



Highlights of European CRE/CMBS Primer

May 2011

Passion to Perform

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Introduction





Introduction

Most market participants including lenders, borrowers, investors, regulators and even more casual observers have long found the European CRE and CMBS markets obtuse. The fragmented nature of the lending environment, multiple jurisdictions and legal systems have been at the root of most frustrations. The market as it stands today has recovered somewhat from the credit crisis in every sense but stresses do remain. In the coming years, loans totaling hundreds of millions of Euros will need to be refinanced and will provide investment and business opportunities for many institutions. Our intent with this publication therefore, is to provide a convenient reference point for those new to the industry as well as seasoned participants and to help close any knowledge gaps to the extent they exist.

The document provides an overview of the performance and size of the CRE market in Europe, the structure of the debt market, common lending practices and a look at how the market has evolved. In regards to the CMBS market specifically, we provide an overview of credit and spread performance, deal structure and an accounting of the various transaction participants. We conclude with a summary of the processes used by the major rating agencies, a comparison of the different methodologies and some of the unique risks embedded in the European CMBS market.

Despite our attempt to include as much information as possible in an accessible format, by definition a primer can never be all-inclusive. However, we hope that you will find this primer useful and welcome feedback or comments.

- Harris A. Trifon

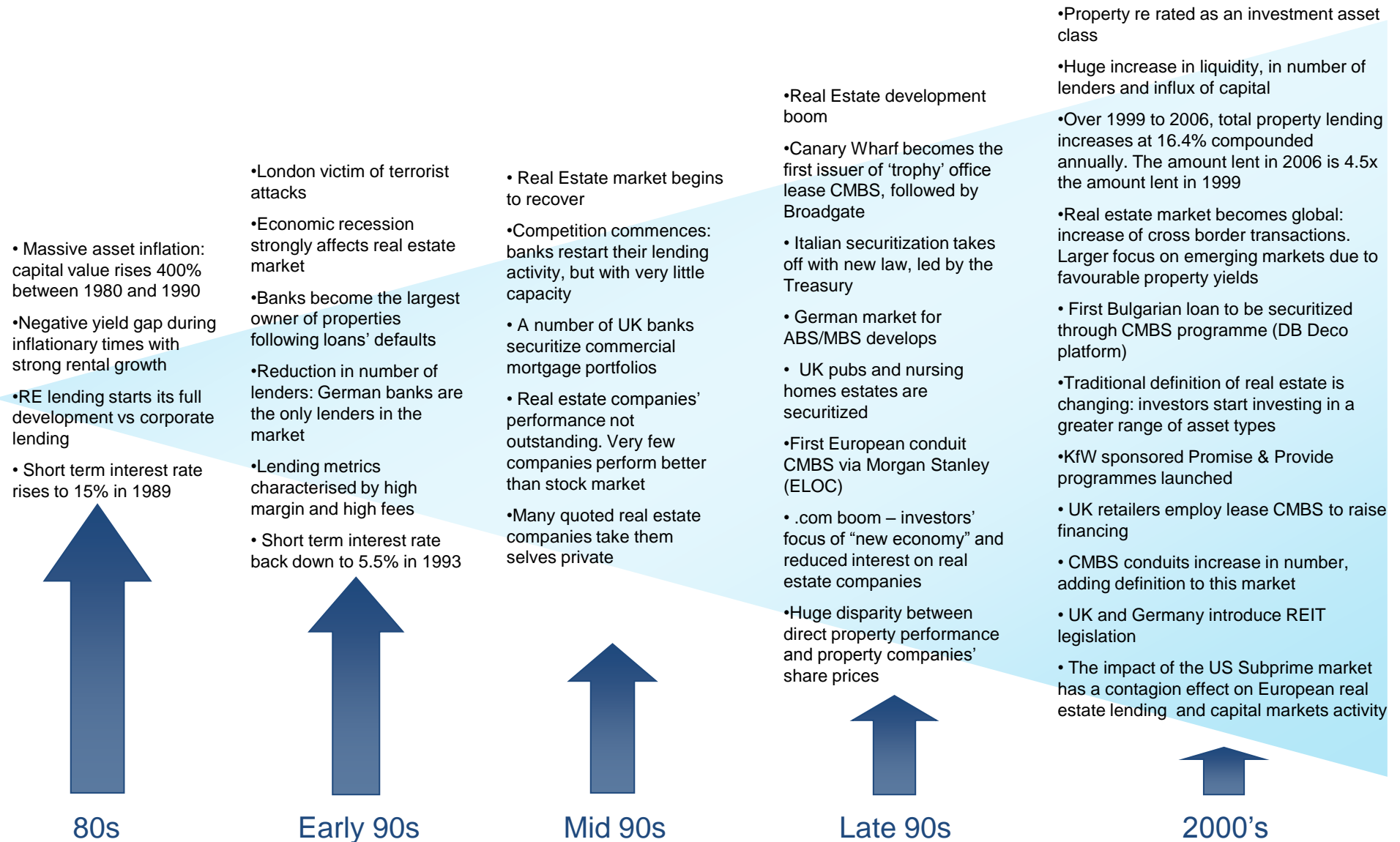
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An overview of the CRE Market



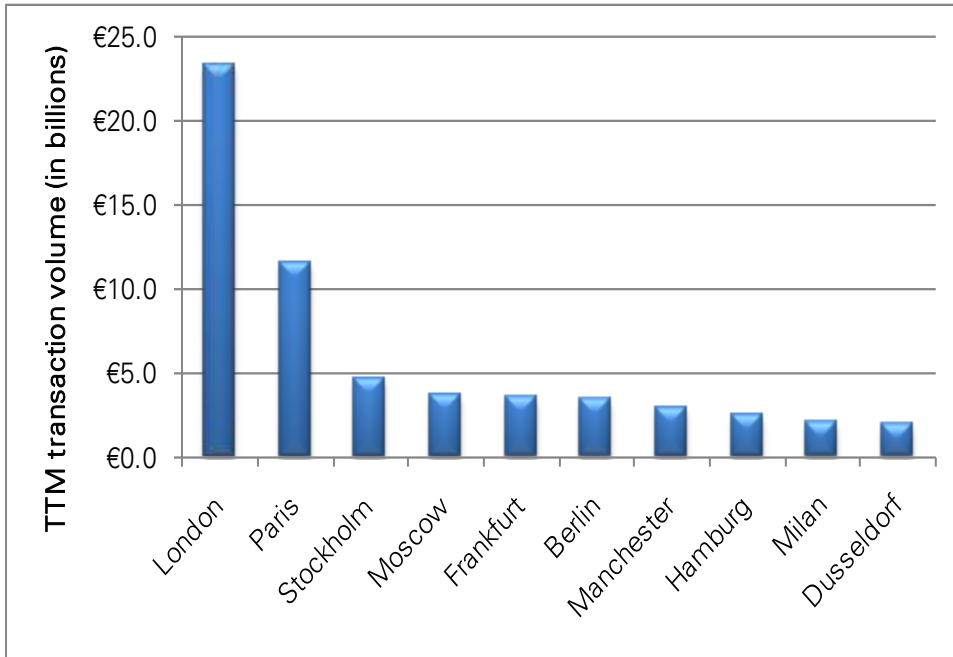


Milestones in RE markets / commercial lending



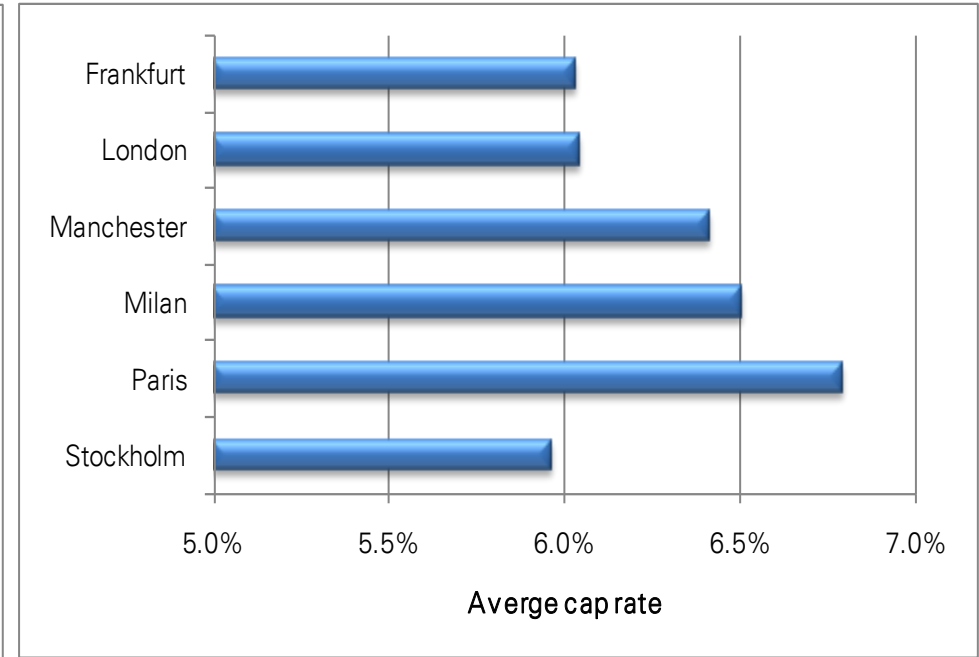


European CRE Capital Flows



Source: Deutsche Bank, RCA

- Volume in gateway markets continues to attract the majority of capital flows.
- Pension and investment funds have been the biggest buyers as they seek to deploy recently raised capital.
- Large sellers have included REITs and Banks.

