market for CDOs (which accounted for the bulk of Asian issuance pre-2008) virtually shut down. In terms of securitisations aimed entirely at domestic market investors, Korea was dominant but the fast-growing Chinese market has not only taken the lead, but the lead continues to widen as the domestic bond markets and the pool of assets that can be securitised continues to grow rapidly.

After hitting a peak of USD 8 billion in issuance (meeting international scale ratings – basically cross-border securitisations) in 2007 (*source: Standard & Poor's, BIS*), this fell to USD 5.8 billion in 2008 and even more sharply to USD 2.3 billion and USD 1.7 billion in 2009 and 2010 respectively (*source: Standard & Poor's, BIS*). The primary reason for the fall in internationally rated cross-border issuance was the slump in regional CDO issuance, which was a sizeable USD 3 billion in 2006, USD 5 billion in 2007 and approximately USD 4 billion in 2008, but then slumped to almost nothing in each of the two subsequent years (*source: Standard & Poor's, BIS*). In the years prior to 2008, CDOs offered a way for the region's issuers with lower ratings to meet the region's investor needs for highly-rated paper. A diversified portfolio of lower-rated credits can obtain a higher rating through a properly structured CDO, but in the aftermath of the events of 2008, the market for these structures fell sharply, along with Asian investors' appetite for risk.

One potential future area for cross-border growth in CDO issuance in the potential re-packaging of Chinese LGFV bonds into CDOs, through the combination of a mix of debt issuances by both higher and lower rated LGFV issuers – the structuring of such transactions is likely to provide a mix of both higher returns to investors and assist in the wider distribution of LGFV risk, thus reducing systemic vulnerabilities. In fact, a few such transactions have already been concluded and the outlook for such deals in the future remains bright.

1. CLOs Retain Their Appeal

However, unlike CDOs which suffered a severe dent to their reputation, CLOs did not suffer as badly during the crisis years and CLO issuance globally rebounded sharply after the slump of 2009-2011. CLOs are typically backed only by corporate loans (unlike CDOs, which in their heyday had underlying mortgage assets lumped in as well, a factor that contributed to their poor performance during the crisis). Indeed, in a low interest rate environment, the mezzanine tranches of CLOs with investment grade ratings are particularly attractive for certain classes of Asian investors, such as Korean (and Japanese) insurance companies who have guaranteed high payouts on insurance policies and other products sold to investors in the past.

Globally, CLO issuance in 2017 and 2018 has continued at a frenzied pace, as a combination of rising interest rates and a strong leveraged loan market has driven the need to bundle corporate loans into CLOs. Moreover, a number of new managers have been attracted to this space and that has led to perceptions that credit quality may be being sacrificed in this quest for yield.

Even so, this popularity of CLOs is set to continue, more so as the Asian investor base develops a degree of sophistication that allows them to consider alternative asset classes. Indeed, the big prise remains the domestic CLO market in China as international access to this asset class, which is growing by leaps and bounds, will help change the face of securitisation in the region.

With the passage of time, it is clear that recent regulatory changes - primarily The Volcker Rule and the risk retention requirement for securitisations introduced in both the USA and Europe – have not really adversely impacted cross-border CLO issuance. Specifically, the 5% risk retention requirement imposed on CLO managers until maturity, both by the EU's CRD (Capital Requirements Directive) and the Dodd-Frank Act in the US has had no impact on CLO originations.

2. Other Asset Classes and Covered Bonds

Turning to the other securitised cross-border asset classes within the region, Korea has one of the most developed securitisation frameworks. The passage of the ABS Act, post-Asian crisis in September 1998 with the establishment of a "True Sale" framework, and the legislation enabling the issue of covered bonds much later, has led to considerable development of the Korean cross-border ABS market. Apart from Korean credit card and auto loan ABS, the "future flow" securitisation carried out by Korean Air in 2011 is noteworthy (although the structure itself is not new and has been implemented both within the region and elsewhere much earlier).

On the subject of covered bonds, one significant point worth noting is that based on the current Korean covered bond legislative framework, RMBS issued by the Korea Housing Finance Corporation (KHFC) is effectively similar to a covered bond. Since investors in covered bonds have recourse to both the issuer and the underlying "cover pool" of assets, these structures are attractive from the viewpoint of international investors. For the moment, KHFC has only issued RMBS in the domestic markets and while that issuer has issued USD-denominated bonds in the international market, there have been no international MBS issues to date by KHFC.

