

**A CASE STUDY OF SOUTH AFRICAN COMMERCIAL  
MORTGAGE BACKED SECURITISATION**

by

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## **DECLARATION**

I declare that "A CASE STUDY OF SOUTH AFRICAN COMMERCIAL MORTGAGE BACKED SECURITISATION" is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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Date

## **ABSTRACT**

Commercial mortgage-backed securitisation (CMBS) is an important development in the South African property finance field. This study explains the characteristics; structure and structuring; advantages, disadvantages and risks; and legal and regulatory aspects of CMBS. Four CMBS programmes have been launched in South Africa to date (August 2006) all of which have been originated by listed Property Loan Stock (PLS) companies. The unique features of the four programmes were examined and the impact on their originators and the listed property sector was analysed. The main participants in the South African CMBS industry were interviewed. CMBS has acted as a catalyst for greater competition between banks resulting in lower interest rates on bank debt and the creation of new property financing products. The introduction of CMBS has benefited not only the four originating PLS companies, but also had a positive impact on the entire listed property sector.

## **KEY TERMS**

- securitisation
- commercial mortgage-backed securities (CMBS)
- commercial mortgage-backed securitisation
- structured finance
- property finance
- debt securities
- South Africa
- property loan stock company (PLS)
- case study
- single borrower

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**“Thought is not merely expressed in words; it comes into  
existence through them”**

*Vygotsky, Speech and Thought*

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## **LIST OF ACRONYMS**

- CMBS – Commercial Mortgage-Backed Securities
- RMBS – Residential Mortgage-Backed Securities
- ABS – Asset Backed Securities
- SPV – Special Purpose Vehicle
- PLS – Property Loan Stock
- JIBAR – Johannesburg Inter-Bank Agreed Rate

# CHAPTER 1

## ORIENTATION TO THE RESEARCH, RESEARCH PROBLEM AND AIMS

### 1.1 INTRODUCTION AND BACKGROUND

Securitisation has been described as ‘innovation in the financial markets at its best’ (Cowan et al 2003:8) and as the ‘most important financial instrument of our time’ (Kothari 1999). The opportunities and potential benefits it can offer to borrowers, investors, governments and economies as a whole have been widely recognised (Lyons [ca] 2002; European Securitisation Forum [ESF] 1998). The essence of securitisation is best described by Kravitt et al (1998) as follows:

... it consists of the use of superior knowledge about the expected financial behaviour of particular assets, as opposed to knowledge about the expected financial behaviour of the originator of the chosen assets, with the help of structure to more efficiently finance the assets.

On a more technical note, the definition of securitisation according to the Oxford Dictionary is to ‘convert (an asset) into securities’. It is the process by which a company transforms assets on its balance sheet (like loans, receivables or leases), into marketable securities that are sold to investors and traded in the capital markets (Rand Merchant Bank [RMB] 2005; Cowan et al 2003).

Securitisation originated in the United States (US) in the early 1970s, with the repackaging of residential mortgage loan cash flows into mortgage-backed securities (MBS) (Van den Berg & Van Schalkwyk 2002; RMB 2005). The use of securitisation soon spread to many other asset classes some of which are

commercial mortgages, credit card receivables, auto loans, equipment leases and bank loans (Kothari 1999: v-vi; RMB 2005). The technology of securitisation developed substantially as its application increased and this led to the creation of multi-seller conduits, asset-backed commercial paper programs and collateralised loan obligation structures among others (Lyons [ca] 2002).

Securitisation has grown substantially in the US. At the end of 2005, the total outstanding securities, including mortgage-backed securities, asset-backed securities (ABS) and asset-backed commercial paper (ABCP), amounted to \$8.3 trillion<sup>1</sup> (R50.6 trillion). MBS and ABS at a total of \$5.46 trillion (R33.3 trillion) accounted for roughly a quarter of the whole US bond market. (Nomura 2006)

The European securitisation market has also shown strong growth. Since its inception in 1996 with the issuance of ABS, the market has grown from €35 billion (R259 billion) to €320 billion (R2.4 trillion) by the end of 2005. (Van den Berg & Van Schalkwyk 2002; ESF 2006)

In South Africa certain restrictions imposed by regulatory bodies stifled the development of securitisation before 2001. After the introduction of the amended securitisation regulation and the removal of regulatory constraints in 2001, the first residential mortgage-backed securities (RMBS) programme was initiated followed shortly by the first ABS. (Fitch Ratings 2006a)

Since then, the securitisation market in South Africa has been growing rapidly and today it is characterised by innovation, increasing complexity and a diversity of asset classes. While it is still a young market, it has reached a level of sophistication within five years that took the US and European markets

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<sup>1</sup> The US scale is used throughout this document according to which one trillion equals a thousand billion.

nearly two decades to achieve. This growth and development has been driven by a number of factors including the existence of securitisation specific legislation and security structures, a stable economic environment, developed legal and banking systems and a strong investor demand for rand-denominated debt securities (Gumata & Mokoena 2005; Standard & Poor's 2006; Deloitte 2005; Fitch Ratings 2005a & 2006a). According to Moody's Investor Service, the total term securitisation volume in South Africa stood at R22 billion (\$3.62 billion) at the end of 2005 (Marmery 2006).

The listed Property Loan Stock (PLS) companies of the Johannesburg Stock Exchange (JSE) have taken the lead in introducing Commercial Mortgage Backed Securities (CMBS) to the South African market. The first CMBS programme was launched by iFour Properties in November 2004 followed by Vukile Property Fund's and Growthpoint Properties' CMBS programmes in November 2005 and Freestone Properties' programme in June 2006. This raises the following questions: 'Why have these listed property companies decided to take the CMBS route and what impact will it have on them, on the listed property sector and on property financing as a whole?'

Fitch Ratings (2004 & 2006a) believes that 'CMBS securitisations are potentially the next big asset class to take off in South Africa'. For listed property companies, CMBS programmes are an alternative and potentially cheaper source of funding than conventional bank loans. More property companies may decide to take advantage of these and other benefits CMBS have to offer. Banks may also seek to securitise their commercial property portfolios as part of a balance sheet management strategy or they may decide to set up conduit type CMBS transactions which would enable them to offer borrowers a lower interest rate. (Fitch Ratings 2006a; Muller 2005)

## **1.2 RESEARCH PROBLEM**

Despite the high level of interest in securitisation and its fast growth, information on the topic within the South African context is limited and fragmented. This is even more evident when it comes to the topic of CMBS. While rating agencies, banks and accounting firms have written various reports and guides on securitisation, each of them has looked at only specific aspects. Around the world, commercial mortgage backed securitisation is a relatively new area of specialisation within the (structured) property finance field. South African financial institutions, property companies and investors alike would benefit from a study that provides a thorough examination of CMBS. An increased knowledge of this form of securitisation should boost the level of its use and acceptance in our financial markets.