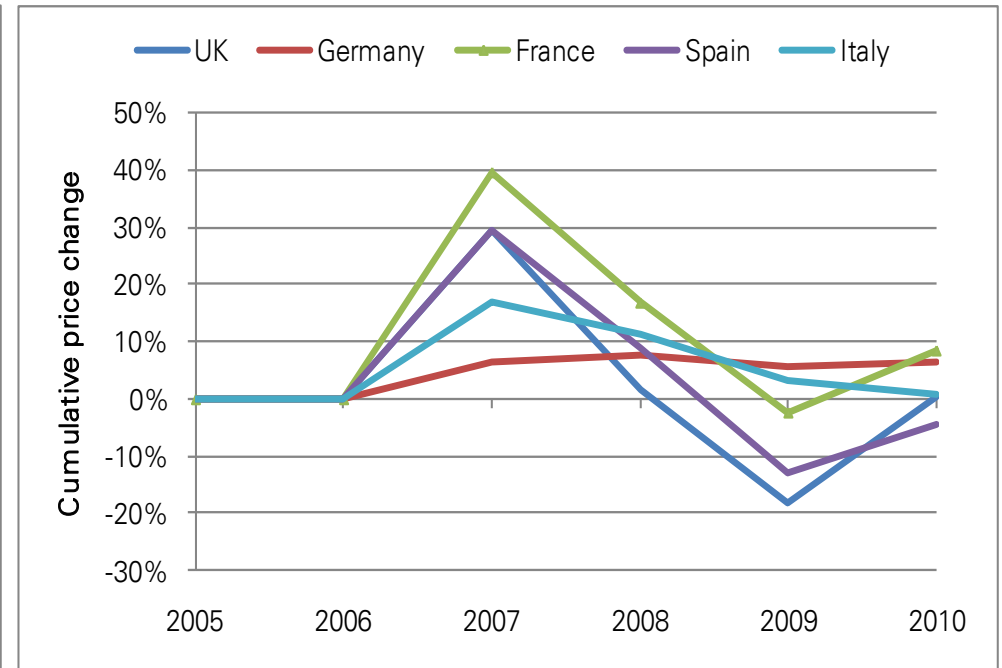
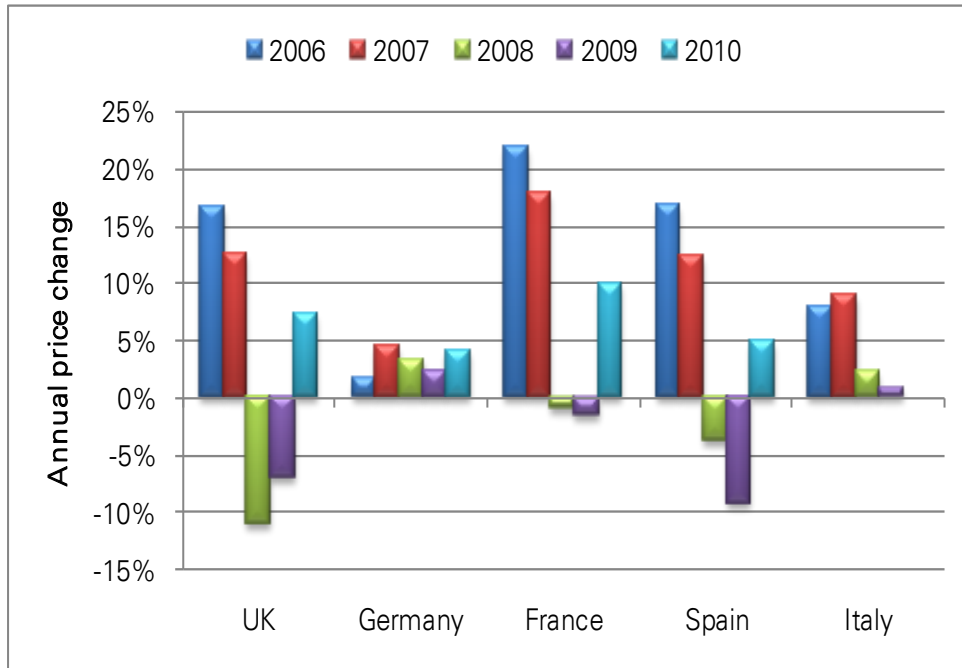


Source: Deutsche Bank, RCA

- Capitalization rates for the major markets have traded within a tight range over the last year.
- Prime assets in these markets can trade at cap rates in the 4s.



Property value volatility has been very high for 5 years



- Average appreciation in 2006 and 2007 was in the double digits but declined in 2008 and 2009
- The UK's property market was the most volatile – averaging +/-11% annual changes

- Property prices have largely recovered to pre-crisis levels
- 5-year returns in France and Germany are approaching 10%

Source: Deutsche Bank, IPD



Average lease terms

Country	Term	Break	TI	Costs
United Kingdom	10 years	3-5 years	GBP 50-100/sqft	Leasing Commissions: 5-7.5% of annual rent Legal Fees: 5% annual rent
Germany	5 years	rare	EUR 750-1000/sqm	Leasing Commissions: 3 months net rent (5% of rent on 5-yr lease) plus 19% VAT Legal Fees: under German law RE companies may not offer legal advice. Tenants pay a lawyer to review contracts.
France	3/6/9 years	every 3 years unless a "firm" 6 or 9 year lease	EUR 400-600/sqm	Leasing Commissions: 15% of first year's rent plus VAT 19.6% Legal Fees: vary depending on needs.
Italy	6+6 years	6 years with 12 months notice	EUR 600-1200/sqm	Leasing Commissions: 10-15% of one year's rent plus 20% VAT Legal Fees: typically minimal Registration Tax: 1% of rent split 50/50 with tenant
Spain	3 or 5 years with 2 or 3 year renewal option	rare	EUR 350-750/sqm	Leasing Commissions: 12-15% of first year's rent plus 18% VAT Public title: notary & registry 0.5 - 1.0% each and Stamp Duty of 0.5 - 1.5% Building and Commerce licenses - 4 - 5% of fit-out
Ireland	20-25 years	10 years, 15 years or both with 6-12 months notice and 6-12 months rent penalty.	EUR 550-1100/sqm	Leasing Commissions: up to 10% of annual rent plus 21% VAT Legal Fees: 10% of first year's rent plus 21% VAT