Turning to the other regional markets, covered bond issuance in Singapore has shown considerable development since the establishment of that country's covered bond framework in 2013. One recent innovation involved the issue of a dual-currency covered bond by one of Singapore's leading banks. Besides USD, covered bond issuance in EUR, AUD and GBP (pound sterling) have been carried out and although the framework exists for LCY SGD-denominated covered bond issuance, no covered bond transaction has been concluded in that currency, as of August 2018.

3. The Regulatory Framework and Conclusions

As the foregoing discussions have shown, in recent years, there have been considerable enhancements/improvements to the Chinese securitisation framework since the establishment of the CBRC/PBOC and the separate CSRC pilot programmes in 2005. For example, CBRC, CSRC and the PBOC recently relaxed the existing rules to allow a new notice filing system from the more restrictive application/approval process on a case by case basis that was used in the past. Furthermore, the CSRC also clarified that ABS issuers could use SPV structures (something not explicitly provided for under Chinese law) and expanded the range of assets eligible for ABS.

Among more recent developments, the introduction of the “Trust Structure ABN” in 2016, wherein assets backing the notes are entrusted to a newly established special purpose trust (SPT) under the Trust Law of the People's Republic of China, allows corporates to access the more liquid China Interbank securitisation market. Specifically, the ring-fencing protection provided by the trust structure ABN is similar to that provided under the Credit Assets Securitisation (CAS) scheme which is regulated by the PBOC and CBRC and which until recently was accessible only to bank and non-bank financial institutions. In addition, elsewhere in the China domestic securitisation market, over the 2017-18 period, the securitisation of Non-Performing Loans (NPLs) and the development of the CMBS/quasi-REITs framework, especially in the context of the rapid development of the PRC e-commerce market, are especially noteworthy and has been extensively discussed in Chapter 3 above.

Turning to other issues, the roles of a trustee and loan service company are clearly well defined in the more established jurisdictions but are still evolving in China. Finally, issues related to ratings, tax, swaps documentation, close-out netting and access to underlying assets in the event of bankruptcy all require a greater degree of clarity/resolution before international investors get a higher level of comfort with China securitisations.

In conclusion though, as China plays an ever-greater role in the global economy, its currency will internationalise at a much faster pace and, moreover, by some measures (such as holdings by central banks), the renminbi is already a de facto reserve currency. As more investors seek to hold assets in the Chinese currency, securitisation offers them an attractive option for diversification – more so in the context of the further liberalisation of foreign investor access to the China Interbank Bond Market (CIBM) and the introduction of the “Bond Connect” scheme – both of which allow for foreign investors to invest in Chinese securitised assets. More importantly, from the issuers’ point of view, securitisation offers an excellent option to de-risk balance sheets and more efficiently use capital. Finally, regulators too have an incentive to encourage securitisation to enable them to meet policy objectives. Clearly, securitisation is one asset class whose future seems assured with China set to be the new frontier.

XIII. Appendices

1. Sources

AFME, SIFMA, King & Wood Mallesons, Moody's, Fitch Ratings, Ernst & Young, Clifford Chance, ICRA, Thomson Reuters, Bloomberg, IFLR, IMF, Bank of England, Lexology, FinanceAsia, Asia Credit Markets, Reserve bank of Australia, Asia E-Trading, ICLG, MAS, Mayer Brown, Federal Reserve Bank of New York, IOECD, Investopedia, European Central Bank, Euromoney, RMI.

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Christopher Walsh is a partner in our London office who has an in-depth experience of all capital market products and in particular structured finance transactions including Covered Bonds and securitisations.

His experience includes working for both arrangers and originators on a wide variety of RMBS, CMBS, Covered Bonds, MTNs and real estate transactions and also on both conventional and Islamic financings and throughout the UK, Europe, the Middle East and Australasia. Chris has established a wide variety of debt programmes for various institutions including Barclays Bank, Clydesdale Bank, IPIC, National Bank of Abu Dhabi, Barclays Capital, Citi and Deutsche Bank, including advising the arrangers and dealers on the inaugural establishment of a covered bond programme in Singapore.