## **1.3 PURPOSE OF THE STUDY**

As its primary objective, this study provides a comprehensive analysis of CMBS with a focus on South Africa. To add further depth, realism and clarification to the theoretical aspects of CMBS, a case study is presented which covers the four CMBS programmes that have been launched in South Africa to date (July 2006).

The secondary objective of this study is to answer three main questions:

- Why did the four PLS companies decide to initiate a CMBS?
- How has it affected the companies' operations and performance?
- What impact did CMBS have on the listed property sector and property finance as a whole?

## 1.4 RESEARCH METHODOLOGY

This study employs primary and secondary data. Primary data refers to original information that is collected by the researcher specifically for the research study at hand, for example data obtained through interviews and surveys. Secondary data refers to information that has been previously gathered by someone else for some other purpose which can be re-used by the researcher. Secondary sources include books, journal articles and reports among others.

### 1.4.1 Literature study

The literature study is a critical, analytical summary and synthesis of the current knowledge on a topic using secondary sources. This study provides a comprehensive analysis of commercial mortgage backed securitisation in terms of its: structure; characteristics; structuring process; advantages, disadvantages and risks; and legal, regulatory, taxation and accounting aspects.

The fast development, specialised nature and novelty of CMBS in terms of recent emergence, directs the literature study needed. As such, the materials used are mainly sourced from specialist securitisation books, research reports and studies, market reports, rating agency reports and newsletters, financial institution presentations, conference proceedings and business newspapers. Many of the sources used are available on the World Wide Web.

The two most important books for this study are "*Securitisation: the financial instrument of the new millennium*" and "*Securitisation: the financial instrument of the future*" both written by Vinod Kothari (1999 & 2006), an internationally recognised expert in the field of securitisation

### 1.4.2 Empirical research

Empirical research involves the collection and analysis of primary data. In this study, the empirical research is conducted by means of a case study. The case study analyses the four South African CMBS programmes to date, in terms of their characteristics and structure. This adds depth, realism and clarification to the theoretical aspects discussed in the literature review. It also answers the questions outlined under the secondary objective.

Yin (1984:23) defines the case study research method as:

... an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.

Case studies facilitate the understanding of complex real-life situations. They are also particularly useful in portraying the participants' experiences and the results regarding a programme (Soy 1997). A major strength of the case study methodology is that it utilises multiple sources and techniques in the data gathering process. Data gathered are normally qualitative but may also be quantitative (Soy 1997).

The main sources of data for this case study are documents and interviews. The documents include: company annual reports, CMBS programme memorandums and pre-sale reports, newspaper articles, and press releases among others. The interviews were conducted with the directors of the PLS companies that originated the CMBS programmes, the arrangers of the CMBS programmes and analysts from the rating agencies who rated the CMBS note issuances.

Interviews are one of the most important sources of information for a case study because they enable the researcher to fully understand and depict the participants' experiences and impressions regarding a programme (Soy 1997). Focused in-depth interviews were conducted whereby the same open-ended questions are posed to all the interviewees. This approach ensures that the same areas of information are collected and at the same time allowing the respondents to choose how they want to answer the questions (Tellis 1997a).

An illustrative case study design is implemented. This type of case study uses a small number of instances to analyse and explain a situation. Its primary purpose is to describe what is happening and why. It makes the unfamiliar familiar and adds realism and examples to other information about a topic. (Morra & Friedlander [ca] 1999; Datta 1990)

## **1.5 CHAPTER OUTLINE**

Chapter one introduces the research topic and its background. It also provides the research problem, the objectives of the study and the research methodology employed to meet these objectives.

Chapter two describes the various types of securitisation transactions and explains the key terms used in securitisation. This is followed by an overview of the three phases of securitisation, the securitisation process and the roles that various transaction parties and agencies perform in the process.

Chapter three describes in detail the elements and steps taken in structuring a traditional securitisation transaction. The focus is on CMBS where the originator is a property company (i.e. a single borrower deal).



Chapter four explains the advantages of securitisation from the perspective of the originator of a securitisation programme, the investors who buy the securities and the economy as a whole. It also discusses the disadvantages of securitisation and the risks involved.

Chapter five summarises the main legal, regulatory, taxation and accounting aspects of South African securitisation schemes as they apply to traditional transactions.

Chapter six explains the case study research methodology utilised in this study. It describes the case study's design and the methods of data collection and analysis.

Chapter seven presents the case study and its findings. It also provides a brief background to Property Loan Stock companies in South Africa.

Chapter eight summarises the entire study and draws conclusions from the case study.

## CHAPTER 2

### THE CONCEPT AND PROCESS OF SECURITISATION

#### 2.1 INTRODUCTION

Securitisation is the creation and issuance of debt securities, whose payments of principal and interest are derived from cash flows generated by a segregated pool of assets (Cowan et al 2003). The end result of securitisation is financing, however the organisation securitising its assets is not borrowing money as is the case if it issued corporate bonds but it is selling a stream of cash flows that would otherwise accrue to it (Kothari 2006a:5).

Securitisation involves three key steps. Firstly, the company that owns the assets (the originator) sells them to a Special Purpose Vehicle (the issuer) which is a newly formed company or trust. Secondly, the Special Purpose Vehicle (SPV) issues securities, typically bonds (or notes), which are backed by the cash flows of the underlying assets. Thirdly, the securities are sold to investors and are traded in the capital markets. (Gumata & Mokoena 2005)

In this chapter, the various types of securitisation transactions will be described. This will be followed by an overview of the securitisation process and the roles that various transaction parties and agencies play in it. The parties involved, the processes and the elements of a securitisation are largely the same irrespective of the type of asset being securitised or the country where it is set up. However, the legal structure of a transaction, the note structure, the level and type of credit enhancements and other subtleties of a transaction vary

by asset class, country and originator and investor requirements. In this chapter all variable factors will be described as they apply to commercial mortgage backed securitisation and/or to the South African securitisation market.

## **2.2 TYPES OF TRANSACTIONS**

Securitisation transactions can be categorised according to the asset class underlying the securities, type of originator, transaction and payment structure and the nature of the sale of assets to the SPV.

### **2.2.1 Asset class**

Essentially, any homogeneous group of assets that generate regular, identifiable and predictable cash flows can be securitised (Thompson 2001; Rand Merchant Bank [RMB] 2005; Oliver & Sallis 2000). The four main types of securities are: residential mortgage backed securities (RMBS); commercial mortgage backed securities (CMBS); asset backed securities (ABS); and collateralised debt/loan obligations (CDO/CLO). Table 2.1 (on next page) shows the four types of securitisations and the assets backing them.