Source: CBRE

The CRE Debt Market





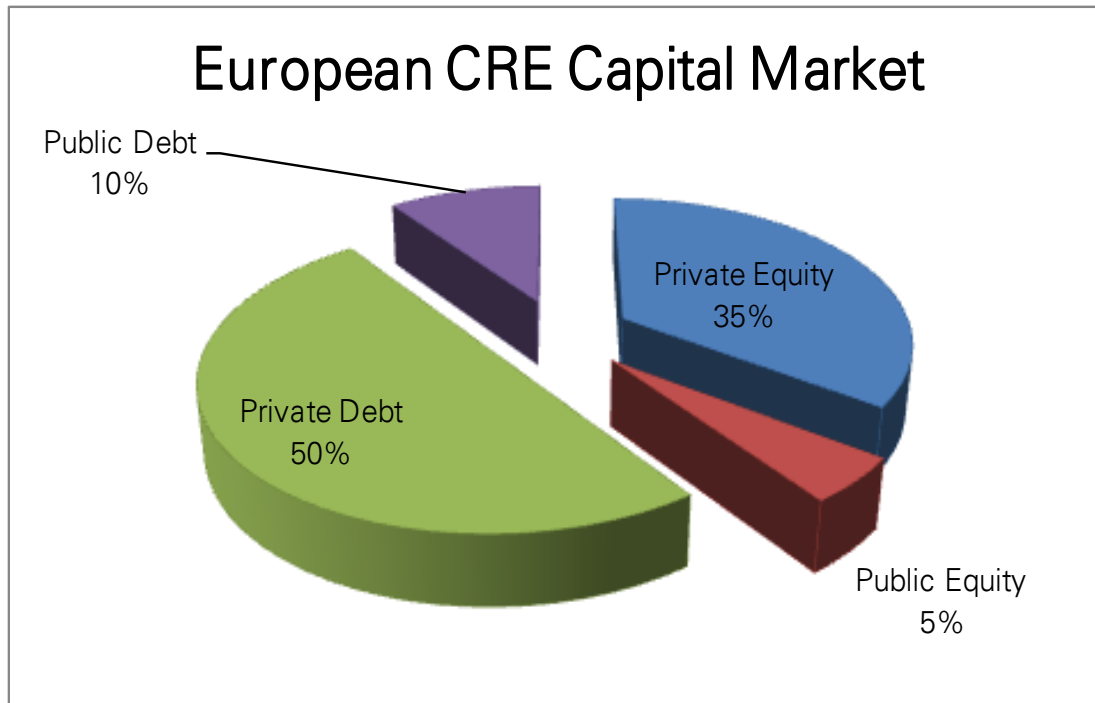
An overview

- The banks continue to hold a large portion of all commercial real estate mortgage financing in Europe.
- CMBS grew consistently prior to the credit crisis but continues to be a relatively small portion of total commercial real estate lending in Europe.
- Legacy credit issues and changes to capital adequacy rules (Basel III) will allow the CMBS market to grow again at the expense of the bank loan market.
- A wave of maturing loans will hit the market over the next few years and provide opportunities for lenders and investors across the risk spectrum.



RE capital markets – Europe

Total European Real Estate Capital Market, Year End 2010
(€1.8 trillion)



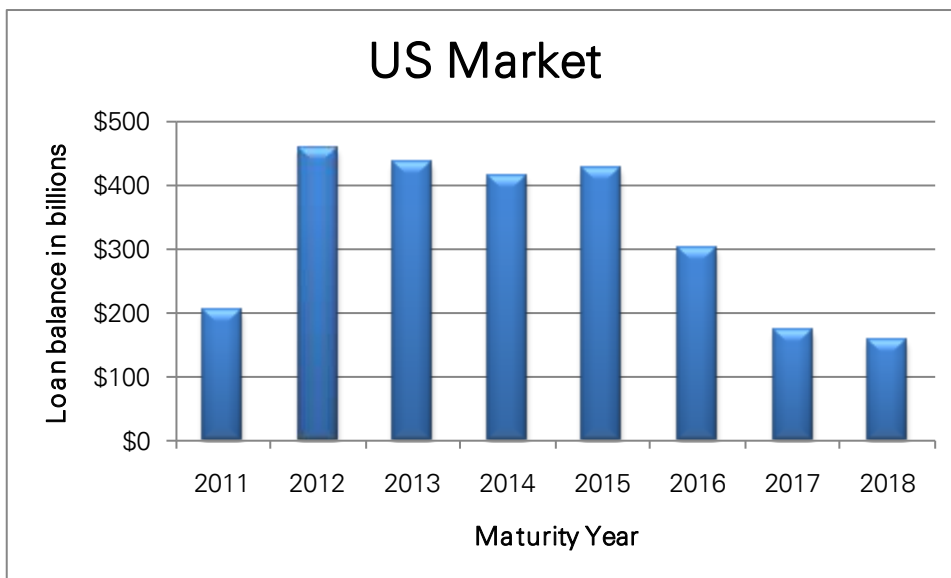
- We estimate the size of the market has declined by 30% over the last four years
- Most of the declines have been due to reduction in private equity

Source: Deutsche Bank, Intex, CBRE, De Montfort University, DTZ, BOE

Note: Private debt refers to all real estate debt that is not held in the form of listed financial securities.



Maturing loans are a concern in the US and Europe

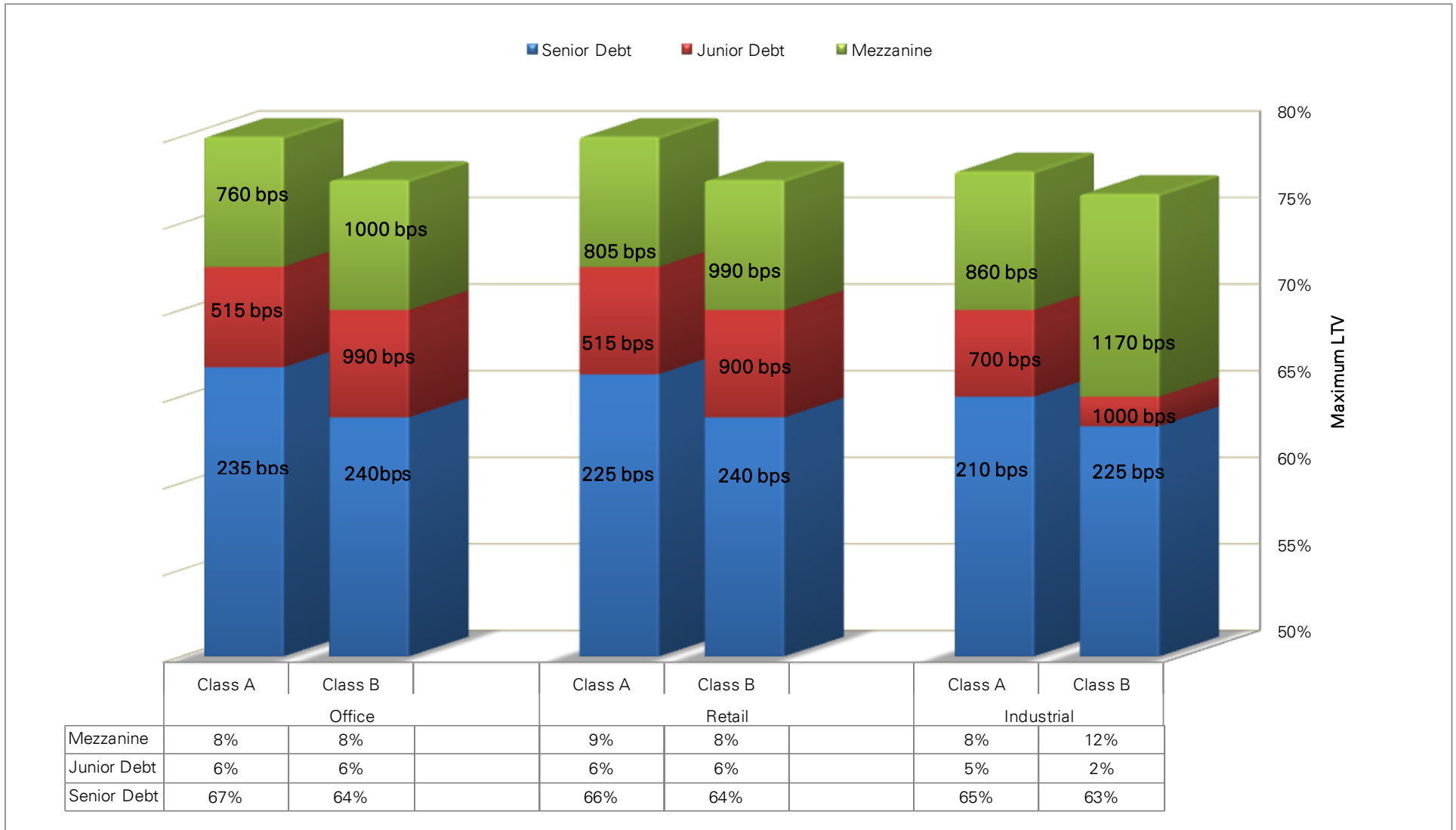


- More than €500B of loans mature in the next 30 months
- At least €100B of additional equity will be needed to recapitalize these loans
- The profiles of the maturity schedule in both the US and European markets are very similar. However, the US market is more 2x larger

Source: Deutsche Bank, Intex, Federal Reserve, CBRE, De Montfort University, DTZ Research



Margins are very high for subordinate debt across property types and even for Class A properties



Source: Deutsche Bank, De Montfort University

CRE Loan Structuring





CMBS loans vs. Balance Sheet loans

- The origination process for CMBS loans and balance sheet loans is not substantially different. Most of the differences, where they do exist, are structural in nature.
- Examples of structural differences include:
 - loan term
 - hedging
 - prepayments
 - substitutions
 - additional drawings
 - insurance
- In addition, CMBS loans are structured to meet certain rating agency criteria in order to achieve optimal credit enhancement levels (see the rating agency section for more details.) This will have a bearing on the type of loans that are originated as it pertains to their incorporation in a CMBS transaction. Usually, only those loans that are secured on income-producing properties are included.



