Real Estate Securitisation as an Alternative Source of Financing for the Property Industry

by

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Abstract: The paper deals with the subject of Real Estate Securitisation. The main question is: What is Securitisation and how does it benefit the property industry?

The paper first defines Securitisation and Real Estate Securitisation, and then analyses how Real Estate Asset-Backed Securities differ from Mortgage-Backed Securities. Thereafter the author will take a look at the European Securitisation market to support the relevance of the topic. After that the basics of Asset-Backed Security Financing will be explained.

The main topic that will be discussed in the paper is: What are the benefits of this financing alternative to the players in the property industry and what are the limits of these transactions? Firstly, real estate assets have to fulfil certain criteria to be able to qualify for an Asset-Backed Security transaction. Secondly, three angles of how to view a Real Estate Securitisation can be distinguished. This will lead to a division in different transaction categories. Depending on the motives of the company there are various ways of how a Securitisation can be structured. For illustration, some examples from past transactions are depicted.

The paper will conclude with a view on why Real Estate Securitisation is important for the property industry - today and even more in the future, especially considering the effect of Basel II on the credit markets.

Contents

1 Introduction

The sale of receivables as such is relatively old. As far back as 1880, companies have sold receivables to each other. However, 'Securitisation' or 'Asset-Securitisation' is a fairly young financial markets innovation. The concept of Asset-Securitisation has its origins in the USA, where Asset-Backed Securities (ABS) have evolved from Mortgage-Backed Securities (MBS). MBS were developed in the 1980's to save the thrifts in the savings & loans crisis. Today ABS are the major category and MBS are a subset of that. Since the start of ABS in 1985 the Asset-Securitisation market has risen enormously. In Europe the ABS market has risen from €3 billion in 1992 to over €146.6 billion at year-end 2002. The enormous growth of the market during the last five years can be attributed to mainly three things: the amendment of the legal and regulatory framework, the growing acceptance in the corporate and the banking market, and the transparency of the market that has been pushed forward by the rating agencies. In Europe this has led to unique transactions that have even more opened the market for new transaction structures and asset classes (e.g. Securitisation of receivables from Formula One racing in the U.K. and the Securitisation of Champagne inventory in France). The current development can be described as: „What started as true sales of large pools of homogenous assets has spread to allow the technique to be used for more diverse, unique asset types." This is also true with real estate assets. Until now Securitisation in connection with real estate related assets has only been limited to Mortgage-Backed loan Securitisation (i.e. MBS). However, now this financing technique is expanding to a lot of other real estate receivables and assets that define Real Estate Securitisation.

As a general concept Real Estate Securitisation could function as a means for desintermediation of real estate lenders and therefore as an innovative financing alternative for the property industry. The concept of real estate or property securitisation, as it may also be called, has positioned itself as an alternative financing product to the classic real estate financing products. It could function as a substitute for traditional mortgage financing as well as a complementary product to enhance traditional financing.

This way of financing real estate is very interesting for the property industry, because capital market investors often value cash flows differently than mortgage banks.

Moreover they are more willing and also more able to take on specific risks that mortgage banks cannot take on. Hence with Real Estate Securitisation, the LTV-ratios on the capital market could be higher than in traditional mortgage bank financing. Also, due to the transaction structure, the overall interest rate on that transaction could be lower than it would be on a traditional mortgage loan. Apart from that Real Estate Securitisation has grown to increasing popularity with ABS-investors in recent times because it is also often used in connection with principal finance and whole company securitisation.

This paper will look at how securitisation and especially Real Estate Securitisation works. It will delineate for whom this will be interesting, for which real estate assets it will be applicable, and what the motives are to do such a transaction. At the end of the paper the benefits and limits of Real Estate Securitisation will be shown.

2 Definition and Demarcation of Real Estate Securitisation

There exist different definitions of what securitisation and especially Real Estate Securitisation is. Often it gets mixed up with Mortgage-Backed Securities. Therefore these terms shall be defined in this paragraph and the difference between Real Estate ABS and MBS shall be delineated.

2.1 Definitions

Securitisation

Securitisation is the issuance of debt certificates that are secured by cash flows from different kinds of assets. Hence the issued securities are called Asset-Backed Securities (ABS). In essence a pool of payment claims are packaged and are made to securities in order to create a secondary market for the underlying receivables or other various illiquid assets. Thereby Securitisation is the generic term for any kind of Asset- or Receivable-Securitisation. It is derived from the word security, because usually illiquid and sometimes even intangible assets that generate a constant cash flow are formed into a tradable security and are floated on the debt market. Securitisation as a financing product belongs to the group of structured finance products that summarizes various kinds of products that are innovative and require a fair amount of transaction structuring. In general Asset-Securitisation has similar characteristics to Asset-Factoring: there is a true sale which creates solvency, however the purchase of the assets is not refinanced over the capital markets, but over the balance sheet of the buyer (factor).

Since Asset-Securitisations are complex structures that must create bankruptcy remote Special Purpose Vehicles (SPV), there always has to be some sort of security in case the originator goes bankrupt, or the contracts that are the basis for future cash flows are not adhered to. In the normal case of a receivable securitisation the security for the transaction are the securitised assets themselves, i.e. the receivables. This is due to the fact that usually the underlying pool of debtors is very large and the debtors are spread over various industries and regions. Consequently the probability of default is very low. In transactions that involve future cash flows that result out of contractual relationships with a higher degree of uncertainty and therefore higher default risk, additional collateral is required. In essence, in the case of the securitisation of future real estate rental cash flows, the property itself has to function as collateral, in addition to the future rental cash flow receivables.

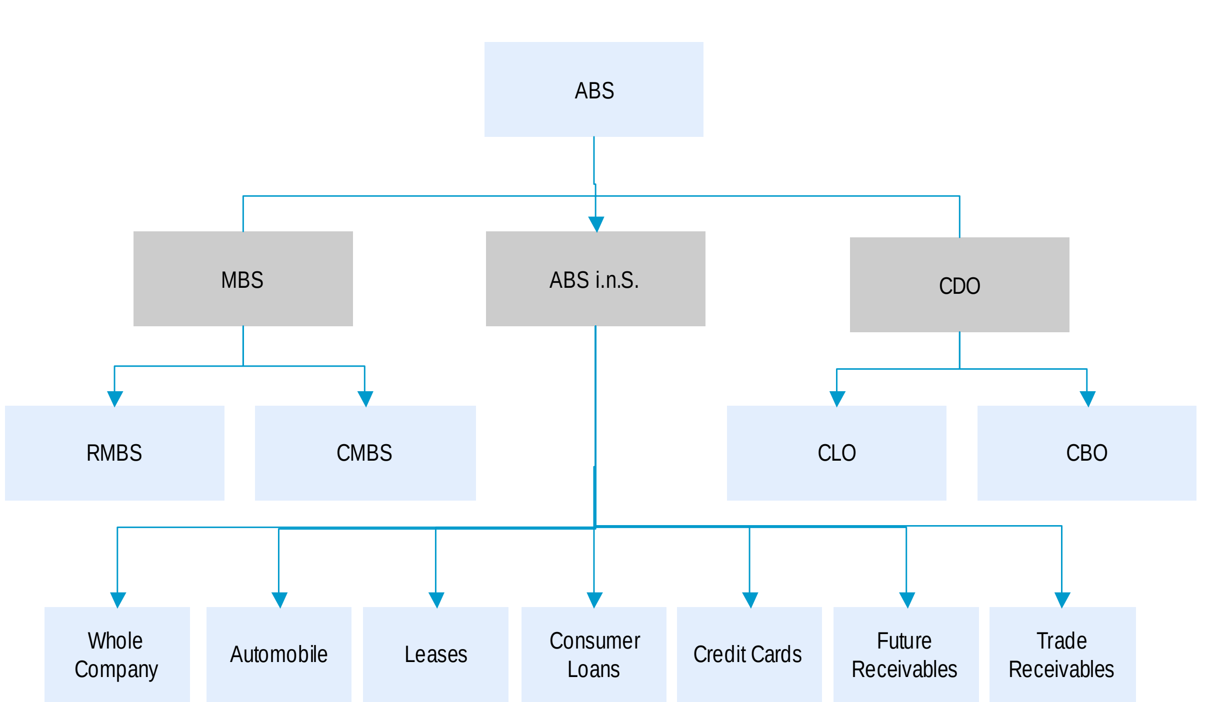
So on the loan securitisation side, there can either be securitisations of unsecured loans (e.g. Collateralised Debt Obligations), where the loans function as the security for the investors, or there can be securitisations of secured loans (e.g. Mortgage-Backed Securities), where the assets are the loans, but where there exists additional collateral for the security of the investor, such as a mortgage.