CMBS is the securitisation of rental income or loan debt service payments derived from commercial properties or commercial property loans (Fitch Ratings 2004). The definition that Kothari (2006a:363) gives for commercial property is: "property let out or managed for economic benefit as opposed to that for self occupation" and typically includes, retail, office and industrial real estate. Mortgages on the commercial properties secure the issuer's obligation to repay the interest and capital on the notes and hence the term "commercial mortgage backed securities" (Law News Network 1998).

**TABLE 2.1: Securitisation by asset class**

<b>SECURITISATION</b>	<b>UNDERLYING ASSET</b>
RMBS	Home Loans
CMBS	Commercial Property Loans
	Commercial Real Estate
ABS	Auto Loans
	Credit Card Receivables
	Equipment Leases
	Trade Receivables
CDO / CLO	Corporate Debt / Bank Loans

Based on a personal interview with Nick Job (2005).

Many other asset classes have been securitised some of which are: student loans, auto leases, small-business loans, servicing fees, servicing rights, charged-off credit card obligations, timeshare payments, music royalties, stadium luxury boxes, project and public finance transactions, cross-border future flow receivables, trademarks, medical aid receivables, vat receivables, water bills, lottery ticket receipts, delinquent tax payments. (Cowan et al 2003; Finkelstein & Fenton 2003; Fitch Ratings 2006a; Lyons [ca] 2002)

### **2.2.2 Type of originator**

The two broad categories of originators in securitisation transactions are financial institutions (typically banks) and non-financial institutions. Securitisation by a non-financial company is referred to as a single borrower or client sponsored transaction. In this case the company securitises a single large asset, like as a shopping centre, or it can securitise a portfolio of homogenous assets where the assets are cross-collateralised and cross defaulted (Fitch

Ratings 2004). Where a financial institution initiates the securitisation, it is typically a multi-borrower transaction and it usually entails the securitisation of a bank's portfolio of assets, for example a portfolio of commercial mortgage loans (Fitch Ratings 2004). Multi-borrower deals have greater collateral or asset diversification than single borrower deals (Vanderbilt Capital Advisors 1999).

### **2.2.3 Transaction structure**

Securitisation schemes can have a term structure or a conduit structure. In a term securitisation a specific group of assets and their cash flows are purchased by an SPV that is formed specifically and only for that purpose (Thompson 2001). Single borrower transactions usually have a term structure. With a conduit securitisation, the portfolio of assets held by an SPV is continually replenished over a long period of time (Thompson 2001; RMB 2005). This type of securitisation is typically a multi-borrower transaction established by a financial institution that originates and warehouses assets with the intention of securitising those assets.

### **2.2.4 Payment structure**

Payment structure refers to the manner in which investors share the cash flows that arise from the pool of assets that are beneficially owned by them. There are three main payment structures: pass through, pay-through and bond structures. The pass through structure was the first type of securitisation technique that was used in the United States (U.S.). In this structure, the investors receive a proportional share in the pool of receivables. The SPV collects and passes on the payments it receives with no reconfiguration of the cash flows. This structure results in erratic and unpredictable cash flows therefore it is only suitable for the US mortgage market where payments to the investors are guaranteed by government agencies. (Kothari 1999:74)

In a pay-through structure, the SPV reinvests the cash flows from the receivables until the stated payment date to the investors. For example, cash flows are received from the assets monthly, but the payments made to the investors are at quarterly intervals. (Kothari 1999:75)

The bond structure is an extension of the pay-through structure whereby the cash flows of the securitisation are actively managed at SPV level. The notes or bonds that result from this structure can have different payment priorities and various maturities that are unrelated to the underlying assets. (Kothari 1999:75; Kothari 2006b)

### **2.2.5 Nature of asset sale**

When the pool of assets is sold to the SPV, the nature of the sale can take two forms. It can be a true sale transaction which is referred to as a traditional or physical securitisation. In this case the assets are sold to the SPV making the SPV the new legal owner of the assets. Consequently, the assets are transferred off the balance sheet of the originator. (Gumata & Mokoena 2005)

The other possible form of sale is a synthetic sale. With synthetic securitisations only the underlying credit and/or market risk of the assets are transferred to the SPV through the use of derivative instruments. The assets themselves remain on the balance sheet of the originator. With both types of transactions, the economic rights relating to the securitised assets are owned by the SPV. (RMB 2005; Deloitte & Touche 2003; Fergus & Jacobs 2000; Gumata & Mokoena 2005)

## **2.3 THE THREE PHASES OF SECURITISATION**

Securitisation involves three main phases: asset origination; structuring and issuance; and the holding and trading phase. The steps and actions that take place during these phases are described below.

### **2.3.1 Asset Origination Phase**

Asset origination is the creation of an asset portfolio on a company's balance sheet that can be securitised. Typically a company that decides to securitise would have already built up a portfolio of homogenous assets under its normal course of business. For example, the buildings that a property company owns or the loans that a bank has advanced. In other cases, for example with conduit securitisation, the assets are originated and warehoused specifically for the purpose of securitisation. (Barclays Capital 2006)

### **2.3.2 Structuring and Issuance Phase**

The structuring and issuance phase involves a number of steps. Firstly, an initial investigation is undertaken to determine the legal and financial feasibility of the proposed securitisation programme. If the securitisation is viable then the arrangers (typically investment bankers), rating agencies and legal advisors will be appointed to manage and advise on the entire structuring and rating process.

The assets that will be securitised are then selected and analysed by way of a comprehensive due diligence process. An initial securitisation structure including note and legal structure is decided on and a financial analysis and evaluation is completed based on the proposed structure. After this stage the

rating agency will give an initial opinion of the ratings that the proposed note issuance would receive. The note structure and the ratings are very important because they have a major impact on the cost of funding for the borrower.

Through an iterative process the final structure is decided following which the special purpose vehicles and trusts are set up, the assets are transferred to the SPVs and the legal documentation is compiled. While all this is being set up, the originator together with its arrangers will go on road shows to market the programme and its note issue to potential investors. Once everything has been completed, the rating agency announces the final note ratings and the note pricing and sale takes place on the bond exchange through a placement agent or underwriter. (Barclays Capital 2006, Kothari 2006a:202-209)

In chapter three, the elements and steps discussed under structuring will be explained in detail.