Standard terms of a European CMBS loan

	CMBS Loan Standard Terms
Borrower Type	■ Special Purpose Vehicles (SPVs)
Loan Type	■ Fixed Rate or Floating Rate hedged at the Borrower Level ¹
Loan Term	■ Typically medium (3-7 years)
Financial Covenants	■ LTV, ICR/DSCR, Cash Trap triggers
Release Premium	■ Upon asset sale, typically between 110% - 130% of ALA
Substitution	■ Not permitted
Development	■ Not permitted
Security	■ Standard Security Package is described below
Other Covenants	■ Property Manager ■ Bank Accounts ■ Insurance
Prepayment Penalties	■ May cover full life of the loan

1) Interest rate to be paid in full. No discounted interest rate methodology applies in CMBS loans.

Source: Deutsche Bank



Loan Term and Hedging

- Loan Term
 - In the European market CMBS loans are typically medium term facilities: three to seven year term as opposed to the loans in US market which generally have ten year terms.
 - The term profile is designed to satisfy investor requirements. Loans with extension options and longer maturity can be securitized, but investors' interest for longer dated bonds is not as strong as for medium term bonds.
 - Long-term CMBS (>20 years) tend to be issued in the form of fixed-rate notes and the loan/loans are expected to amortize down to a nominal sum by maturity.
 - Because of the above, balance sheet lenders have greater flexibility in the term of the loans offered and the amount of debt outstanding at maturity.

- Loan Type (Hedging)
 - CMBS loans are fully hedged against interest rate movements. Most CMBS lenders adopt the solution of advancing funds to the borrower at a fixed rate.
 - Full interest rate hedging can also be achieved through an interest rate swap or cap at the borrower level: these hedging instruments can be used in loans intended for CMBS, but hedging documentation has to comply with rating agency swap criteria (i.e. hedging counterparty minimum short term rating).
 - Many balance sheet lenders also require full interest rate hedging but tend to be more flexible with their hedging requirements.



I/O and Amortizing Loans

- CMBS and Balance Sheet loans are either interest-only loans (IO) or amortizing loans. The latter type of loans will amortize according to the paydown mechanics described in the loan agreement.

- Principal Paydown Mechanics:
 - Hard scheduled amortization: a fixed debt amount will have to be repaid on each payment date. Failure to make this payment will result in a loan Event of Default (EoD).
 - Soft scheduled amortization: same as hard scheduled amortization, but failure to make the payment will not result in a loan EoD prior to loan maturity.
 - Cash sweep: loan is repaid depending on excess property cash flows generated each period.
 - Cash trap: normally triggered after the occurrence of a financial covenant breach. Available cash may be applied immediately to pay down debt or may be collected in a pledge account and made available to cover debt service shortfalls and repay principal upon loan event of default.



Prepayments and Property Substitution

■ Prepayment

- In the past, CMBS loans did not allow for prepayments
- In response to increased pressure from both borrowers and competitors, CMBS loans began to allow for full or partial prepayment (subject to fees)

Prepayments – main considerations:

- 1) Loss of margin income: the originator will normally define a set of prepayment fees in order to limit the effect of this loss. Loan prepayments may also create Available Funds Caps issues at the CMBS level (see the CMBS Structure section for more details)
- 2) Adverse selection: quality of the remaining CMBS pool may deteriorate if better loans are the ones to prepay
- 3) Timing of the prepayment: there should be a restriction preventing loan prepayment on any date other than a payment date. This is not applicable for balance sheet lenders

■ Property Substitution

- As per prepayment penalties, property substitution is a flexibility that was introduced in CMBS before the credit crisis to accommodate borrowers
- However, the loans have stringent criteria governing a borrower's ability to substitute



Loan's Security and Bank Accounts

- Basic security packages would not generally differ between a CMBS loan and Balance Sheet loan. However, balance sheet lenders generally have more flexibility. The security package for a CMBS loan will typically include the following:
 - first ranking security over the property
 - assignment of rental income from the property
 - first ranking security over bank accounts
 - first ranking security over the share of the borrower(s)
 - first ranking security over all agreements relating to the ownership and management of the property, including insurance where permissible
- Bank account structures are normally more complex for CMBS loans than for Balance Sheet loans. Complexity is designed to protect income from the properties from potential insolvency of the borrower
- In CMBS loans, borrowers normally have no control over the bank accounts in which the rental income is paid



Borrower Structure and Covenants

- Commercial mortgage loans are typically made to borrowers in the form of Special Purpose Vehicles (SPV) and made on a non-recourse basis
- Borrower structure and domicile assume a greater relevance when a loan is originated for CMBS execution
- In order to minimize the insolvency risk, CMBS loan agreements will normally restrict the powers and activities of the borrowing entity. Typical set of covenants would include the following:
 - use of newly formed entities or entities formed at the time of the acquisition of the property
 - contractual restrictions on activities, objects, powers and debt limitations
 - non-petition and separateness covenants
 - independent director
 - no employees



Loan Covenant Packages

- The majority of loan covenants are common for both CMBS loans and balance sheet loans. The covenant package for a CMBS loan would typically have the following:
 - Quarterly investment reports: loan agreement to require that the borrower provides comprehensive portfolio information on a quarterly basis
 - Borrower's structure and its activity: loan agreement to contain covenants controlling and restricting the activities of the borrower (please refer to borrower section below)
 - Insurance arrangements: items covered and the provisions of payments tend to be the same between CMBS and balance sheet loans. However, CMBS loans will require a minimum rating for the insurance provider. Coverage should include: third-party liability insurance; building liability insurance; insurance cover for damage to the property; delay or shortfall of rent insurance – business interruption; and terrorism insurance (if available)
 - Financial covenants: typically LTV and ICR/DSCR. Absence of a comprehensive financial covenant package will not preclude CMBS exit, but may affect rating agencies' feed back
 - Managing agent: for loans destined to CMBS, loan agreement needs to ensure that suitable managing agent is appointed (relevant for rent collection)
 - Issuing vehicle: for CMBS loans, the loan agreement needs to permit the assignment and transfer of the loan and its security to a third party (in this case the CMBS Issuer)



Documentary CPs

- A CMBS lender will require the satisfaction of documentary CPs. These have to be in form and substance satisfactory to the lender and typically include:
 - 1) constitutional and corporate documents relating to the borrower and other obligors;
 - 2) valuation and other due diligence reports (legal due diligence reports, environmental due diligence reports, tax and accounting due diligence reports); and...
 - 3) all signed security documents.



Property and Loan Due Diligence

- Property due diligence is a key area in the CMBS loan arrangement process – the property is the source of the Cash Flow Value and the Capital Value

- The property due diligence will have several aspects:
 - 1) legal due diligence (which considers the title position and the leases);
 - 2) valuation (which considers the value of the property);
 - 3) technical/structural due diligence (often, but not invariably, obtained and relating to the physical characteristics of the property);
 - 4) environmental due diligence (again often but not invariably obtained and relating to any environmental issues affecting the property).



Less standardization in Europe compared to the US market

- In the US, the CMBS market grew from distress in commercial real estate due to overbuilding and general oversupply leading to reduction of lending by traditional real estate lenders and demand for liquidity
- In contrast, the European CMBS market was introduced to a market of immense liquidity and relationship based lending practices
- Therefore, CMBS loans in Europe are less standardized with differing
 - LTVs
 - amortization schedules
 - hedging (or lack thereof)
 - mortgage security (or lack thereof),
 - asset classes (including bingo halls, hospitals, nursing homes, pubs, CentreParcs)