Asset-Backed Securities

The term Asset-Backed Securities (ABS) comprises securities and certificates of indebtedness representing payment claims against a special purpose vehicle (SPV) established solely for the purposes of the ABS-transaction. The payment claims are ‘backed’ by a pool of ‘assets’ which are transferred to the special purpose vehicle and serve as security, largely for the benefit of the holders of the ABS, i.e. the ABS-investors.

There exist different asset classes within Asset-Backed Securities. Until now it is mainly Mortgage-Backed Securities (MBS), Collateralised Debt Obligations (CDO) and Asset-Backed Securities in the narrower sense, but as the securitisation market is mainly driven by innovation of new asset securitisations, the universe of asset classes is further expanding. The shown asset classes subdivide themselves into further subasset classes: Commercial MBS (CMBS), Residential MBS (RMBS), Collateralised Loan Obligations (CLO), Collateralised Bond Obligations (CBO) and other types of ABS that are backed by a range of different assets as shown below.

Subdivision into different asset classes (today)



Mortgage-Backed Securities

Mortgage-Backed Securities (MBS) are bank originated securities that are backed by a pool of either residential or commercial mortgage loans. These securities therefore represent payment claims against an SPV that are backed by a pool of secured loans, i.e. mortgages that comprise cash flows from real estate loans. In short these securities represent derivative real estate cash flows.

Real Estate Securitisation

Broadly, any asset which produces a predictable and dependable income stream or receivable can be securitised. Because income will be required to service interest payments due on the securities, the existence of a steady or predictable income stream is a fundamental requirement. Whilst it is probably fair to say that the majority of Asset-Backed Securitisations are supported by mortgages loans, the market is seeing more and more transactions which are based on true real estate, i.e. bricks and mortar. Hence, the cash flows from actual real estate are being securitised and not the cash flows from the real estate loans.

Real Estate or Property Securitisation is defined by the Securitisation of real estate assets, i.e. real property or real estate receivables. In this paper Real Estate and Property Securitisation are understood as substitute expressions. However, there might be a small difference in the sense that Property Securitisation could be seen as a subset of Real Estate Securitisation. Real Estate Securitisation comprises of the securitisation of current and future real estate cash flows and receivables, as well as the securitisation of real property. Whereas Property Securitisation can be defined as only the securitisation of real property. The securities that represent the claims against the SPV that holds the real estate assets are referred to as Real Estate Asset-Backed Securities (RE ABS).

In short Real Estate Securitisation describes the financing of property through the securitisation of real estate cash flows and property values without the bank as a lending intermediary. However, the bank will take part in the transaction, not as the lending institution, but as the arranger of the financing. Therefore the bank is not going to commit valuable equity. It will only earn the structuring fees. In this constellation the lending spread can be distributed between the originator, the arranger and the investors.

2.2 Demarcation of Mortgage-Backed Securities and Real Estate Asset-Backed Securities

In order to really understand the concept of Real Estate Securitisation, the difference between Real Estate ABS (RE ABS) and Mortgage-Backed Securities (MBS) has to be clarified. For this purpose the following paragraphs deduce the differences between the two.

The following graph shows a different categorisation of ABS transactions into type of originator and type of asset. In general there are three major groups of originators: banks, corporates and the government. On the asset side, a distinction between ‘Receivables and Loans’ and ‘Real Estate Assets’ is made. As one can see below the full range of ABS asset classes as defined in the chapter above can be found in the graph: ABS i.n.S., CDO, MBS. But also a new category has been included into this graph: RE ABS. Whereas CDO's and ABS i.n.S. represent receivable or loan securitisations, MBS and RE ABS stand for real estate related asset securitisations. In this case the difference between RE ABS and MBS is mainly who originates the asset and what is the asset. MBS are backed by real estate loans that are originated by banks, whereas RE ABS represent securities that are originated by corporates or the government and that are backed by real estate cash flows or real property.

Categorisation of ABS-Transactions

	Banks	Corporates	Government
Receivables (loans)	**Collateralized Debt Obligations** – Securitisatoin of corporate loans and bonds in order to relieve regulatory capital	**Asset-Backed Securities in a narrower sense** – Securitisation of Receivables or customer loans in order to create solvency	**Asset-Backed Securities in a narrower sense** – Securitisation of future cash flows in order to achieve off-balance sheet financing (without raising the national deficit)
Real Estate Assets	**Mortgage-Backed Securities** – Securitisation of Real Estate secured loans in order to relieve economic capital	**Real Estate ABS – Securitisation of Real Estate receivables that are backed by the real property**	**Real Estate ABS -- Securitisation of future Real Estate sales revenues in order to lower the national deficit**

A second graph shows an alternative presentation of the different categories. It also makes the distinction between 'Receivables and Loans' and 'Real Estate Assets', but it looks at the nature of the originated cash flow. In securitisations there can be original (i.e. primary) cash flows, or there can be derivative (i.e. secondary) cash flows. The difference between the two is for example: receivables of a company depict original or primary company cash flows, whereas cash flows from interest and principal of a company loan are rather derivative company cash flows. Moreover, securitisations of derivative cash flows are done by banks whereas securitisations of original cash flows are done by non-banks. Also the motive for the securitisation is different. Derivative cash flow securitisations usually follow the motive of regulatory capital relieve, whereas the securitisation of original cash flows rather represents the motive of solvency generation.

Original vs. Derivative Cash Flows

	Original Cash Flows	Derivative Cash Flows
Receivables (loans)	**Asset-Backed Securities in a narrower sense** – Securitisation of original receivable cash flows, e.g. Customer loans, trade receivables (in order to generate solvency)	**Collateralized Debt Obligations** – Securitisation of derivative corporate cash flows by securitising corporate loans and bonds (in order to relieve regulatory capital)
Real Estate Assets	**Real Estate ABS** **--** **Securitisation of original real estate cash flows, e.g. rent receivables, future property reversion values** **(in order to create solvency)**	**Mortgage-Backed Securities** – Securitisation of derivative real estate cash flows, i.e. interest and principal payments from real estate loans (in order to relieve regulatory capital)

So in the 'Receivables and Loans' category, receivable securitisations are backed by original company cash flows and loan securitisations are backed by derivative company cash flows. In the 'Real Estate Assets' category this fact represents the major difference between RE ABS and MBS. MBS depict derivative real estate cash flows whereas RE ABS are backed by original/primary cash flow from real estate assets. This distinction is very important because for an investor it might have different implications, if he invests into original or derivative cash flows. Also for the structuring of the transaction there are differences concerning the security for the investor.

In essence, MBS derive from bank originated real estate assets that are backed by derivative real estate cash flows, whereas RE ABS derive from Corporate or Government originated real estate assets that are backed by original real estate cash flows. Therefore one can demark Real Estate Securitisation as real estate backed transactions that are not originated by a bank and that refer to original or primary real estate cash flows.