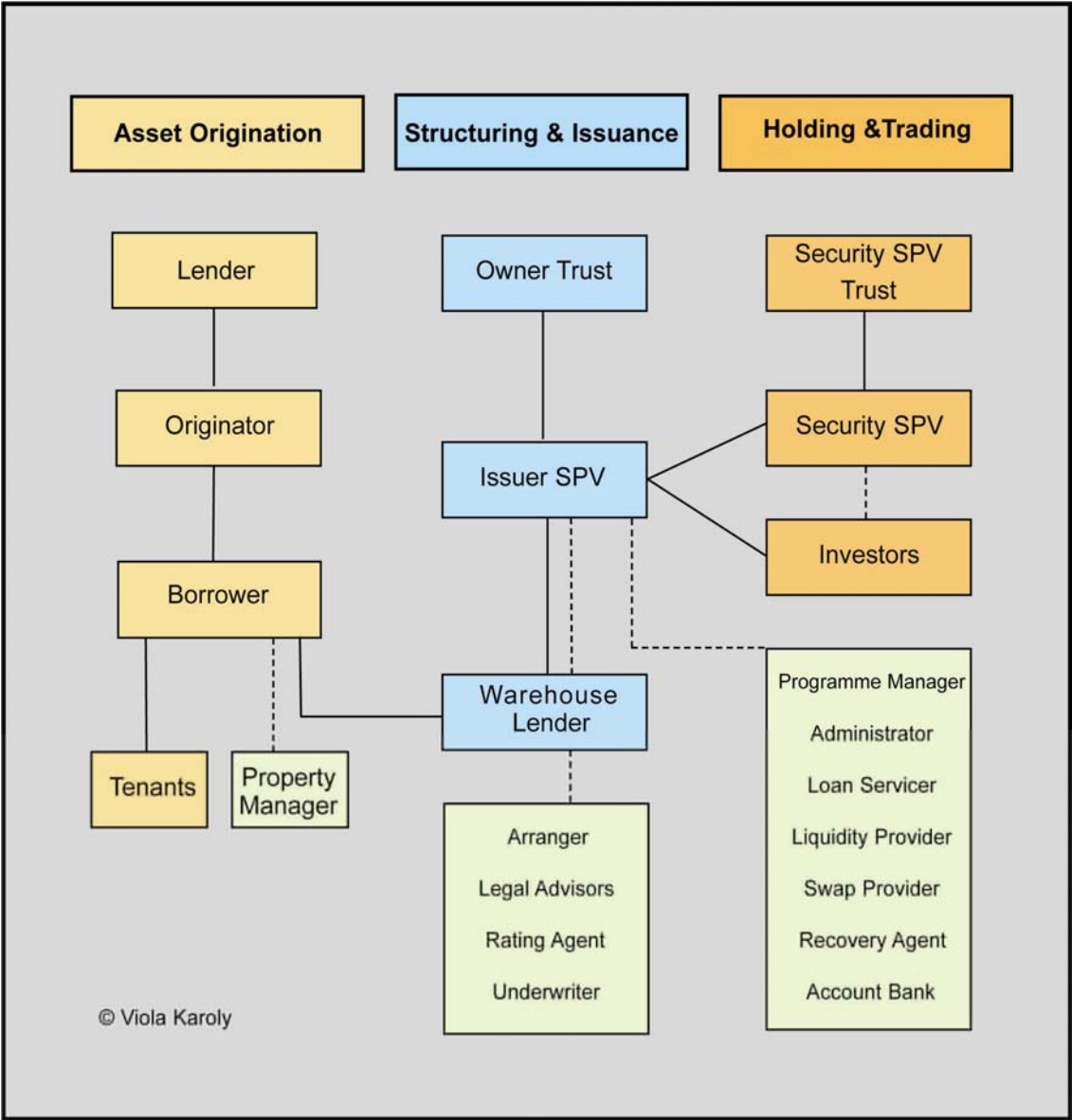
### **2.3.3 Holding and Trading Phase**

The last phase is the holding and trading phase during which the investors can either hold on to their notes, receiving interest and principal payments on them, or they can trade the notes on the bond exchange. A number of service providers or agencies are contracted during this phase to facilitate the smooth running of the securitisation programme. The administrator, trustees and the rating agency(s) monitor the programme throughout its life and they compile periodic performance review reports for the investors. (Barclays Capital 2006)



Figure 2.1 shows the three phases and structure of a securitisation programme together with the legal entities, transaction parties and agencies that are involved during these phases. The structure shown below is based on the four South African CMBS programmes. The nuances of the South African CMBS structures will be examined and explained in chapter seven.

**FIGURE 2.1: The three phases of securitisation**



## 2.4 TRANSACTION PARTICIPANTS

### 2.4.1 Primary Parties

#### *2.4.1.1 Originator and Borrower*

The originator is the party who initiates the securitisation scheme i.e. the organisation that wants to securitise its assets (Kothari 2006a:201). In figure 2.1, the originator is a listed property company. The borrower is an SPV that holds only the physical properties that support the payment on the notes. The borrower is one hundred percent owned by the originator and therefore the properties still form part of the listed property company's portfolio.

This isolation makes the borrower bankruptcy remote from the originator. It also ensures that the payments on the notes are derived only from the pool of assets that form part of the securitisation and not from the originator of the assets. These are two fundamental goals of securitisation. (Cowan et al 2003)

A CMBS programme can also be originated by a bank who wishes to securitise its commercial mortgage loans. In this case the bank would sell its mortgage loans to the issuer SPV and therefore the loans and the related mortgage security would no longer form part of its balance sheet. The term "borrower" would then refer to the individual entities that took out a commercial mortgage loan with the bank.

#### *2.4.1.2 Issuer SPV and Owner Trust*

The issuer SPV, which can take the form of a company or a trust, is "incorporated or created solely for the purpose of the implementation and operation of a ... securitisation scheme" (Republic of South Africa [RSA] 2004:11). The issuer SPV buys the collateral asset pool and issues different

classes or tranches of bonds that vary in payment priority, yield and possibly also in duration or maturity (Commercial Mortgage Securities Association [CMSA] & Mortgage Bankers Association [MBA] 2004; Barclays Capital 2006).

If the originator is a bank then the asset pool that the issuer SPV buys is a portfolio of commercial mortgage loans. In the case of the South African property companies' securitisation, the issuer SPV purchased the mortgage right or security from the borrower along with the bridge loan that was extended to the borrower by the warehouse lender (see section 2.4.2.5). It would also be possible for the issuer SPV to buy the physical commercial properties in which case the rental income from the properties would support the payment on the notes directly. However, this would not be beneficial for a property company since it would reduce its property portfolio.