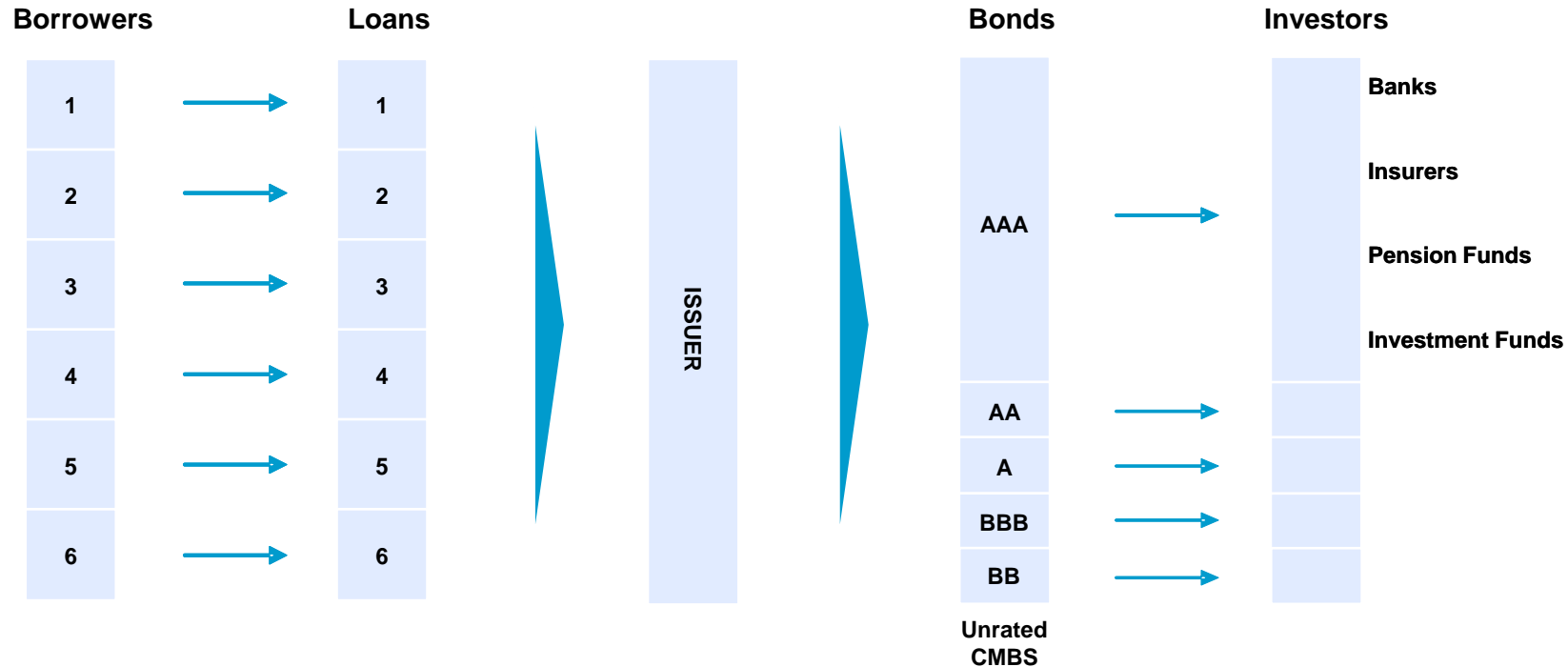
CMBS Market Performance





European CMBS summary

Multiple Borrower / Multiple Properties are the dominant form of CMBS deals.

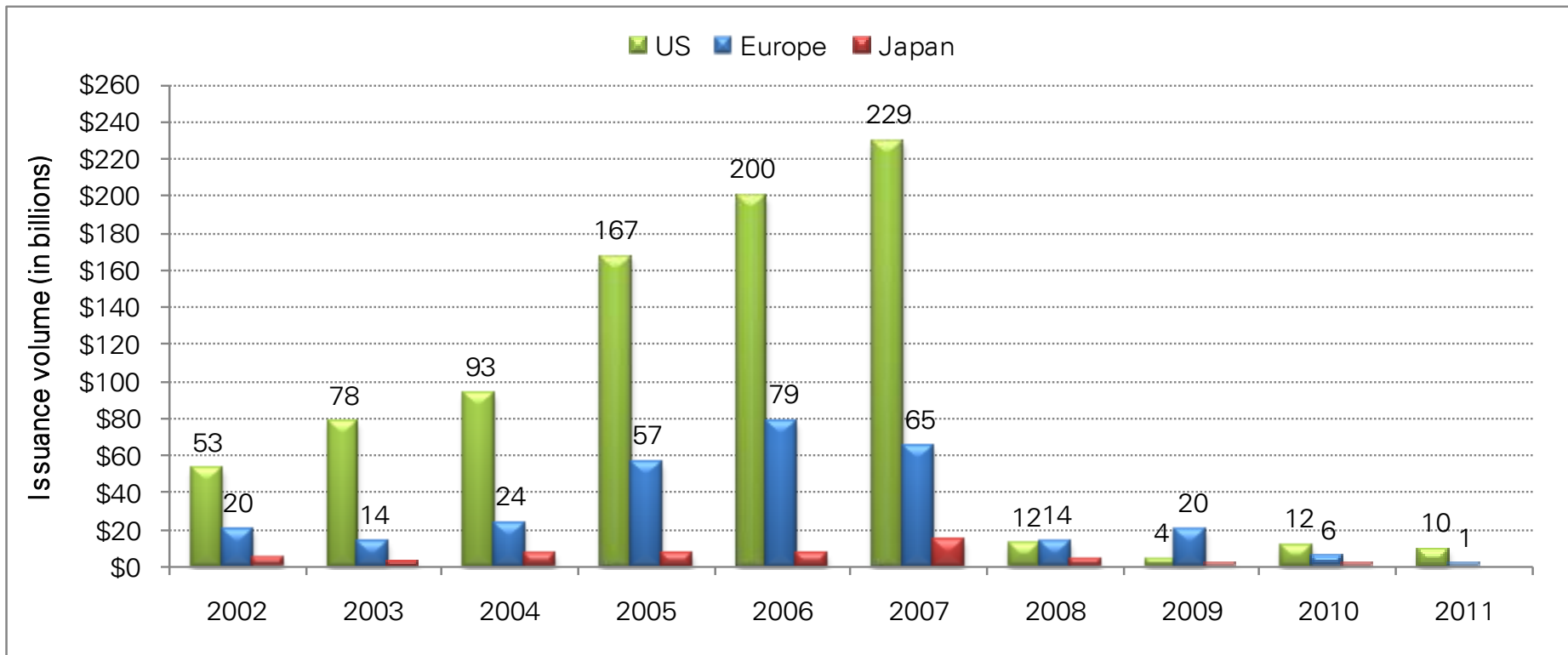


In addition to the transaction type above, other major types of European CMBS transactions are:

- Single Borrower – Single / Multiple Properties
- Synthetic / Agented CMBS Transactions
- Whole Business CMBS Transactions
- Credit Tenant Lease



CMBS global issuance

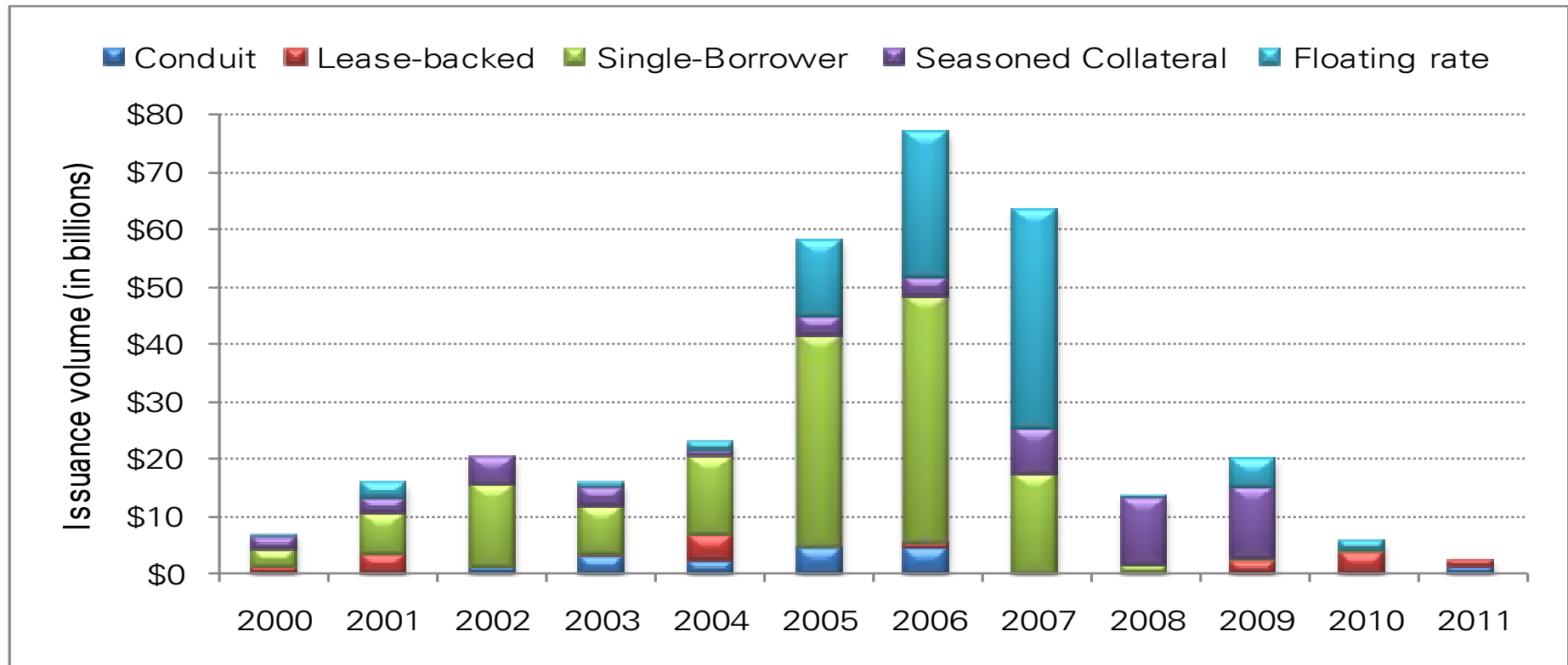


Source: Commercial Mortgage Alert

- Total CMBS issuance in 2007 was over \$300B but declined to \$17B last year
- The European issuance market has been effectively closed for two years but will reopen later this year
- We expect 2011 issuance to be around \$1B and potentially \$5-\$15B in 2012



European Issuance



Source: Commercial Mortgage Alert

- As issuance volumes began to markedly increase in 2005, multi-borrower deals became more prevalent and ultimately in 2007 were able to displace single-borrower deals as the dominant deal type (59% share).
- In the first two years since the credit crisis, more lease-backed transactions have been issued than in the previous seven years.