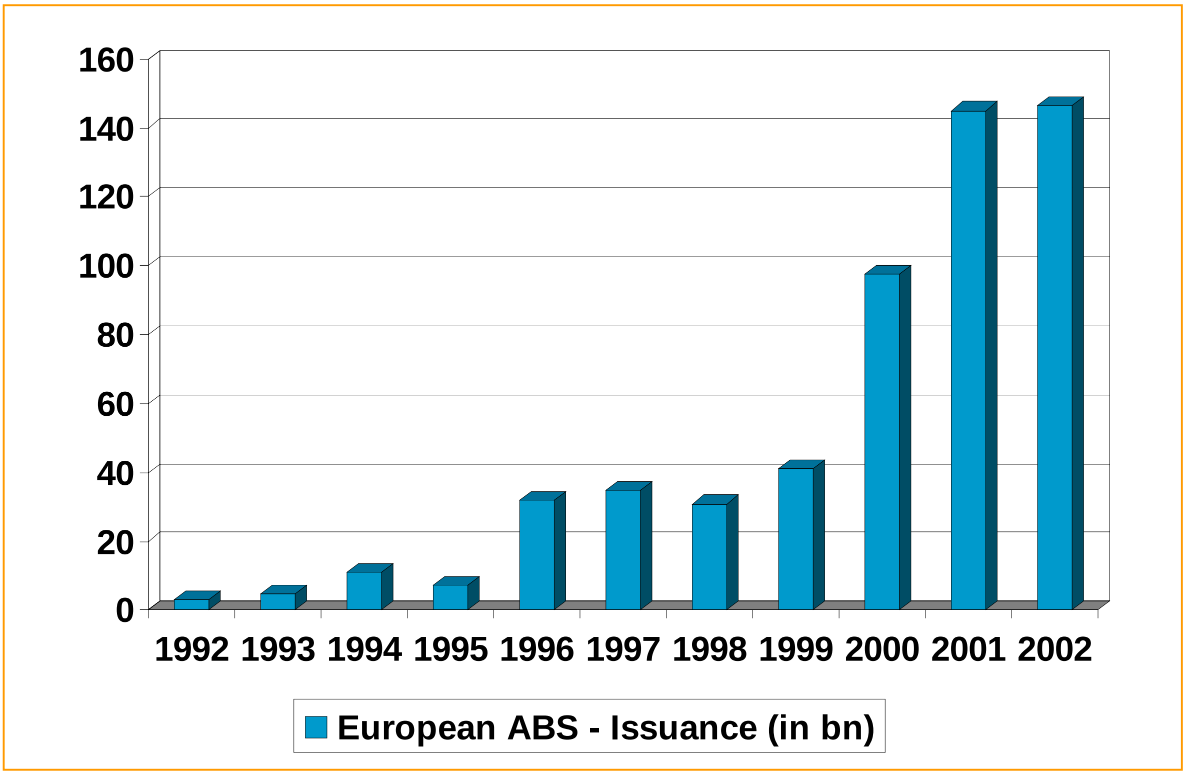
2.3 The European Market for Securitisation

The last couple of years have witnessed the overall European market's continued expansion into new asset classes and the increased acceptance of Securitisation as an established financing technique by financial institutions and corporates throughout Europe. These transactions point to a strong growing market that is likely to be marked by a dynamic mix of asset classes and increasingly innovative structures for years to come. Several innovative securitisations have demonstrated this solid growth. Steadily increasing numbers of European investors and originators are embracing Securitisation, as evidenced by the growth in traditional asset classes and structures, and by the level of investor interest seen in more and more innovative transactions. Examples of such new real estate securitisation transactions include the well known Canary Wharf and Broadgate Securitisations as well as the University accommodation rentals securitisations, the London City Airport whole company Securitisation, the UK pub deals, the increasing number of corporate real estate securitisations and the government driven residential property Securitisation as seen in Italy.

Investors' appetite for structured bonds has been evidenced by their willingness to buy securities backed by an ever-broadening range of assets, which shows an increasing comfort with the securitisation process. The investment base is becoming more sophisticated, and investors are increasingly looking for performance data on transactions – one sign of active investor involvement and interest.

As the US Securitisation market continues to mature, it is the European market that is increasingly the main focus for growth across a number of jurisdictions and asset classes. Due to the number of jurisdictions, the pan-European market is one of the most complex as, whilst there are proposals to harmonise European legal, accounting and regulatory guidance to produce a pan-European framework, at present the implications for Securitisation in Europe are many and varied and also subject to considerable change and evolution. Until now this has been the main reason for the slow development of the pan-European market.

The graph below shows the development of the European Market since its beginning in 1992. The market has risen from €3 billion in 1992 to over €146.6 billion at year-end 2002. The enormous growth of the market during the last five years can be attributed to mainly three things: the amendment of the legal and regulatory framework, the growing acceptance in the corporate and the banking market, and the transparency of the market that has been pushed forward by the rating agencies.

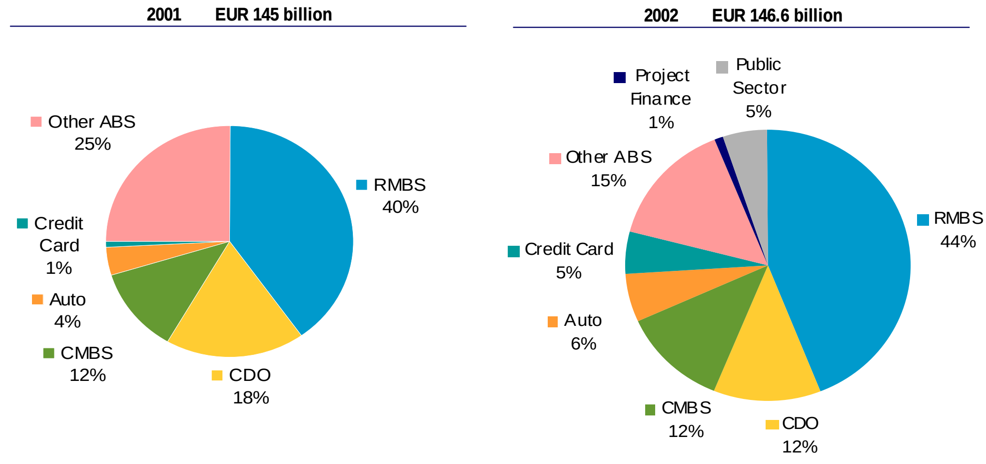


The total new issuance volume in 2002 is only slightly over 2001's issuance. The reasons for this are obvious: investors got more cautious in the aftermath of the World Trade Center bombings, the declining credit quality caused by the world recession has let the default rates rise and the rising volume of synthetic securitisations (in synthetic securitisations the biggest part of the transaction is covered by credit default swaps, only a small part is actually funded by ABS notes).

In order to understand the drivers of the market one has to look at different segmentations of the total issuance volume. The total issuance at year-end 2001 was EUR 145.0 billion, and at year-end 2002 it was EUR 146.6 billion. In the following it will be looked at a division of the total issuances by asset class, by country and by type of seller (i.e. by originator) for the last two years. From this presentation it will be possible to draw different conclusions for the European Securitisation market and also for the development of real estate securitisation.

Division by Asset Class

Looking at the two pie charts it can be derived that Credit Card receivables, Auto loans and Public Sector Receivables have the strongest increase. Regulatory equity driven RMBS still make up the biggest part of the securitised assets, whereas regulatory equity driven CDO’s have declined. This has mainly to do with the fact that there are more and more defaults in corporate loans and bonds. In though times like these investors seem to believe that residential MBS are the safest haven in the arena of ABS. The market is open for new products and asset classes as shown by project finance and public sector receivables. Investor appetite for new and innovative products for portfolio diversification has risen. This is good sign for potential new real estate securitisation products. There is no Real Estate Asset class included in the division because until now Real Estate Securitisations have been summarised under CMBS or RMBS, even though they don’t belong into this asset class as it has been defined in the previous chapter.