Chris also works extensively on portfolio acquisitions and warehouse financings for private equity clients and other financial and corporate institutions. Chris's experience spans working with clients in Australia, Asia, Europe and the U.K.

Francis Edwards, Partner, Registered Foreign Lawyer

Francis is the Head of our Derivatives and Structured Finance Practice in Greater China and a market leading derivatives and structured finance specialist.

Francis specialises in all forms of derivatives, financial market products and structured finance, including repackagings, credit derivatives, equity derivatives and other OTC derivatives, structured products, securities lending and repos, as well as netting, collateral, clearing, custody and credit risk management issues.

His focus is on complex transactional matters and innovative market developments in Asia Pacific. Francis also regularly advises on Hong Kong regulatory matters and on issues arising from the global OTC derivatives regulatory reforms. Francis is a regular speaker on derivatives and regulatory matters, including for ISDA and other trade associations.

Paul Landless, Partner

Paul Landless is a partner in our Singapore office who specialises in structured finance, derivatives and financial markets products, including securitisations, repackagings, structured notes, securities lending and repo. He leads the financial markets team in Singapore and South East Asia. He also has extensive experience in various types of structured transactions, including in relation to commodities trading, commodity financing and various forms of structured trade finance.

He regularly advises on global and local financial regulatory developments and financial market infrastructure. He is also the co-head of the firm's global Tech Group as one of the leaders of the Fintech practice with particular interest in data, cyber, artificial intelligence, smart contracts and DLT uses in financial markets trading and risk management.

Paul has worked in Clifford Chance's London, Hong Kong and Singapore offices, sit on the firm's global Brexit Markets Group and help lead the ASEAN Focus Group and the Philippines Focus Group.

James Pedley, Registered Foreign Lawyer (England and Wales)

James is a structured debt and securitisation lawyer, who has been based in the firms' London and Hong Kong offices, with more than ten years of experience acting for arrangers, investors, banks and originators involving a wide variety of asset classes, including trade receivables, infrastructure, RMBS, CMBS, auto-loans, consumer loans and corporate loans on complex cross-border transactions.

He has also established and restructured a variety of structured funding platforms, including ABCP conduits, structured corporate debt platforms, receivables and trade finance platforms and risk distribution programmes for banks. James also regularly advises on the regulatory aspects of structured debt and securitisation transactions.

Ernst & Young

Rohit Narula, Partner, Financial Services Transaction Tax

Rohit is a Hong Kong based Transaction Tax Partner and is also part of EY's Asia-Pacific Financial Services Tax Team.

He joined EY in 2012 and prior to EY he worked in the Financial Services Tax & Regulatory Team in another Big 4 firm in Mumbai since 2005.

He brings in multitude of experience in the area of tax in the Financial Services space, covering Banks, Non-Banking Financial Companies, Capital Market Players, Private Equity Funds.

He has been responsible for managing various multi-jurisdictional tax projects for large foreign banking groups and capital market players.

He has extensive experience in international and domestic taxation (in India and Hong Kong), inbound entry strategies for multinationals and outbound structuring strategies for large Asia corporates. He advises large multinationals on planning their tax strategies in Asia-Pacific.

Fitch Ratings

Claire Heaton, Senior Director

Claire is a senior director and the analytical team head of Fitch Ratings' covered bond team based in Sydney, Australia which is responsible for covered bonds ratings issued out of the Asia-Pacific region. Claire has extensive experience in covered bonds and structured finance spanning 18 years. She is also the primary author of Fitch's APAC Covered Bonds Quarterly publication that covers all Fitch rated Australian, New Zealand, Singapore and South Korean covered bond programmes.

Claire has been the head of the Asia-Pacific covered bond team in Sydney from mid-2013 after being based in Fitch's covered bond team in London, since January 2010. While there, Claire was involved in rating covered bonds issued out of Ireland, Netherlands, Canada, United Kingdom and Norway covering residential, commercial and public sector assets.

Claire joined Fitch in October 2006 in Sydney Australia and was previously responsible for structured finance ratings across RMBS, CMBS and ABS for Australia and New Zealand. Until her move to London, she had worked in the Australian securitisation industry close to 10 years.