A trust, referred to as the owner trust holds the issuer SPV's equity and monitors the SPV's performance. The trustees protect the rights of the investors by ensuring that they are paid in accordance with the terms of the securities, that the administrator adheres to the rules laid down for the SPV and that triggers relating to financial and asset portfolio covenants are not breached. These triggers are set by the rating agency in order to prevent deterioration in the quality of the underlying assets and to prevent default on the notes. (Oliver & Sallis 2000; Saayman [ca] 2003; Thompson 2001)

#### ***2.4.1.3 Security SPV and Security SPV Owner Trust***

The issuer SPV owner trust protects only the rights of the investors. However, a securitisation programme also has a number of transaction creditors who provide various services to the issuer SPV, for example the liquidity provider, swap provider, servicer and administrator among others. These transaction

creditors' rights are not protected by the issuer owner trust. For this reason, the South African securitisation structure makes use of another bankruptcy remote SPV referred to as the security SPV. This SPV holds and administers the security or rights and guarantees the issuer SPV's obligations to both the investors and the transaction creditors. The security SPV owner trust holds the security SPV's equity. If the issuer SPV defaults then the security SPV trustees will be entitled to claim the assets of the issuer and distribute the proceeds from the assets among the investors and creditors in terms of the priority of payments. (Thompson 2001; Fitch Ratings 2006a; Barclays Capital 2006)

#### ***2.4.1.4 Investors***

The investors are the companies and individuals who buy the notes or bonds issued by the issuer SPV. By purchasing the notes, they in fact provide the finance that the issuer SPV needs to buy the collateral asset portfolio. The originator can source investors like banks, insurance companies and pension funds directly or it can access them through the capital markets by listing the bonds on the Bond Exchange. A securitisation issue has a number of different classes of investors since as already mentioned; the notes are divided into different tranches that vary in payment priority, yield and duration. (Thompson 2001)

### **2.4.2 Supporting Agencies and Service Providers**

#### ***2.4.2.1 Arranger and Programme Manager***

The arranger, typically the structured finance team of a bank, manages and coordinates the entire securitisation process on behalf of the originator. This includes: the initial feasibility study; the appointment of the necessary service providers; the due diligence and financial analysis; the determination of the

programme, note and legal structures; the consultations with the rating agency; and the marketing of the notes. The programme manager who is usually the same person or team as the arranger, co-ordinates the securitisation programme once it is up and running. (Barclays Capital 2006)

#### ***2.4.2.2 Rating Agency***

The rating agency is responsible for determining the credit risk associated with the securitisation transaction and to establish a rating for each bond class that the SPV issues (Wight 2001; CMSA & MBA 2004). After the bonds have been issued, the rating agency will monitor the securitisation and its underlying assets' performance and update the rating for the investors (CMSA & MBA 2004). There can be more than one rating agency involved in rating a securitisation (CMSA & MBA 2004).

#### ***2.4.2.3 Legal Advisors***

The legal team determines the legal feasibility of the securitisation programme at the outset of the transaction and advises on the legal structure. They also draft the securitisation documents, provide legal opinions and assist with the transfer of assets to the SPV. The legal opinion is a formal letter in which the legal advisors report on various legal aspects of the transaction and provide assurance that the assets that the SPV holds are bankruptcy remote from the originator. (Kothari 2006a:208)

#### ***2.4.2.4 Underwriter***

The underwriter or placement agent (typically a bank) carries out the placement of the notes issued by the SPV. One of the ways that this can take place is that the underwriter purchases all the notes or bonds issued by the SPV

for cash and then sells the notes to the investors. The originator has to pay a fee for this service but in this way the responsibility falls on an experienced underwriter to get the issuance subscribed. The notes that are not placed are kept by the bank. (Cowan et al 2003; Van den Berg 2000; Kothari 2006a:201)

#### ***2.4.2.5 Warehouse Lender***

The warehouse lender, also referred to as the bridge loan lender or remote originator, provides interim funding during the structuring phase of a securitisation transaction. If the originator is a bank then the warehouse lender would provide funding for the issuer SPV in order that the SPV may purchase the collateral asset portfolio (e.g. a portfolio of commercial mortgage bonds). In the South African CMBS transactions, the warehouse lender provided interim funding to the borrower SPV so that the borrower could take transfer of the physical properties. This bridge funding typically shortens the time it takes to structure a transaction and it also enables the SPV to begin marketing and issuing the notes earlier. (Deloitte & Touche 2003; Van den Berg 2000)

#### ***2.4.2.6 Administrator***

The administrator manages the day to day operation of the issuer SPV. This includes: the collection of cash flows from the SPV's assets; paying the amounts due on the notes; monitoring and reporting on the assets' performance; managing recoveries on defaulted receivables; and exercising any other rights and duties of the issuer SPV as set out in the transaction documents. The administration function, which is usually performed by a bank, is split into a number of sub functions including loan servicing; payment calculation; note transfer; and settlement. As these functions are vital for the smooth running of a securitisation vehicle, a back-up administrator is usually appointed who

could replace the administrator on short notice if the administrator fails to perform its duties. (Kothari 2006a:209; Growthpoint Note Issuer Company 2005a:5-6, 88; Barclays Capital 2006)

#### ***2.4.2.7 Loan Servicer***

The loan servicer administers the SPV's assets and collects the related cash flows on behalf of the issuer SPV. In a single borrower transaction, the loan servicer collects the amount owed under the loan(s) to the borrower. In the case of a multi-borrower transaction, the servicer would also manage arrears, defaults and recoveries arising from the portfolio of loans provided that these defaults do not threaten the entire securitisation transaction. The servicer needs to monitor and report on any actual or potential loan event of default or any material adverse effect to the issuer, security SPV and the rating agency. This function is usually performed by a bank since a bank has the collections and monitoring systems in place from its normal lending business. (Growthpoint Note Issuer Company 2005a:5; Oliver & Sallis 2000)

#### ***2.4.2.8 Recovery Agent***

The administration of the assets is transferred to the recovery agent or special servicer if a predefined actual or potential loan event of default occurs. In the context of the listed property company's securitisation, a loan event of default occurs if the borrower does not pay the interest due on its loan in the given time and if it fails to redeem its loan on the expected maturity date. A potential loan event of default is an indication that the borrower will not be able to pay the amounts due under its loan and include events like the interest cover ratio falling below a specified amount. In an event of default the transaction is wound down and the special servicer's job is to maximise the recovery on the

defaulted asset. With a single borrower deal this recovery process would typically involve the sale or liquidation of the physical properties. (CMSA & MBA 2004; Growthpoint Note Issuer Company 2005a:88)

#### ***2.4.2.9 Calculation, Transfer and Settlement Agents***

The calculation agent performs all the calculations as set out in the transaction documents and administers the loan agreements and the priority of payments on behalf of the issuer SPV (Growthpoint Note Issuer Company 2005a:5-6). The transfer agent is responsible for all duties relating to the bond certificates including the issuing of certificates, administration of the certificate register and cancellation of notes that have been redeemed by the issuer (Vukile Investment Property Securitisation [VIPS] 2005a:31,41). The settlement agent is a Bond Exchange approved participant who performs electronic settlement of funds on behalf of the securitisation's market participants (Growthpoint Note Issuer Company 2005a).