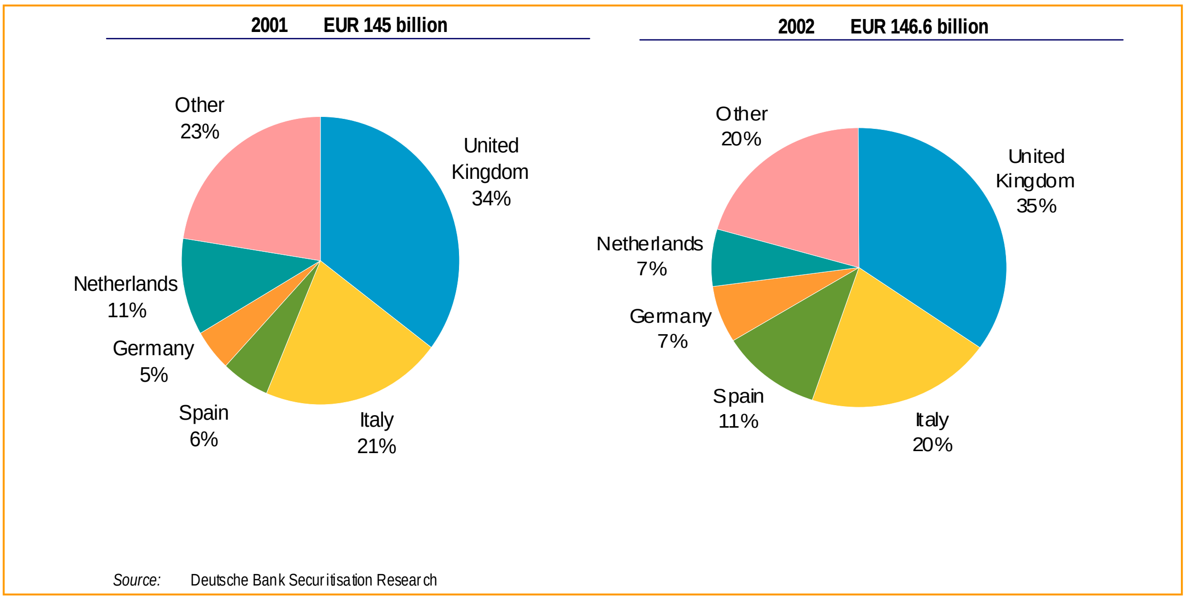


Source: Deutsche Bank Securitisation Research

Division by Country

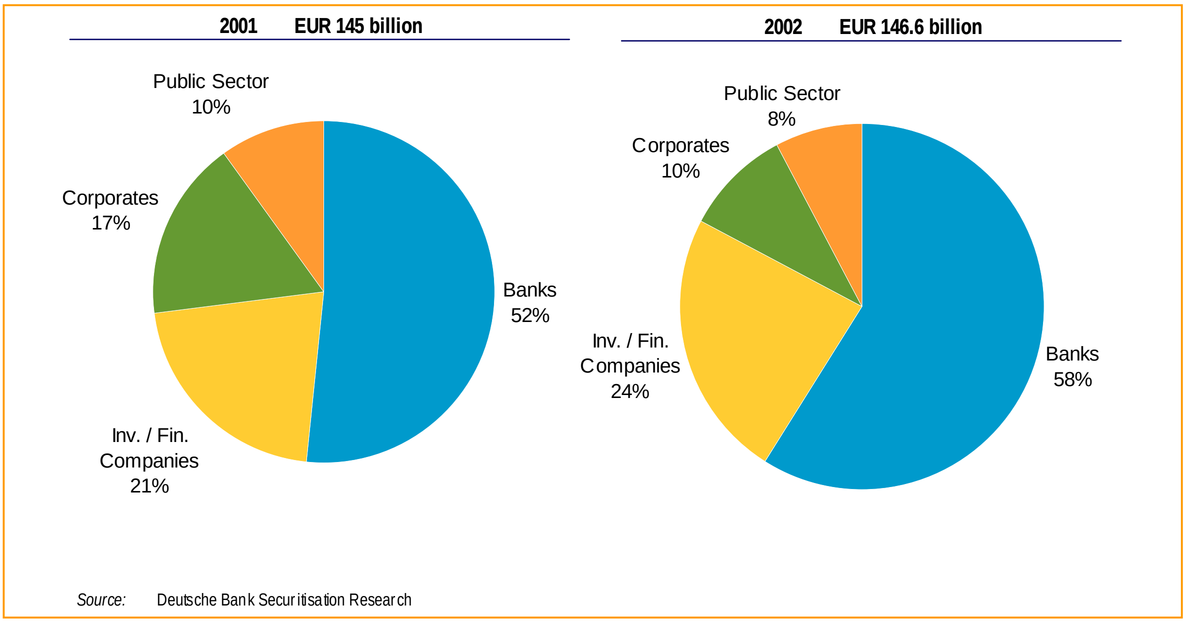
UK is not only the oldest but also still the biggest market in Europe. The UK is followed by Italy that has been a strong issuer for the last 3 years. Especially the government driven real estate securitisations have raised Italy’s share of the market. With new legislation in Spain and a growing acceptance in the Spanish market, the new issuance volume in Spain has increased and has made Spain Number 3 issuer in Europe for the first time. Germany being a big market for bank driven synthetic

Securitisations is climbing up the ladder. Due to the actual legislation in Germany the synthetic market is still predicted to grow very fast.



Division by Type of Seller

Banks are still the biggest originator of securitisations in Europe. This has mainly to do with the fact that securitisations relieve regulatory capital that is very valuable to the banks. Even though the corporate and the public sector issuance volume have sunk, these two originator classes have the best potential for the future. The Public Sector Securitisations are weaker, since the EUROSTAT (the Department of European Statistics) published the new off-balance sheet criteria for European Governmentsa. The governments try to raise money without elevating their debt new indebtness.



3 Basics of Asset-Backed Security Financing

3.1 General Transaction Structure

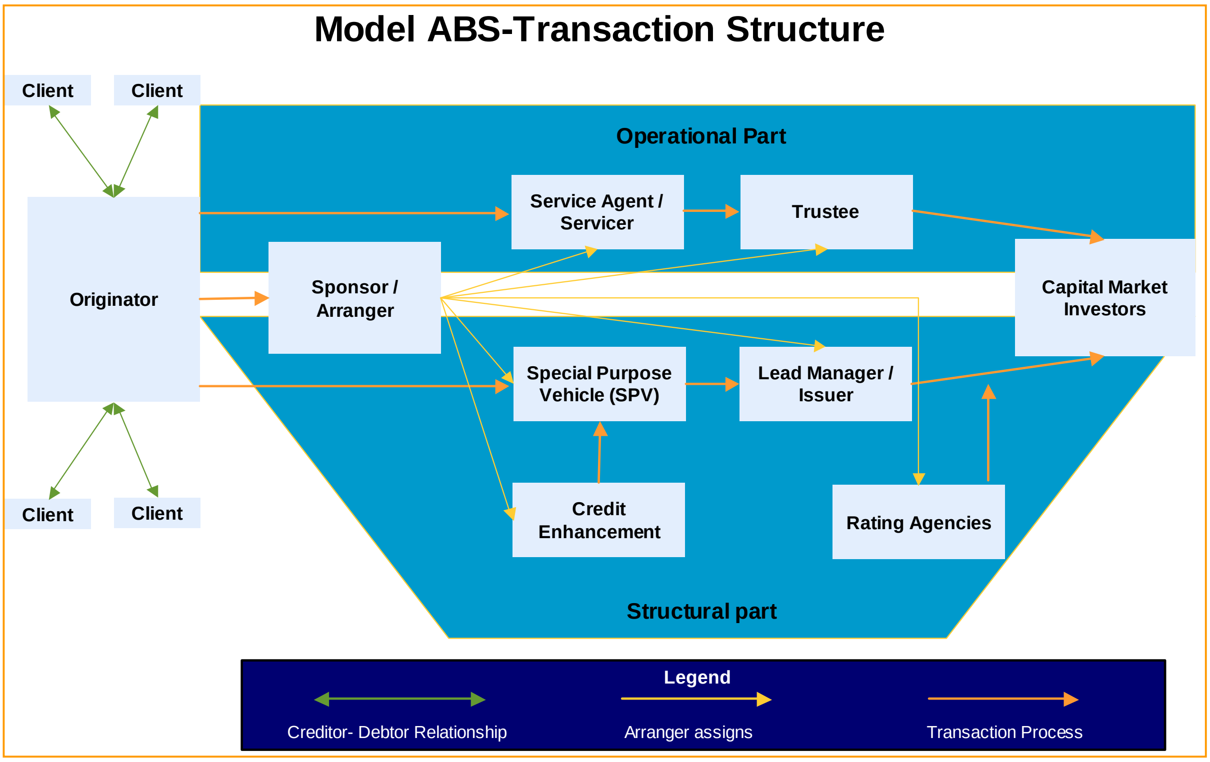
Asset Backed Securities are complex financing tools, that originate cash flow and that create complicated transaction structures. It is this complexity, as well as the many involved parties that make the understanding of those transactions very difficult. Each Asset-Securitisation requires a Taylor-made structure. In this connection the arranger/sponsor has to take all the specific characteristics of the transaction into account, i.e. the originators' needs, the assets that are to be securitised and the specific national regulatory and legal peculiarities. The range of assets which are being securitised continues to grow, however the concepts are generally the same, no matter what the underlying asset. Therefore this chapter will introduce a basic model structure that is similar across nearly every ABS transaction.