Quick comparison of European and U.S. loans

	European Loans	US Fixed Rate Loans	US Floating Rate Loans
Coupon	Fixed + Swap	Fixed	Floating
Term	3-7 years	7-10 years	2-5 years (plus extensions)
Prepayment Penalties	Light prepayment penalties usually 2-3 years	Defeasance	Light prepayment penalties usually 2-3 years
Financial Covenants*	LTV, ICR/DSCR, Cash trap triggers	No	Not commonly featured
Collateral	Mostly Stabilised	Stabilised	Transitional
Recourse	Non-recourse	Non-recourse	Non-recourse
Bad Boy Carve-outs	No	(i) fraud, (ii) gross negligence, and (iii) misappropriation	(i) fraud, (ii) gross negligence, and (iii) misappropriation

Source: Deutsche Bank



Buyers of European CMBS

There are three key categories of CMBS investors:

1) AAA/Aaa only

- Generally risk-averse investor base
- Insurance Co's, Pension Funds, Central and Government Sponsored Banks

2) Variable Up and Down the Capital Structure

- Investors who seek a suitable risk-adjusted spread
- Banks and Building Societies, Fund Managers, Leveraged Accounts, Insurance Co's

3) Mezzanine/B-Note Focus

- Yield driven
- Hedge Funds, Investment Funds, Banks – positions retained, Banks – Special Situations Groups, Property Companies



Sample Deal Summary – DECO 2005-E1X

- The first DECO Pan European deal characterized by small size loans and reasonable leverage/debt yields. All the loans in the pool that have reached maturity have been successfully refinanced. The allocation of cash flow to the notes is pro-rata.
- The pool is comprised of three loans in Germany (78%) and Switzerland (22%). The largest property concentrations are office (44%), multifamily (35%) and mixed use (22%).
- The largest loan in the pool, Deutsche Post (44%), is secured by seven office properties in Germany (6 in Berlin, 1 in Cologne). The Properties are generally 3-5 story office buildings, constructed in the late-1800's. Most of the net rentable area is used as office space with some space configured for retail use, telecommunications/data storage and storage space.
- The largest tenants are Deutsche Post (61% of rent) and Deutsche Telekom (10%); no other tenant accounts for more than 4% of rent. Since the downgrade of Deutsche Post (BBB+/Baa1), all excess cash has been trapped in a deposit account (currently amounting to €956k).

Source: Deutsche Bank and rating agency reports

CMBS Structure





Characteristics of Rated CMBS deals

Conduit / Fusion

- Combination of conduit and large loan collateral, size ranges between €1billion – €2.5 billion
- Around 10-20 loans on average, top 5 loans >40% of deal
- Given no real conduit pools in Europe, the smaller loans which would have gone to a conduit pool, tend to be of lower quality compared to the larger loans
- Single asset, single borrower – secured by mortgage on one ‘trophy asset’
- The tendency is to include these in fusion transactions as there is a pooling pick up
- Same as in the US, the focus is on sponsorship, management expertise, local market conditions, property quality and loan structure
- Capital structure below BBB- / BB is typically sold as B-note.

Large Loan

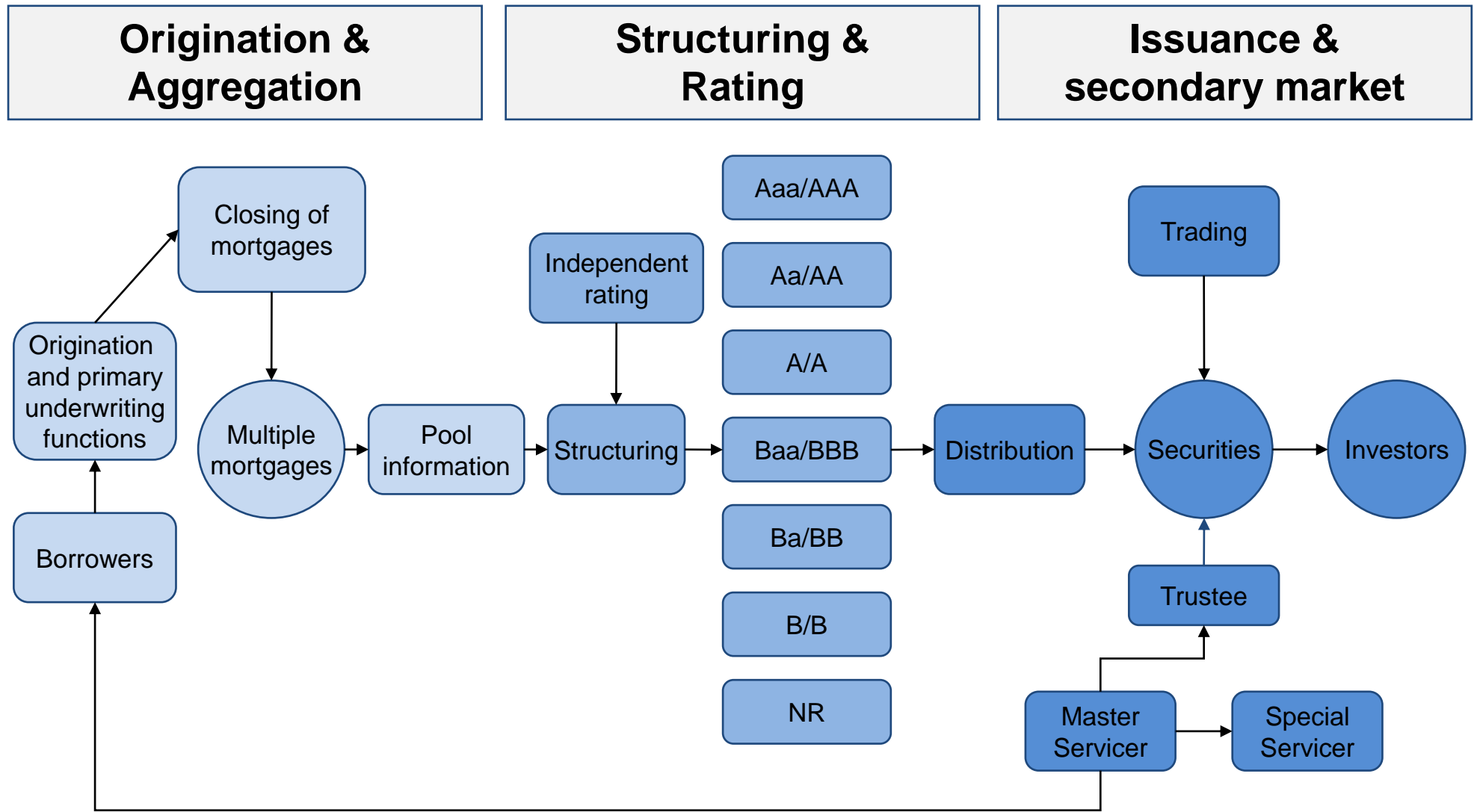
- Backed by a small number of large mortgage loans
- Collateral pool cross-collateralized / cross-defaulted
- Less common as large loans can be more efficiently securitized as part of fusion transactions – Large Loan transactions seen in cases of agented transactions or esoteric assets (e.g. Bingo Halls and pubs)
- Capital structure below BBB- / BB is typically sold as B-note.

Synthetic / Agented Loans

- Backed by a small number of large mortgage loans
- Collateral pool cross-collateralised / cross-defaulted
- Less common as large loans can be more efficiently securitized as part of fusion transactions – Large Loan transactions seen in cases of agented transactions or esoteric assets (e.g. Bingo Halls and pubs)
- Capital structure below BBB- / BB is typically sold as B-note.