#### ***2.4.2.10 Liquidity Provider***

The liquidity provider extends a short term loan facility to the issuer SPV to fund liquidity shortfalls due to certain cash flow mismatches. For example the facility could be used if due to an administration or systems related problem the cash flows from the assets could not be collected in time to meet the payment due on the notes. The facility is also important if there is loan event of default. In this case the assets of the SPV are liquidated over a certain period of time and the liquidity facility is used during this recovery process to keep the notes current i.e. to prevent a note event of default. The liquidity facility is usually set to a certain percentage of the outstanding or initial principal amount on the notes. (Growthpoint Note Issuer Company 2005a:6, 48; Barclays Capital 2006)



#### ***2.4.2.11 Swap Provider***

The swap provider is the counterparty with whom the issuer SPV enters into a derivative contract such as an interest rate swap. Typically, the issuer is required to enter into an interest rate swap if there is an interest rate mismatch between the assets and the liabilities of the issuer (e.g. receiving interest payments based on a fixed rate where the interest rate payable on the notes is floating or variable rate). (Growthpoint Note Issuer Company 2005a:6)

#### ***2.4.2.12 Account Bank***

The account bank is the bank at which the borrower and issuer SPV keep their accounts. A number of accounts need to be set up for a securitisation transaction. The rent collections account holds the rental payments from the tenants of the collateral properties. This account is held in the name of the borrower. The reserve account holds the issuer SPV's cash reserve; the transaction account is used to hold all amounts payable to the issuer under the transaction and the proceeds from the sale of assets (e.g. the physical properties) are deposited in the sale account. Another account that is set up in the name of the issuer is the springing lock-box account. If there is a potential loan event of default, the money from the rent collections account is transferred into the springing lock-box account. (Growthpoint Note Issuer Company 2005a:43-47)

#### ***2.4.2.13 Property Manager***

The property manager is responsible for overseeing all aspects related to operating the commercial properties on behalf of a property owner. These aspects include: collecting rent; paying operating and maintenance expenses; hiring security, cleaning, maintenance and other personnel to manage the facilities on site; advertising vacant space and negotiating with prospective

tenants; resolving any problems and complaints related to the property; supervising the preparation of financial statements and reporting to the owner of the properties. The property management function is important to maximise the income from the properties and to maintain and increase the value of the properties for both the borrower(s) and the investors. For these reasons, it is usual in a CMBS programme to have a back-up property manager. The back-up manager would step in if the original manager fails to perform the above mentioned duties. (Wikipedia 2006)

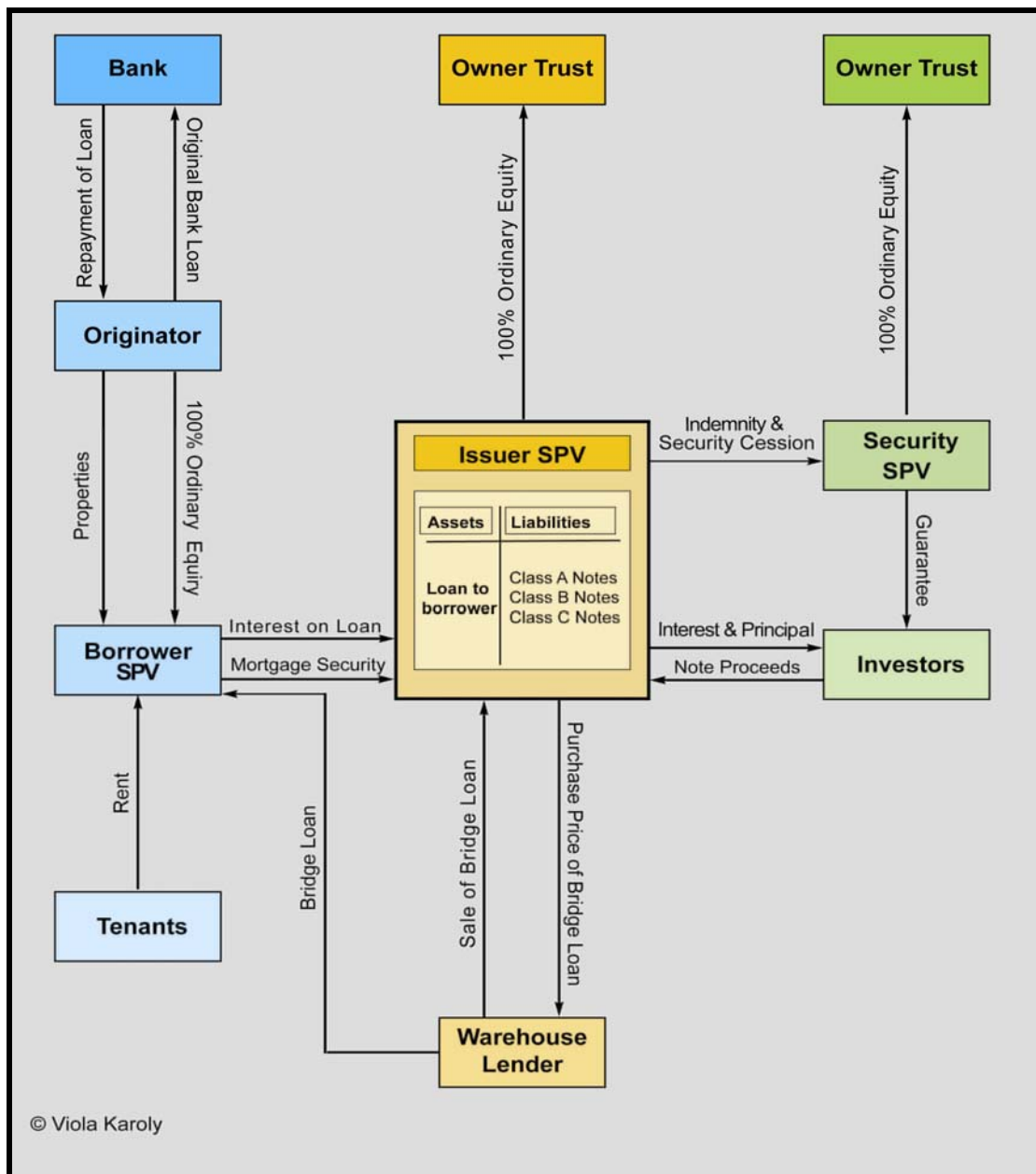
### **2.4.3 A bank's role in securitisation**

As seen from the discussion in this chapter, a bank typically performs a number of roles in a securitisation even if it is not the originator. For example, the bank can carry out the functions of: arranger, programme manager, underwriter, warehouse lender, administrator, loan servicer, recovery agent, calculation agent, liquidity provider, swap or hedge provider, account bank and even property manager (Van den Berg 2000; Deloitte & Touche 2003). By taking the role of warehouse lender and providing interim funding to the structuring process, the bank earns interest income which is similar to its normal lending activities (Van den Berg 2000). For all the other services the bank receives a fee income which compensates it for transferring its rights to the assets (Kothari 1999:192). For example, with the property company initiated CMBS, the banks "lose" their assets (the commercial mortgage loans to the property companies) to the capital markets. The bank that facilitates the securitisation process for the property company (typically one of the banks that provided loans to the property company), would fulfil all the possible functions and therefore earn a fee for these services which would compensate it for the loss of interest income.