Starting point of an Asset-Securitisation are the assets that are to be securitised. These can be a multitude of different assets as they have been defined above. However, most of the time the securitised assets can be related to some kind of a receivable of a creditor towards a multitude of different debtors. From these receivables there arise financial obligations, i.e. future cash-flows of the debtor towards the creditor. In the following we will just refer to them as assets in general. The owner of the assets is called the "originator" of the Securitisation.

To a transaction structure, there are usually two sides, the structural side and the operational side. In general the features of the structural side are essential for the process until the issuance of the securities, whereas the operational features are important for the functioning of the transaction in the time thereafter and until maturity.

At the beginning of the transaction the originator will assign an arranger/sponsor that is in charge of putting the transaction together. First, the arranger sets up a transaction specific special purpose vehicle (SPV) on a nearly non-recourse basis. Simultaneously the arranger will assign the different parties involved, i.e. the Rating Agencies (which are, besides the arranger the most important party in the process), the Lead Manager / Issuer, the Credit Enhancers (Banks and Monoline Insurers), the

Trustee and the Service Agent. Together with all of them the transaction structure will be put into place.



The first step in the transaction process is that the originator sells the assets that are to be securitised to the established SPV. The SPV is specifically founded for this one transaction and cannot be used for other transactions. Subsequently the SPV pools the assets which will be the backing for the issued securities, as the term Asset-Backed Securities implies. The SPV should be a legally and economically independent entity that is incorporated in a mainly restriction-free and tax-neutral legal system. It should be an independent entity that is supplied with a minimum of equity, it is usually a trust that is incorporated in some off-shore banking environment (e.g. Cayman Islands, Jearsey, Curacao or Ireland). The sole purpose of the SPV is the purchase of assets and their refinancing. The SPV refinances itself by issuing ABS-papers on the capital markets. The issuance takes place in cooperation with a bank consortium (Lead Manager / Issuer) that is mostly comprised of investment banks, commercial banks or both. The bank consortium places the securities with mostly institutional investors. The cash-flows from the asset-pool are subsequently used to pay interest and principal to the investors. The asset portfolio can, but it does not have to be the only underlying collateral for this transaction. The asset could for instance be a portfolio of loans and a supplement collateral could be the mortgages that are used to secure the loans; or the asset could be real estate rent cash flows that are secured by the underlying real estate itself as additional collateral. The transaction will be enhanced by credit enhancement measures (internal and external).

The involved rating agencies are in charge of the quality rating of the security, by examining the securitised assets and by testing the transaction structure. In general, the rating agencies provide the ABS transaction with a high rating, because of the high quality and the diversification of the assets. The credit risk of the securitised assets is taken on by the investors, which is the key concept of Asset-Securitisation. However, in order to get a good rating, which is necessary for the originator to be able to place the issuance, credit enhancement measures are required to make the issued papers more attractive for investors. This makes it a distinctive feature of ABS, unlike corporate bonds, which are not secured. A variety of internal and/or external credit supports are employed to increase the likelihood that investors will receive the cash flows to which they are entitled. Internal credit enhancements are subordination, overcollateralisation, excess spread accounts, reserve funds, whereas external credit enhancements are third-party or parental guarantees, Letters of Credit (LOC), Cash Collateral Accounts or the assent to repurchase the asset by the originator.

During the operational term of the transaction the asset portfolio has to be serviced. This task is taken on by the service agent. For the security of the investors an independent trustee is being appointed with the obligation to supervise the transaction and the following payments. He has the priority right to access the asset pool of the SPV. Moreover he responsible for the servicing of the main account and the transmission of cash-flows to the investors.

3.2 Participants of ABS-Transactions

As explained in the previous chapter an ABS transaction involves many parties. Each party has different tasks and motives, it is important to understand what they do and why they do it. Therefore the following paragraph will go deeper into the tasks of the different participants.

Originator

The originator of an ABS transaction can be a bank or a corporate or the federal government of a country. The governments however have just only recently started to use the Securitisation technique as a financing tool to lower their deficits. The originator sells a part of its illiquid assets including all collateral attached to those assets on a non-recourse basis to an SPV. The assets have to be chosen using certain criteria that will be explained in a later part of the paper. Most of the time the originator also takes on the tasks of the "Servicer", since he has originated the assets.

Special Purpose Vehicle (SPV)

The task of the Special Purpose Vehicle is to buy the assets that the originator has generated in its business operations (e.g. receivables) or other fixed assets (e.g. real estate) that he wants to dispose of. It structures the assets and pays the originator a certain price for his assets. Then it refinances the purchase price by placing securities ("notes") privately with institutional investors or publicly by offering the notes on the capital market. The notes are served by the cash flows of the assets upon which they are based. The assets are also available to the holders of the securities as a basis for liability (collateral). In the case of receivables for instance, the purchase price of the assets is based on the present value of the receivables portfolio minus the structuring costs.

The use of an SPV is critical to the creation of ABS, because the SPV stands between the originator of the underlying assets and the issuer of the securities. The key structural feature of an SPV, which enables it to insulate the trust form the originator, is bankruptcy remoteness. This is normally achieved by a true sale of the assets to the SPV by the originator. This means that the originator no longer has ownership rights to the assets, such that a trustee in bankruptcy of the sponsor would be unable to recover the assets or their proceeds. As a result, the ABS-issuing trust's ability to pay interest and principal should remain intact even if the originator were to go bankrupt.

Bankruptcy remoteness, along with certain other aspects of the SPV’s and trust’s structures and the extra support provided by credit enhancement measures, enable the ABS transaction to receive its own credit rating, independent of that of the originator. This is important for investors, because the originator may well have a lower credit rating than the rating carried by most ABS.

Sponsor

The sponsor sets up and administrates the SPV. Moreover his tasks include the structuring of the transaction and the coordination of the different parties that are involved in the deal. He determines the legal, credit enhancement and cash flow structures, and chooses the rating agencies. Most of the time Investment Banks function as Sponsors of ABS transactions; however some Corporates have their own divisions and subsidiaries that sponsor transactions (e.g. GE Capital).

Service-Agent / Servicer

The servicer is in charge of the debit accounting and to send reminders to the debitors. He takes care of the timely submission of incoming cash flows to the trustee. The servicer has to regularly account for his activities that are linked to the transaction.

Trustee

The trustee is the intermediary between the service agent and the investor. Usually the trustee is called into the transaction to secure the interests of the investors. The trustee regularly receives the payments from the service agent onto specific trustee accounts on previously specified dates. Depending on the payment structure of the ABS transaction the trustee pays out the cash flows directly to the investors or he invests the money until the next pre-specified interest and principal payment date. This way cash flows can be adjusted to the needs of the investors.

Investor

Generally the originator of an asset securitisation has an information advantage towards other involved parties. These information asymmetries cause an inefficient investment decision on behalf of the investor. The agents on the capital market solve this problem by signaling the quality of the transaction. One part of this signaling game is the involvement of rating agencies as an independent third party. Through the use of the transaction rating, the originator can show the quality of his issuance by qualifying the issued securities for certain standardized rating classes. Institutional investors are used to base their investment decision on such ratings and therefore the rated notes have a high probability of being placed.

Rating Agencies

Rating is the risk and quality assessment of issues, issuers, debt, debtors, receivables, creditors and other assets. The rating agencies' task is to screen and evaluate the full transaction and the involved parties. In the case of an Asset-Securitisation they determine if the issuer is legally and economically able to fulfill the requirements that are laid upon him by the issuance of the notes in time and to the full satisfaction of the investor. The quality of the transaction is determined by classifying the ABS rating in the usual bond rating letter scheme (e.g. AAA for the best quality in an S&P rating). Three rating agencies exist that are able to do the ABS rating: Moody's Investor Service („Moody's"), Standard & Poor's („S & P's“) und Fitch IBCA. Usually two out of the three agencies are chosen to work out an independent rating for the ABS issue.

3.3 Asset Securitisation Criteria

First of all an Asset-Securitisation legally requires a sale of the asset and the assignment of claims attached to those assets. Thereby the asset pool has to satisfy certain legal and economic distinguishing features to qualify for an ABS transaction. These will be explained in the following paragraph.