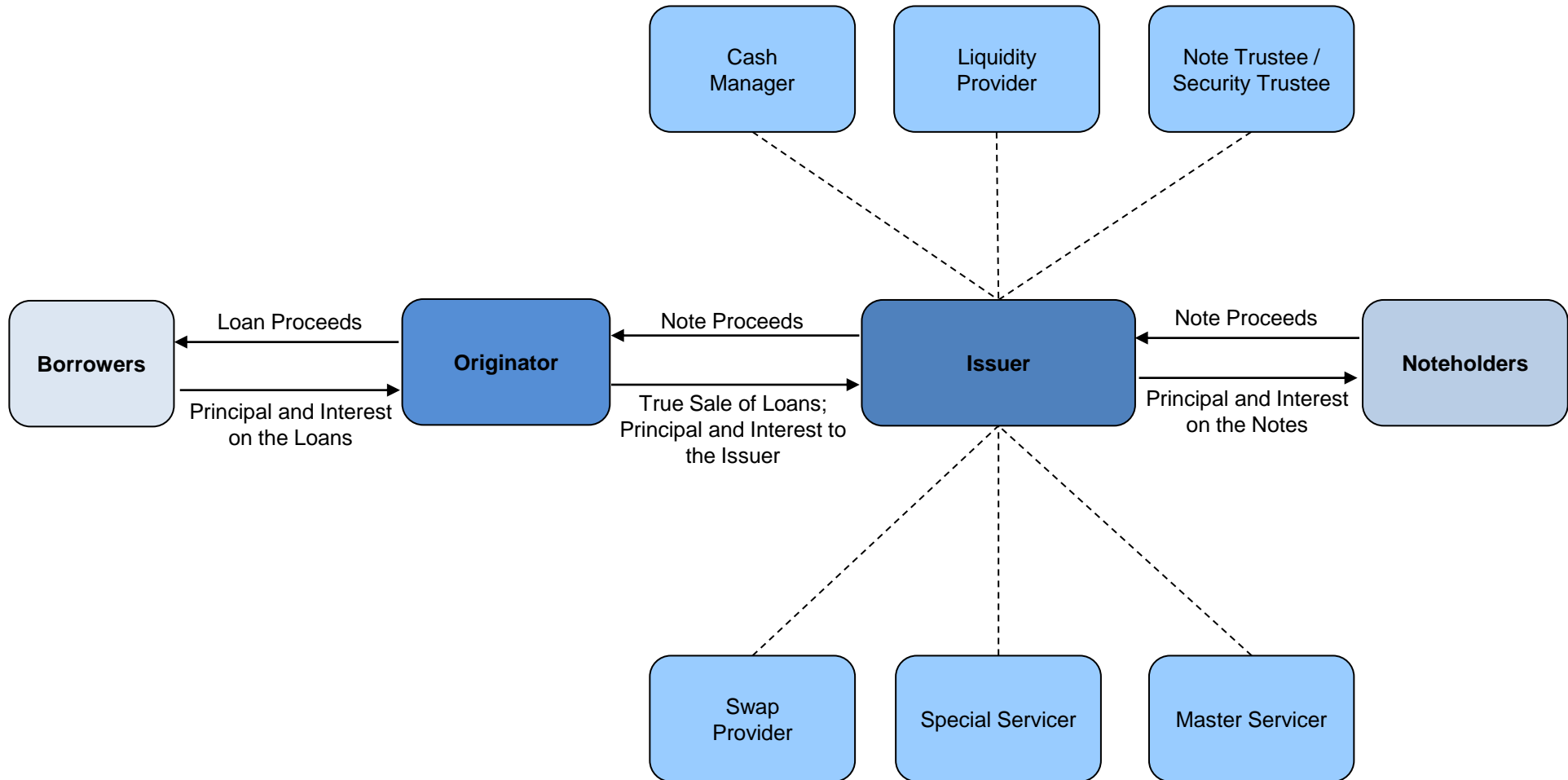
CMBS Lifecycle Flowchart



Source: Deutsche Bank



Conduit Deal Structure



Source: Deutsche Bank



Waterfall Type Summary

Allocation	Description
Sequential	Principal is allocated to the most senior notes outstanding until these have been repaid in full.
Pro rata	Principal funds are allocated to each class according to its fraction of the total amount of notes outstanding.
Modified pro rata	Principal funds are allocated with a mix of pro rata and sequential payment. Typically, 50% of funds are allocated pro rata and 50% sequentially.
Principal buckets	Principal funds are distributed to note tranches according to specific ratios determined on the basis of credit enhancement for each loan.
Capped sequential	Principal funds are applied sequentially in repaying the notes; however, the allocation to each class of notes is capped at the loan's deemed contribution to that specific class.

- The application of losses and recoveries to the various notes in a transaction can be varied. This is in direct contrast to the U.S. Market where nearly all transactions utilize a sequential allocation.
- The non-standard allocations present one of the more significant challenges to U.S.-based investors interested in participating in the market.

Source: Deutsche Bank



Investor reporting

In May 2011, the CREFC released a new version of the investor reporting package. This is the second version, the first came out in 2005. The additional data fields will provide more transparency which ultimately should result in more liquidity. The difference in the two versions are:

- Data fields can be used for various loan structures such as whole loan, securitization, syndication and A/B loan positions.
- Re-defined field definitions, which clarify key concepts.
- Introduction of minimum required fields - key fields that should be populated for basic transaction information flow.
- Introduction of standards for calculating key financial indicators such as interest coverage ratios, debt service coverage ratios and loan to value ratios.
- Financial calculations can be based on the loan agreements and loan structure participation levels.

CMBS Ratings Process



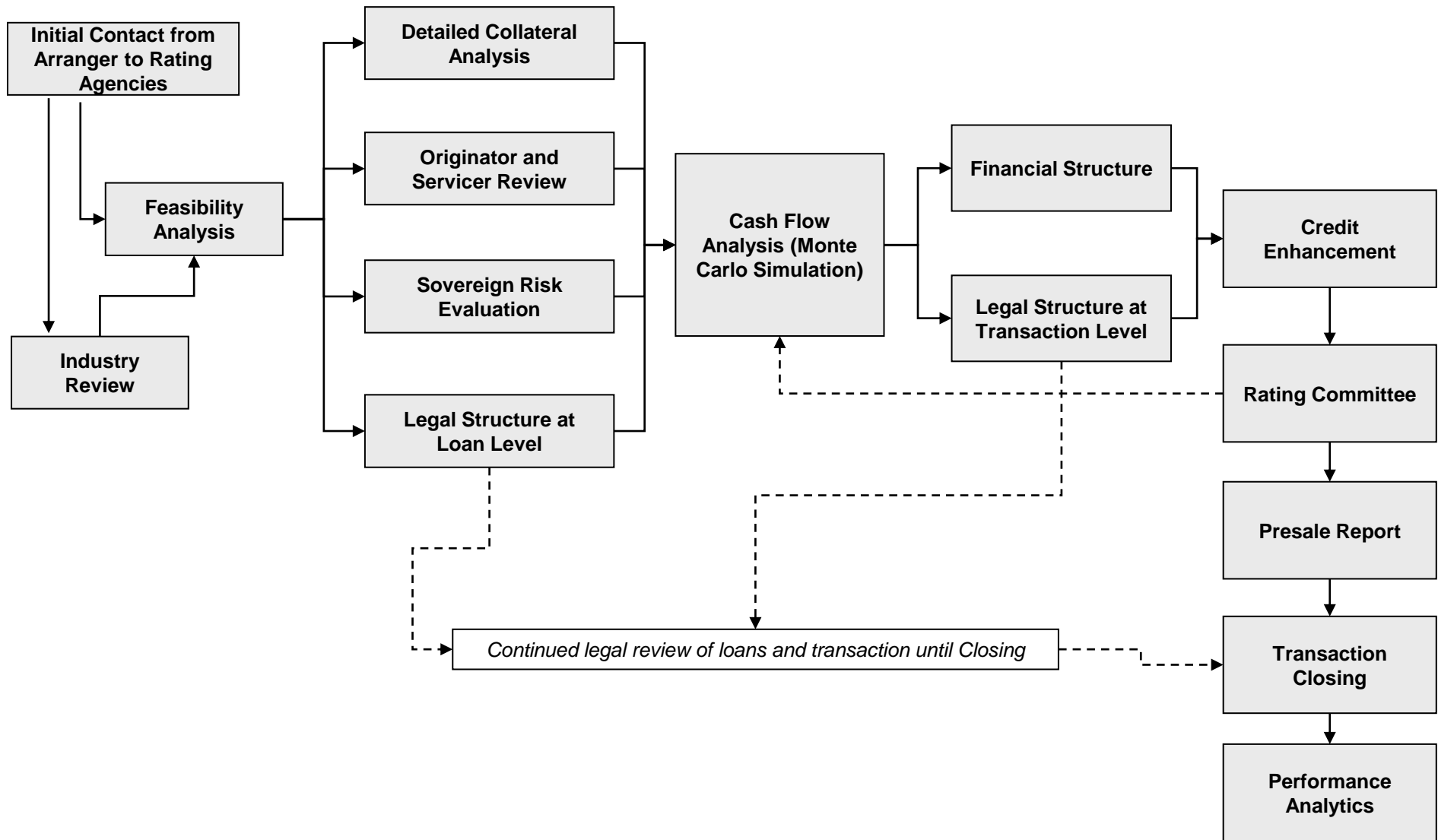


Rating Agency Approach

- The three primary rating agencies (Fitch, Moody's, S&P) rate CMBS bonds according to their own separate methodologies. However, there are substantial similarities in their approaches. Each agency breaks down the analysis into 3 components: real estate; loan; bond.
 - *Real Estate*: the tenant level cash flows and property market values are stressed to assess the ability of a loan to be serviced both during the loan term and post refinance. Each portfolio of real estate is assessed in terms of the diversity and quality of tenants, lease expiration profile, supply and demand characteristics in the local areas and the quality and marketability of the real estate.
 - *Loan*: analysts will discuss the treatment of individual loans to reflect non-quantifiable factors such as loan servicing, A/B intercreditor agreements, etc.
 - *Bond*: the agencies will assess the impact of the transaction's structure on the bond payments in terms of principal paydown waterfalls, and any potential available funds caps on lower rated tranches. This exercise is typically done by running a variety of loan prepayment scenarios to see their impact over the life of the notes.