## 2.5 CASH AND SECURITY FLOWS OF A CMBS

A CMBS securitisation transaction, its three main phases and how they are linked can be explained best from a cash and security flow perspective which is shown in figure 2.2 (see next page). This is based on broad common elements between the four South African CMBS programmes that have been originated by the Property Loan Stock (PLS) companies.

FIGURE 2.2: Cash and security flows of a CMBS transaction



### **2.5.1 Cash and security flows during the asset origination phase**

The cash and security flows during the asset origination phase are as follows:

- The originator takes up commercial mortgage loans from one or more banks to fund the purchase of commercial properties.
- These properties are placed in the originating company.
- The bank receives the mortgage rights over the properties and interest and principal payments on the loan.
- Rental income is received from the tenants of the commercial properties.

### **2.5.2 Cash and security flows during the structuring and issuance phase**

The cash and security flows during the structuring and issuance phase are as follows:

- The commercial properties that will serve as security for the securitisation are transferred into a borrower SPV owned by the originator.
- The warehouse lender extends a bridge loan to the borrower SPV. This amount is paid over to the originator who consequently repays its original bank loans and the mortgage bonds are cancelled with the original bank.
- The mortgages are registered in favour of the issuer SPV.
- The issuer SPV issues notes to the investors and uses the proceeds from the notes to purchase the bridge loan from the warehouse lender.
- The security SPV provides a guarantee to the investors and transaction creditors for the issuer SPV's obligations.
- For this surety-ship, the issuer SPV provides a counter-indemnity to the security SPV and cedes its assets (i.e. the mortgage bonds) as security for its obligations.

### **2.5.3 Cash and security flows during the holding and trading phase**

The cash and security flows during the holding and trading phase are as follows:

- The borrower uses the rental payments received from the properties to pay interest (and capital) on its loan, to the issuer SPV.
- From this income received, the issuer SPV pays the service providers and the interest (and capital) due on the notes.

### **2.5.4 The bank as the originator**

If the originator was a bank, the CMBS structure shown above would be similar except that the bank would sell a portfolio of commercial mortgage loans to the issuer SPV. This would be a multi-borrower transaction where the borrowers are not SPVs but numerous property companies and other companies that took up a commercial mortgage loan from the bank. Also, the transaction would be set up primarily for the benefit of the bank as the originator and the bank could then decide to what extent if any, to pass on the cost saving benefit of securitisation to its borrowers.

## **2.6 SUMMARY**

This chapter reviewed the different types of securitisation transactions in terms of asset class, type of originator, transaction structure, payment structure and nature of asset sale to the SPV. It then explained the three main phases of securitisation, namely asset origination, structuring and issuance, and the holding and trading phase. This was followed by a detailed description of the primary parties, supporting agencies and services providers involved during these phases. The role of a bank in a securitisation transaction when it is not the originator was also explained. Lastly, the South African commercial mortgage backed securitisation process was explained by way of a diagram that showed the cash and security flows during the three phases of securitisation.

## CHAPTER 3

# STRUCTURING A SECURITISATION TRANSACTION

### 3.1 INTRODUCTION

This chapter describes in detail the elements and steps taken in structuring a traditional, true sale securitisation transaction. The focus is on commercial mortgage backed securitisation where the originator is a property company (i.e. a single borrower deal). However certain aspects differ if the originator is a bank and these are explained. The steps are ordered in a sequence that the researcher has deemed logical however it must be noted that some of the steps are not necessarily sequential and that a number of steps can be initiated simultaneously (Kothari 2006a:202). Many of the concepts discussed in this chapter have been introduced in chapter two.

### 3.2 INITIAL FEASIBILITY STUDY

#### 3.2.1 Aspects to consider

Before starting on a securitisation exercise, the originator must examine the feasibility of the proposed securitisation and the prerequisites to setting up a transaction (Kothari 2006a:203). Firstly, the originator needs to consider its financing needs, the alternative forms of financing that are available and the objectives that it is trying to reach with a securitisation. According to Fergus and Jacobs (2000), securitisation is best suited for companies that are looking for strategic, mid to long term diversified funding and where the securitisation vehicle would be used on an ongoing basis to raise additional debt.

Increasing the note issue either by launching a new series of debt under a programme or by increasing the collateral pool and consequently increasing the number of notes issued within one series provides the best utilisation of a securitisation vehicle. The reason for this is two fold. Firstly, originators can achieve a lower cost of funding with a second set of note issue because the costs involved in issuing more notes once the vehicle has been set up is a fraction of the costs incurred to issue the first set of notes. Secondly, increasing the volume of notes increases the notes' liquidity and therefore its attractiveness to investors. This can also contribute to lowering the interest rate payable on the second and subsequent note issues. (Fergus & Jacobs 2000)

The second aspect that the originator needs to examine is the legal feasibility of the proposed transaction. Legal and regulatory issues are important in a securitisation transaction and problems in these areas can become insurmountable (Kothari 2006a:203). These aspects are discussed in chapter five.

The originator must consider its asset portfolio next, in terms of the portfolio's size, the type of assets in the portfolio and the amount of debt the portfolio could sustain. The quality of the data available on the assets' historical performance is also an important aspect here. Following this, the originator must conduct a financial feasibility analysis to determine whether the financial benefits will outweigh the costs involved in setting up and operating a securitisation vehicle. Other important aspects to consider are: whether there are enough investors who would buy the note issue; the time that it would take to set up a programme; and the impact that this process would have on the originator's operations. (Kothari 2006a:204; Rand Merchant Bank [RMB] 2005)



### **3.2.2 Pricing the transaction**

For property companies the biggest motivation to set up a CMBS programme is that it can provide a cheaper source of finance than bank loans. The cost effectiveness of a proposed securitisation transaction however must be examined through a financial feasibility analysis. The reason for this is that the property company as the originator must bear the set-up costs and the operating costs of the securitisation vehicle. These costs, especially the set-up costs can be substantial and therefore they have a big impact on the overall cost of debt achieved through securitisation.