Assignability and Distrainability

The originator of the asset can only sell those assets that are legally assignable to the buyer. Therefore the receivable for example shall not be strictly personal or there shall not be a clause in the underlying contract that forbids a cession of the receivable. Moreover the receivable must not be nonleviable.

True Sale

As long as the transaction structure doesn't comprise a synthetic securitisation, the sale of the assets has to be a 'True Sale' and it must not qualified as a grant of a loan. In case the sale of the assets is determined to be a grant of a loan, this will lead to lengthening of the balance sheet and subsequently to a worsening of the capital-to-asset ratio. In addition the true sale is important in the case of the insolvency of the originator. If it turns out that there has been no true sale of the assets, then in the worst case the trustee in charge of the bankruptcy of the originator would be able to recover the assets or their proceeds. The assets would fall into the bankruptcy estate of the originator and the SPV would not be able to pay the note holders anymore. In Germany the courts have ruled that in order to determine if the transaction is classified as a true sale, the criteria to determine a true or an untrue factoring should be used.

Apart from the true sale criteria, certain other criteria has to be fulfilled for the transaction to qualify for an off-balance sheet treatment:

- Legal isolation of the assets from the seller; the transferred assets are put beyond the reach of the transferor and its creditors.
- The new owner of the assets has the right to pledge or to exchange the assets.
- The seller doesn't have the right to buy the assets back.

Transaction Size

Since Asset-Securitisations are of a complex nature that cause high fixed expenses, usually there has to be a minimum volume of assets to be securitised in order for the transaction to be economically feasible. In the current literature there is no unanimous definition of the minimum volume; however, the numbers range from €50m to €100 m, whereas in practice investment banks won't start working on a transaction that has a size smaller than €250m. This is the benchmark for public transactions. If the originator decides to place the notes privately there have already been transactions made that have been a lot smaller than €250m. Nonetheless a minimum size of €50m has to be reached for the benefits of the asset-securitisation to exceed the costs implied in a Taylor-made transaction structure. If one originator does not fulfill the minimum criteria, then there is also the possibility of pooling originators in a multi-seller model.

Asset-Servicing Criteria

The originator of the assets does not only have to separate the securitised assets legally from his estate but also technically. Therefore he needs to have a good electronic data processing by which he can separate the cash flow streams of the sold from the cash flow streams of the unsold assets. Subsequently the originator most of the times takes on the tasks of the service agent for two reasons: firstly because he already has all the data needed to service the assets, and secondly because he wishes that the relationship with the customer (in the case of receivables) is not stressed. Therefore the originator will function as the service agent and will book the securitised receivables on separate accounts.

Asset Structure

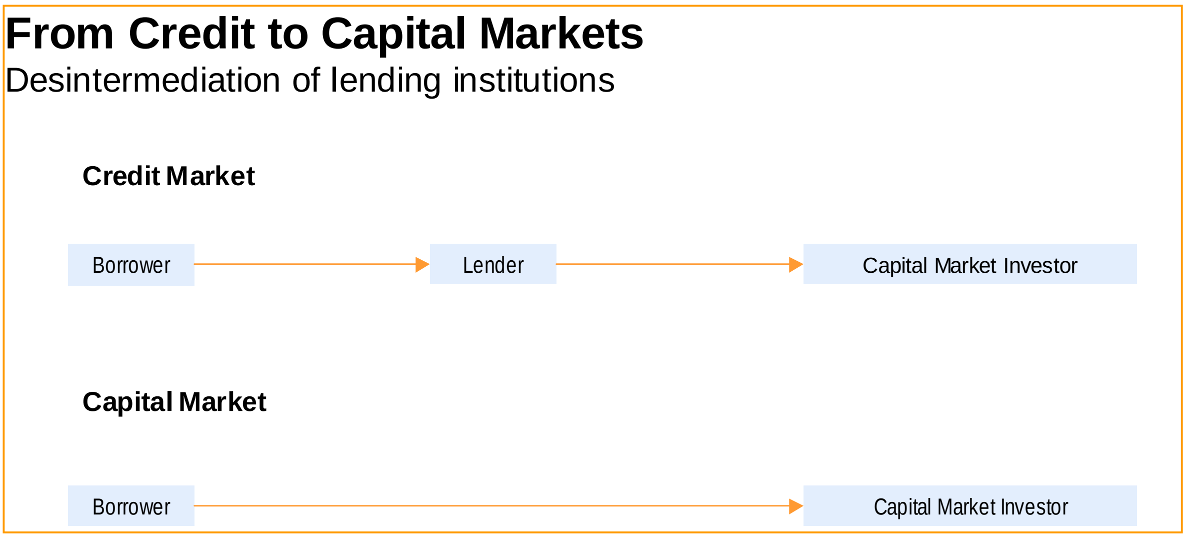
The first requirement for the asset structure is that there has to be some kind of cash flow related to the asset that is to be securitised: "If it flows, securitise it!". Moreover the asset pool should ideally have a multitude of nearly homogeneous and relatively small claims against as many as possible debtors. Apart from that there have to be a long history of data, so the credit risk of the underlying assets can be quantified. The main questions in this context are: What is the default rate of the assets? What is the prepayment rate of the assets? How many payments are delayed?

A regional and demographic diversification as well as a high credit standing of the debtor or the assets is of high importance. Moreover the assets should have a certain seasoning (i.e. age) and the weighted average life of the assets (i.e. maturity) should exceed one year.

4 Real Estate Securitisation

4.1 Real Estate Securitisation as a Concept for Desintermediation of Lending Institutions

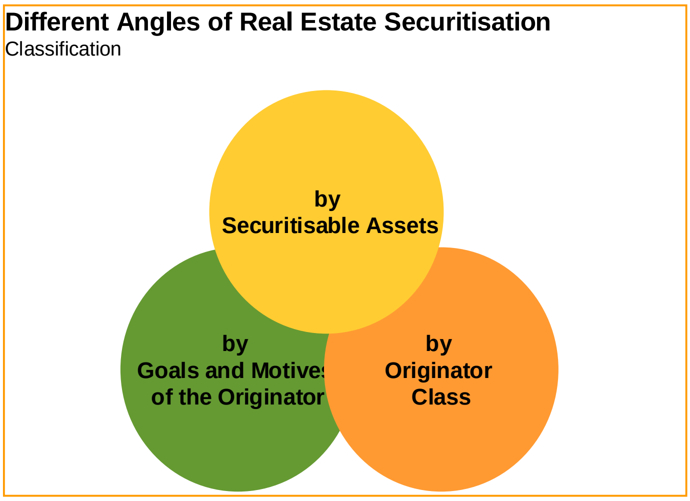
In recent times financing for real estate companies has become more and more difficult because banks have become very cautious with loan origination. This is due to the fact that a lot of banks have made an enormous amount of bad loans during the last decade and now those big bad loan portfolios weigh hard on the banks' balance sheets. However, Capital markets dictate that banks are more bottom line oriented. Therefore a lot of big commercial banks have decided to go away from the classic lending business and go into fee income business. This goes in hand with a second big trend, a trend that has been going on in the financial industry for many years. It can be described as the desintermediation of financial intermediaries; lending banks as such intermediaries will be more and more cut out of the lending process as they only function as an intermediary between the borrower and the capital market. Therefore the current trend in the banking industry can be described as a shift from credit to capital markets.



Real Estate Securitisation is a classic case of a desintermediation in the real estate lending industry. The reason why this is happening is twofold. Firstly many banks have made bad real estate loans in the times of the economic upturn that have had a detrimental effect on the banks' ROE as discussed above. Secondly investors are always willing to get a higher return for the same amount of risk. So if the banks are desintermediated the usual lending spread can be distributed to the investor, the arranger and the borrower. Hence, this is a win-win situation for all the parties involved: the banks as arrangers make more fee income, investors get more return for the same amount of risk, and the borrowers get better financing conditions than before.

4.2 Different angles to view Real Estate Securitisation

Each transaction structure is different and the ultimate structure depends on whichever angle one looks at the securitisation.



First of all a categorization into securitisable assets, originator type, and goals and motives of the originator can be made. This makes sense because for instance different originators hold different assets and might have various motives of doing a real estate securitisation. The three classifications overlap and most of the time a transaction structure is constructed by looking at it from every angle. Each category will be described in the following chapters.