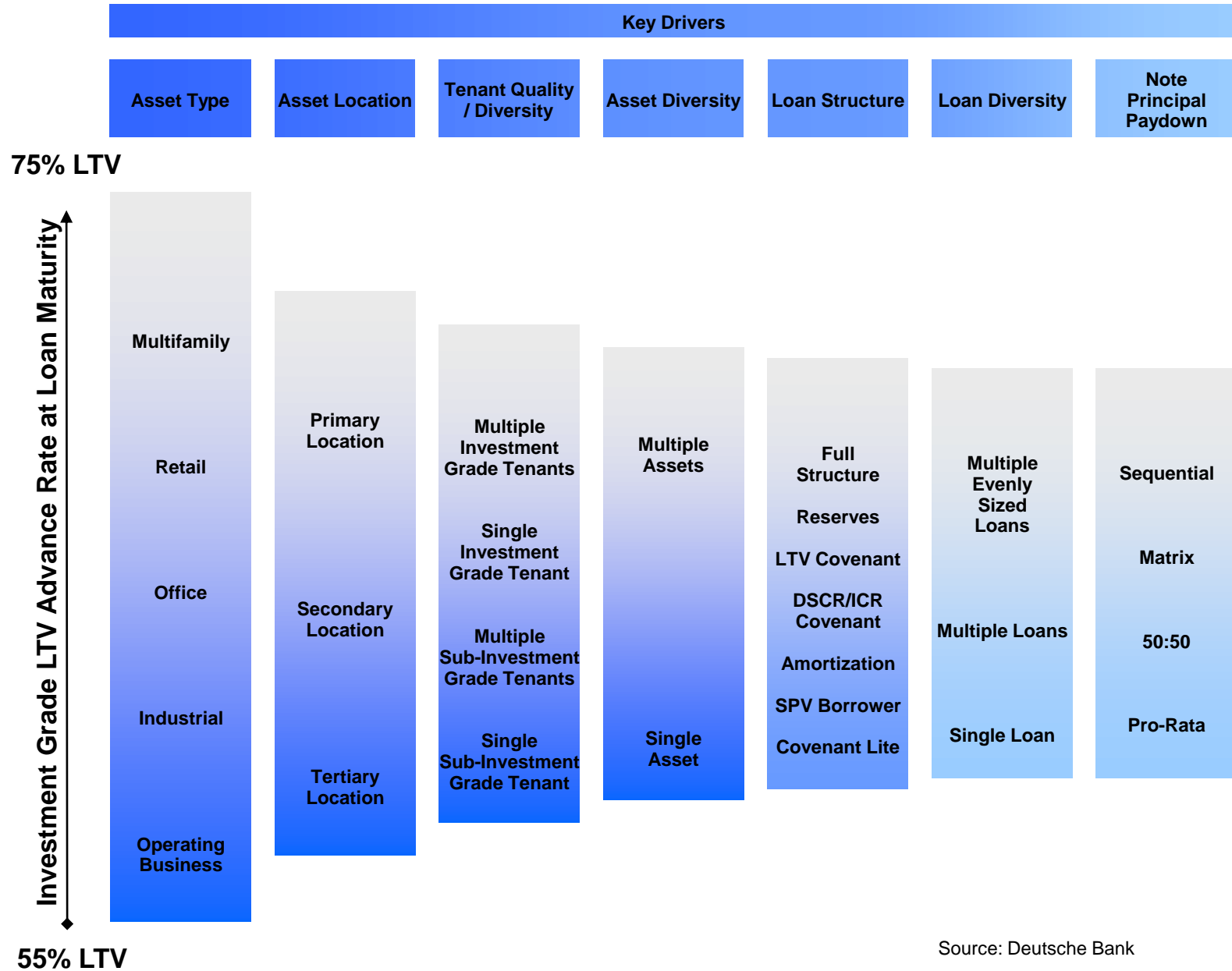
Ratings Process Flowchart



Source: CMSA-Europe Conference 2007



Rating Drivers



Risks in CMBS Investing





The Basic Credit Risks of CRE Loans

- The macro and micro location of a commercial property is the primary driver behind the overall success or failure.
- There is only one source of value from which debt service is made – the property. A CMBS loan should be structured to preserve and exploit the Cash-Flow Value and the Capital Value. The property in turn has two significant commercial characteristics:
 - its ability to generate periodic cash-flow and
 - its value upon a sale or refinancing.
- Property due diligence is a key area in the CMBS loan arrangement process. The property due diligence will have several components:
 - legal due diligence (which considers the title position and the leases);
 - valuation (which considers the value of the property);
 - technical/structural due diligence (often, but not invariably, obtained and relating to the physical characteristics of the property);
 - environmental due diligence (again often but not invariably obtained and relating to any environmental issues affecting the property).

Legal Risks



Risk	UK	Germany	France	Italy
Typical Security Package	Security over real estate assets is taken pursuant to a mortgage. Security is also taken over the equity interests of the property owning entity, various receivables (including rent generated by the real estate) and bank accounts and amounts credited to them. In addition, all assets of the borrower not otherwise secured may be secured by way of a floating charge.	Security over real estate assets is taken pursuant to a mortgage (Grundschuld). Security is also taken over the equity interests of the property owning entity, various receivables (including rent generated by the real estate) and bank accounts and amounts credited to them.	Security over real estate assets is taken pursuant to holders privilege (privilege de preteur de denier) or a mortgage (hypoteque). Both forms of security interest have substantially similar effects. Security is also taken over the equity interests of the property owning entity, various receivables (including rent generated by the real estate) and bank accounts and amounts credited to them.	Security over real estate assets is taken pursuant to a mortgage (hipoteca). Security is also taken over the equity interests of the property owning entity, various receivables (including rent generated by the real estate) and bank accounts and amounts credited to them.
Typical Enforcement Process for the Mortgages	The typical way of enforcing a mortgage is through the mortgagee exercising its power of sale, itself or through a receiver.	There are two processes recognised by German law for mortgage enforcement; The first is compulsory sale (Zwangsvertsteigerung) by way of court ordered public auction. The second is a court ordered compulsory administration (Zwangsverwaltung). In the latter case, the administrator alone is entitled to receive all income generated by the mortgaged property, including	Mortgage enforcement process is prescribed by law and is court driven. The debtor has the right to raise objections to the enforcement process which must be determined by the court in which enforcement is taking place.	Mortgage enforcement process is prescribed by law and is court driven. The sale can either be by way of a court ordered tender or public auction. Alternatively, the court may appoint a public notary to undertake the sale process.
Overall Enforcement Environment	Until September 2003, very favourable to creditors. This notwithstanding, England and Wales remains the friendliest toward secured creditors.	Creditor friendly. Although secured creditors do not control the post-insolvency process, they are able to take and retain security over substantially all the assets of a German company.	The new French insolvency regime is intended to promote rehabilitation. Accordingly, in the event that either the preservation procedure or the recovery procedure is applied to the borrower, enforcement action will be limited. However, the risk of this is mitigated by the nature of the borrowers as limited purpose entities.	The Italian enforcement environment is not regarded as creditor friendly. In order to mitigate the legal risks, lending structures involve non Italian holding companies and use of fund vehicles which are immune from insolvency processes.
Typical Timeframe	12 months	12-24 months	Two to three years but in some cases up to 5 years	up to 8 years



Appendix 1

Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst about the subject issuers and the securities of those issuers. In addition, the undersigned lead analyst has not and will not receive any compensation for providing a specific recommendation or view in this report.

Harris Trifon

Regulatory Disclosures

1. Important Additional Conflict Disclosures

Aside from within this report, important conflict disclosures can also be found at <https://gm.db.com/equities> under the “Disclosures Lookup” and “Legal” tabs. Investors are strongly encouraged to review this information before investing.

2. Short-Term Trade Ideas

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