King & Wood Mallesons

Paul McBride, Partner

Paul McBride is a partner specialising in securitisation, structured finance and derivatives. Paul has a broad range of experience across Asian markets and underlying assets representing all market participants including financiers, arrangers, insurers, originators, swap counterparties, rating agencies and investors. Paul has been involved in most of the first to market China related cross border asset-backed deals over recent years.

Paul is regularly ranked as a leading lawyer.

Paul worked in Tokyo and London for another international firm before joining King & Wood Mallesons in 2005.

Eddie Hu, Partner

Eddie Hu is a partner in the Shanghai office and specialises in structured finance, securitisation, syndication, loan & credit facility, M&A of financial institutions, real estate finance and tax.

Eddie Hu has been practicing in China since 2004 and has extensive experience in advising major international commercial banks, investment banks, assets managers, hedge funds, private equity funds, developers and sponsors on China related projects, M&A transactions, structured finance, acquisition finance, real estate finance, financial institution acquisition, distressed debts and workout and other domestic or cross-border matters.

Eddie Hu has advised a number of banks, auto finance companies, and financial companies in their asset-backed securitisation transactions.

Eddie joined King & Wood Mallesons in 2007 and before that he had practised as in-house legal counsel in Mitsubishi Corporation.

Eddie also has qualifications of Chartered Financial Analyst, Certified Public Accountant, Certificated Tax Advisor and Certified Public Valuer in PRC.

Anne-Marie Neagle, Partner

Anne-Marie Neagle is a partner specialising in securitisation, derivatives, debt capital market, hybrid, convertible and structured capital markets transactions, and structured finance. Her experience includes advising on the acquisition and securitisation of loan, leasing, non-performing and other receivables, on hybrid capital and other structured capital products, on green and social corporate and securitised bonds and on derivatives transactions.

Anne-Marie is highly regarded as an Australian and Asian securitisation and structured finance practitioner, and as a thought leader in innovative structures and new development areas such as Green and Social Bonds and securitisations of new asset classes.

Anne-Marie has also worked in a leading international firm in London.

Darwin Goei, Associate

Darwin Goei is an associate in the firm's securitisation team. He specialises in structured finance and securitisation.

Darwin is part of the team that pioneered the "first-to-market" loan repackaging deals involving onshore PRC credit support, and has been involved in nearly all repeats of such deals in the market since. Additionally, Darwin is actively involved in the Korean cross-border ABS market, having worked on securitisation deals involving most of the major Korean credit card and auto-loan companies.

Moody's

Elaine Ng, Vice President - Senior Analyst

Elaine Ng is a Vice President---Senior Analyst with Moody's Structured Finance Group in Asia. Based in Hong Kong, Elaine has been with Moody's since 2000.

Elaine is responsible for rating various structured finance transactions in Asia (ex-Japan), including different types of asset-backed securitisations, collateralised loan obligations, repackaged notes, standby letters of credit supported transactions, asset-backed commercial papers, commercial mortgage-backed securitisations and residential mortgage-backed securitisations.

Elaine holds a Bachelor of Finance from The University of Hong Kong and Bachelor of Laws from the University of London.

MUFG

Taemoon Chung, Managing Director & Head of Securitisation Asia

Taemoon spent nine years at RBS Tokyo prior to joining MUFG in March 2012.

He has more than 16 years of APAC securitisation experience with a focus on consumer assets and has lead-arranged a number of first-time and award-winning transactions in the region.

He was previously an equity analyst of non-bank financials sector at ING Tokyo and also worked at Citi in the US.

Taemoon graduated with a B.S. in Chemical Engineering (Minor in Economics) from the Massachusetts Institute of Technology. He is a CFA Charter holder and speaks English, Japanese and Korean.

Clarence Chan, Vice President, Securitisation

Clarence joined MUFG in 2016 and is responsible for expanding MUFG's push to provide securitisation solutions to clients in East Asia.

Prior to this role, Clarence was part of Temasek Holdings' corporate finance team, where he focused on funding optimisation and credit ratings. He started his career at DBS Bank where he was part of the structured debt solutions group working on asset-backed securities and other debt instruments.

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