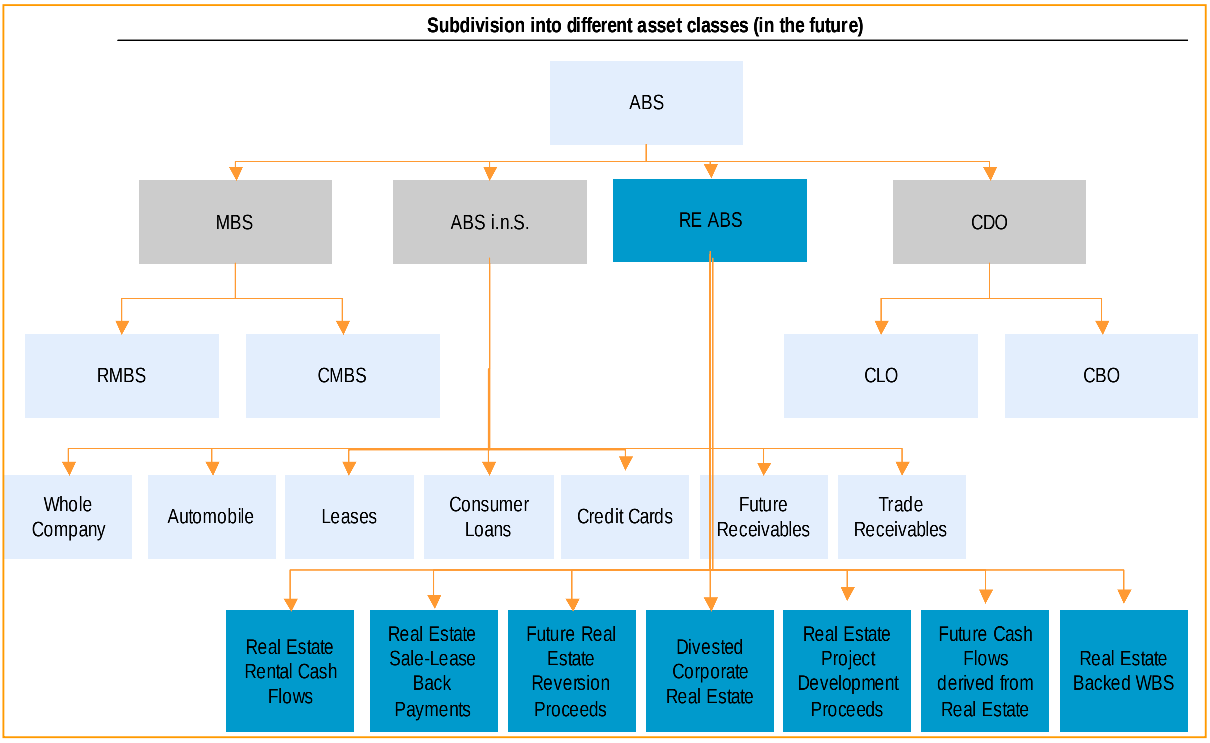
4.2.1 Categorisation by Type of Asset

All the assets for a real estate securitisation are cash flows that are derived from real estate, in one way or another. Those assets can be summarised in the following categories:

- Real estate rental cash flows
- Future real estate rental cash flows (secured either by the real estate itself or by a leasehold interest in the real estate)
- Future cash flows derived from real estate
    - o Cash Flows from Toll roads or income from other public infrastructure projects

  - Income from usage of oil pipelines or dams
  - Ticket sales from football stadiums and multi-purpose arenas
- Real estate sale and leaseback payments
- Future real estate reversion proceeds
- Corporate Real Estate (to be divested)
- Inheritable building rights
- Cash flows from real estate backed Whole Company Securitisations (e.g. Pub deals) → the assets are the cash flows from the company, but the collateral is the real estate of the company
- Future proceeds from real estate development projects (problem to be solved is how an effective distribution of the risks can be done).

Those findings could be put into a new subdivision of asset classes as shown below:



4.2.2 Categorization by Type of Real Estate Originator

There are various originators of real estate related cash flows and real estate assets in the property industry. Depending on the type of incorporation, the core competencies and the business model of those originator, it can be delineated for whom a securitisation transaction might be feasible or not.

- Corporates, that have defined real estate as a non-core business and that try to desinvest their real estate holdings in order to raise shareholder value.
- Corporates, that have defined real estate as a core business and that are looking to finance or refinance their existing holdings.
- Real estate holders, that are looking at financing or refinancing their existing real estate. The following list belongs to that category:
    - Open-ended real estate funds
    - Closed-ended real estate funds
    - Listed property companies
    - Real estate specialty funds (for insurances etc.)
    - Opportunity Funds
- Real Estate Investors, that are financing new acquisitions by issuing Asset-Backed Securities.
- Real Estate Sellers, that are trying to generate solvency for a sale that will only take place sometime in the future (advance sale)
- Governments that have solvency problems but that also have a lot of real estate holdings. In the European Union, member countries are only allowed to take on a certain amount of debt (Maastricht Criteria). Therefore the governments are looking for ways to access solvency without raising the national debt (compare Italian Treasury Real Estate Securitisation).
- Real estate project developer
- Suppliers of Multi-Seller Platforms; those enable a pool of small originators to pool their assets.

4.2.3 Categorization by Motivations of the Originator

In general, there must be some kind of motive or a goal that an origiantor follows with a securitisation, otherwise it would not be done. Usually originators want to have all the following goals and motives satisfied, however that is not always possible. Contradictions of goals often occur:

- Off-Balance Sheet Financing
- Generation of solvency
    - by selling future real estate cash flows
    - by selling the real estate itself
- Development of new financing sources and opening up a new investor base
- Capital market financing without having a rating
- To get a cheaper financing if the asset rating is better than the corporate rating
- Realisation of balance sheet reserves
- Higher loan to value ratios (LTV)
- Opportunity to realise future real estate cash flows today (at a present value)
- Improvement of the Return on Equity (ROE) and increase of the shareholder value
- Increase of the company's solvency
- Gain of flexibility for controlling the earnings (tax optimisation) and use of securitisation as a balance sheet management tool

4.3 Benefits and Limits of Real Estate Securitisation

Of course there are not only benefits associated with the use of real estate securitisation as an alternative financing source, but there are also limits that restrict the use of this financing tool. Both will be delineated in the following paragraphs.

Benefits

There can be benefits for both the originating company and those who will ultimately invest into Real Estate ABS, i.e. the institutional investors.

Benefits for the originator:

- Securitisation can lead to higher leverage, i.e. higher loan to value ratios (LTV) than would normally be achievable using more traditional financing methods. Typically, standard bank lending will assume LTV ratios of between 60-70%. A well structured securitisation can realise LTV ratios of 90-95%. A company can therefore unlock more capital than might be the case through normal bank lending arrangements.

- Real estate securitisation may lower the cost of debt for the borrower compared to traditional sources of financing. The lower percentage of equity invested raises the return on invested capital.
- Real estate Securitisation is an Alternative to traditional sale and leaseback deals as a means of raising capital from an existing corporate real estate portfolio. The main benefit with this is that the originating company can retain ultimate ownership of the income producing assets and simply create or assign an appropriate interest for the purposes of securitisation. For example, a property company might create a long leasehold interest in its freehold portfolio so as to divert the income stream to the newly created leasehold interest.
- It allows non-investment grade companies to access the capital markets.
- The structure is individually tailored to suit the originating company and can therefore be adjusted to meet the nature of each portfolio.
- Investors are comfortable with the concept and the security which the structure will create.
- For the originator it should be possible to achieve a coupon which is below the rate which would be payable on a standard bank facility where a fixed number of percentage points above EURIBOR is usual.
- The focus is shifted onto the income generation of the asset, i.e. cash flow rather than the volume of the asset or the company itself. This allows segregation of good assets from what otherwise may be a poorly performing company or sector of the economy whose lack of profit might otherwise make fund raising difficult. Therefore issuers with a below-investment-grade unsecured debt rating are able to sell investment-grade, even triple-A-rated debt. The debt costs far less than a non-investment-grade firm would be able to access in the capital markets on an unsecured basis.
- Real Estate Securitisation diversifies the sources of capital, reduces the size of the balance sheet and frees up capital associated with the securitised real estate assets. The released capital can be put back to work and the originator may replace the securitised real estate assets with new ones. A higher volume of origination would, therefore, provide the issuer with the potential to generate higher revenues and earnings. In effect, this allows the issuing corporation to leverage off its capital base.

- In general, for investment-grade companies the non-recourse sale of assets enables the issuers to reduce the exposure to higher risk-weighted assets, and to fund portfolio growth through off-balance sheet treatment.
- Change of perception on the market and a possible gain of prestige due to the fact that the company is going new ways and is financing its real estate over the capital markets. Thereby a part of independence from the traditional lending institutions will be gained.
- Possibility to gain the upside potential of the property without really owning the real estate anymore.

Benefits for the investor:

- For the investor real estate securitisation creates a relative value gain, because the coupon on the notes is usually well above that payable on comparable bonds, hence making it an attractive investment.
- The issued Real Estate ABS notes are rated at their issuance and underlie a constant monitoring by the rating agencies.
- Real estate assets represent a very stable asset base and have a good reputation on the market.
- New assets and new structures that might be tailored to the needs of the investors create a better diversification of the investors' portfolios. For example, in Germany real estate ABS would represent a perfect substitute product to the existing real estate investment vehicles that have all proven to be ineffective for international institutional investors.
- Investing in original real estate risk without having to administer and manage the property.

Limits:

The limits of the securitisation transactions can be found on the cost side and on the legal and structuring side. Depending on the country of origination there are tax as well as legal challenges. For example in Germany, for a real estate securitisation where real estate receivables are sold to an SPV and the real estate is transferred to the SPV because it serves as additional collateral, a transfer tax of 3.5% applies. This does not only apply once, but twice, once the real estate is transferred back to the originator after the notes have matured and the transaction is finished. Taking this extra cost of 7% into account, does not make the real estate securitisation look very favorable. So therefore the local tax rules are very important in the structuring of a real estate ABS transaction. Apart from that the biggest legal problem is the achievement of the bankruptcy remoteness of the SPV. It is for that reason that most of the time the real estate has to be transferred as additional collateral. In most countries there are different bankruptcy laws and especially in Europe it is a real challenge to structure a transaction of such sort.

Moreover the new accounting rules concerning securitisation within IAS and especially US GAAP (after Enron) are making it very difficult for companies to reach off-balance sheet treatment. This makes especially those transactions very difficult, where the originator wants to achieve an off-balance sheet treatment, but doesn't want to sacrifice the upside of the portfolio.

Finally, issuers need to weigh the cost of the transaction, which can be very high, versus the benefits of a real estate securitisation. The costs are not only up-front legal and structuring fees, but also issuing and administrative costs. Therefore it is essential that a minimum volume as defined earlier is reached.

4.4 Case Studies

Recently, there have been an increasing number of issues backed by real estate cash flows in Europe. This includes the income from shopping malls (Trafford Center in Manchester), office buildings (Broadgate & Canary Wharf in London), nursing homes (BUPA in the UK), student housing, residential apartments (Vesteda in the Netherlands), government owned housing (Italian Treasury) and pubs (UK pub deals). For demonstration purposes a couple of Real Estate Securitisation transactions will be looked at more closely:

Canary Wharf

In late May 2000, the second Canary Wharf transaction introduced another innovative structure that has become a benchmark for Real Estate Securitisations. Canary Wharf II followed the initial £555 million transaction by the Canary Wharf group in 1997 which, at the time, was the world's largest securitisation of a single property. The £ 475 million multi-currency four tranche structure in the Canary Wharf II transaction incorporates variable funding notes that effectively operate as a revolving loan facility. The underlying asset of the deal was the property and its cash flows.

Italian Treasury

In 1999 the Italian Treasury initiated a EUR 3.5 bn real estate securitisation that was the first under a government programme to dispose of real estate with an estimated book value of between Eu15bn and Eu30bn. This securitisation, which was launched late 1999, involved the sale of a portfolio comprising 27,000 government housing properties to a special purpose vehicle owned by the Italian treasury. The sale was financed with a bond offering, through which the government raised 75% of the assets' gross book value with triple-A debt. Bondholders are entitled to rents on the properties, but will be repaid primarily from the proceeds of selling the flats. Further deals from which the next was mandated at the end of 2002, will securitise the remaining portfolio, which is believed to include roads, prisons and army barracks throughout Italy. The deals were just the latest in a series of securitisations designed to reduce Italy's debt burden to meet the Maastricht criteria for European Monetary Union.

Trafford Centers

In 1999, the Trafford Centre Real Estate Securitisation provided investors with the attractive opportunity to buy securitised papers from one of the UK's premier shopping centres. Trafford Centre is a developed site located in an excellent catchment area, and before the transaction commenced 98% of its space was already let out through long term lease contracts to a broad mix of well known retailers. The structure was a two tier financing structure that was secured by the rental cash flows of the property. Proceeds from the bond were used to refinance bank debt, to pay the associated costs and to provide liquidity for the ultimate owner of Trafford Centre, the Peel Group.

Some of the latest Real Estate Securitisation deals include the following:

Vesteeda Residential Funding I B.V.

This Real Estate Securitisation securitised a portfolio of Dutch residential properties owned and managed by Vesteda, a real estate mutual fund. Vesteda was created in

1998 following the divestiture of the residential portfolio of ABP, the largest pension fund in the Netherlands. The initial portfolio, valued at EUR 3.98 billion constisted of more than 38,000 apartment units and single family houses located in 372 properties throughout the Netherlands. The issued notes benefited from a pledge of shares in the investment funds that legally owned Vesteda's properties. The interest on the notes is paid through the rental cash flows of the properties. The company's direct motivation in originating the transaction was to refinance an existing bridge loan, as part of its broader strategy to refocus its residential property business.

Schalke 04

The soccer club FC Schalke 04 in Germany has just recently raised about € 85m by securitising their ticket proceeds of the next 10 years in a private placement with UK and US institutional investors. The new built stadium functions as an additional collateral for the transaction. The money will be invested in the development of a new rehabilitation compound on the football clubs property.

Tottenham Hotspurs

Tottenham Hotspurs in the UK have just done a deal that is a mixture of bank debt and whole company securitisation. The club will draw a total of £75m to start a youth football academy and to expand its White Hart Lane Stadium. The issued bonds are secured by the underlying real estate, i.e. the football stadium.

Stora Enso

A forestry company called Stora Enso from Finnland just spun off 600,000 hectares of forest to a company called Tornator Timberland Oy, that has refinanced itself by issuing notes in a whole company securitisation. The revenues that will pay off the bond will come from a 10 year contract with Stora Enso guaranteeing the harvest sales for the length of the deal. In essence this is a sale of future cash flows from real estate (forest/land). So this is a real estate securitisation.

5 Summary and Conclusions

In conclusion of this paper, one can see that Real Estate Securitisation is an important innovation for the financing of real estate. The paper has defined Real Estate Securitisation and has demonstrated that Real Estate Asset-Backed Securities are different from Mortgage-Backed Securities and deserve to be a separate asset class.

There are a lot of benefits associated with the financing of real estate by issuing Real Estate ABS. However, there are also limits to that financing technique that have to be taken into account. With toughening credit conditions in the lending markets it will become increasingly difficult for real estate companies to finance their real estate holdings, and as it has been discussed above Real Estate Securitisation might be an alternative source of financing for the property industry. This financing tool is not applicable for all real estate, but for certain defined real estate assets. It is also not a product for every real estate holder, but only for a certain group of real estate originators. However, there is a wide array of motives why a securitisation might make sense for a property company.

As the development of this product has only just started, this method of real estate financing will become increasingly important for the property industry. RE ABS are an emerging market with a huge potential and with more real estate companies making use of this technique of financing real estate assets, there will be more innovative structures evolving that will be tailored to the specific originators' needs. In this context the market has not yet seen securitisations of proceeds from real estate project developments. However, since there is a need for real estate developers to finance their developments and due to the fact that banks will have difficulties under Basel II to finance project developments, it will only be a matter of time until a specific securitisation product for project developments will be introduced to the market.

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