#### ***3.2.2.1 Set-up costs***

Set-up costs depend on the type of securitisation and the market context of the transaction. For example, creating a new asset class or structure in a securitisation market can take many months involving considerable costs. These costs typically include the following (Kothari 1999:199; Thompson 2001; Luff 2001:19):

- Arranger's fee for advising on the transaction and managing the structuring process.
- Legal fees for drafting the legal documentation and for providing legal advice and legal opinions.
- Rating agency fees for determining the credit risk associated with the transaction and to establish ratings for the tranches of notes.
- Cost of establishing the SPVs.
- Cost of registering the mortgage bonds in favour of the issuer SPV.
- Marketing fees, distribution fees (including the underwriter's fee) and the cost of listing the notes on the bond exchange.
- Accounting fees and auditor's fee.

### *3.2.2.2 Operating costs*

As discussed in chapter two, there are numerous parties and service providers involved in operating a securitisation vehicle all of whom must be paid for providing their services. The frequency of operating costs varies; some are monthly costs while others are quarterly or annual costs. Most of them are calculated as a fixed percentage of the note issuance's face value (Kothari 1999:199; Thompson 2001; Luff 2001:20). The following costs are typically involved:

- Administration costs of the SPV including the fees of the loan servicer, calculation agent and back-up administrator
- Accounting fees and auditor's fee
- Standby fee for the recovery agent.
- Salaries of the trustees.
- Programme manager's fee.
- Fees of the exchange and clearing houses that are involved in the trading, settlement and custody of the bonds.
- Rating agency fees for monitoring the transaction and for providing rating updates.
- Cost of the liquidity facility.
- Cost of the interest rate swap contract.
- Account bank fees.
- Standby fee for the back-up property manager.

A property company originator will usually undertake the servicing and maintenance of the underlying properties. Therefore this would be an income source for the originator as opposed to a cost item of the securitisation.

### *3.2.2.3 Cost of credit enhancements*

Credit enhancement (see section 3.7) refers to methods that can be used to improve the credit rating of the note issue. Improved credit rating can decrease the cost of funding however credit enhancements can be expensive. Internal credit enhancements typically involve some form of opportunity costs while external credit enhancements, which are provided by a third party, involve monetary costs (Kothari 1999:199; Luff 2001:20).

## **3.3 ASSET SELECTION**

After deciding to securitise, the originator must examine its asset portfolio in detail to determine which assets should form part of the securitisation (Kothari 1999:186). In a CMBS, the asset selection is somewhat different if the originator is a single borrower like a property company compared to the asset selection if the originator is a bank. The reason for this is that if the originator is a property company that owns the physical real estate, the decision revolves around which properties to ring-fence in an SPV. These properties will still form part of the property company's overall portfolio. If the originator is a bank that holds the commercial property loans, the decision that must be made is which loans to sell to an SPV. The loans will be transferred off the balance sheet of the bank.

The main difference in asset selection between these two types of originators is the answer to the question whether the best, the average or the worst assets should be securitised. If the originator is a property company then the core assets or the best assets can and should be placed in the securitisation vehicle. That is, the assets can be "cherry picked". If however the originator is a bank, it is not advisable to select the best performing loans to form part of the securitisation (Kothari 1999:186).

If the best assets are removed from the bank's portfolio, the overall quality of the remaining portfolio will be worse. Consequently, the bank's own credit rating could deteriorate and its share price decrease due to the concentration of high credit risk assets on its balance sheet. On the other hand, a bank that securitises its poorly performing loans might not be able to market or sell the securitisation note issue. Therefore a balance needs to be maintained between the quality of assets that are securitised and the quality of the assets that remain on the balance sheet. (Luff 2001:20)

A common concern about securitisation is that it will leave a bank originator with "junk assets". However, the Bank for International Settlements in a 1992 publication entitled "Asset Transfer and Securitisation" had the following comment on this topic (Kothari 1999:101):

It is sometimes contended that banks in seeking a good market reception for their securitised assets may tend to sell their best quality assets and thereby increase the average risk in their remaining portfolio. Investor and rating agency demand for high quality assets could encourage the sale of an institution's better quality assets. Moreover, an ongoing securitisation programme needs a growing loan portfolio and this could force a bank to lower its credit standards to generate the necessary volume of loans. In the end a capital requirement that assumes a well diversified loan portfolio of a given quality might prove to be too low if the average asset quality has deteriorated. Such arguments are not easy to support with empirical evidence. Banks that have securitised large amounts of assets do not exhibit signs of lower asset quality. It should also be noted that banks which constantly securitise assets are necessarily interested in maintaining the quality of their loan portfolio. Any asset quality deterioration would affect their reputation and their rating and indeed the capital adequacy requirement imposed by their supervisors.

Besides selecting assets based on their quality other aspects need to be considered as well. Very importantly, the assets' cash flows should be predictable. For example, selecting properties that have long leases makes it easier to predict the cash flows. If the assets are existing loans, the maturity composition of the loans should be sufficiently long to create a medium term security. It is also preferable to select assets with clean and standard documentation (Kothari 1999:66,186).

The selected assets should be fairly homogeneous in terms of type of asset, size (monetary value) and risk features. This helps with the analysis of the portfolio and historical data can be applied to project the risk of the entire portfolio. No asset should be so large in the securitised portfolio that it could substantially affect the returns from the portfolio (the exception to this is single asset securitisation) However, homogeneity is difficult to achieve in a CMBS transaction because the properties can vary greatly (different types and sizes of commercial, retail and industrial properties). Therefore in a CMBS, the properties or property loans need to be analysed individually. (Kothari 1999:67)

It is also beneficial if the portfolio is diversified not only in terms of the number of properties but also in terms of the properties' geographical spread. Selecting properties over a wider geographical area helps to reduce the impact of localised economic factors that could affect the value and cash flows from the properties (Ambery 2002: 34). With a CMBS, diversification in terms of property type (that is office, retail and industrial) is also important as this type of diversification also helps to reduce the impact of economic factors. These are just some of the aspects that the originator could look at when selecting the assets. The criteria for how the assets were selected in the South African CMBS transactions are discussed in chapter seven.

### **3.4 THE DUE DILIGENCE**

A due diligence audit of all aspects related to the selected assets is normally performed by the arrangers of the transaction before the assets are transferred or sold to the relevant SPVs. This process is repeated by the rating agency(s) who will rate the transaction. The purpose is to ensure that the title to the assets is legally valid; that all the assets comply with the pool selection criteria; and to examine the quality of the assets and their cash flows or payment history. The due diligence process is done per asset or on a sample of the assets depending on the size of the portfolio. (Kothari 2006a:205)

With a CMBS transaction where the portfolio consists of a relatively small number of larger assets that are heterogeneous (compared to for example a residential mortgage backed securitisation), the analysis is done per asset. The due diligence process also differs if the originator is a property company compared to if it is a bank. With a bank originator, the underwriting policies and processes of the bank should be examined as well, not just the assets.

#### **3.4.1 Due diligence on properties and their originator**

With a CMBS transaction where the originator is a property company, the main focus falls on the characteristics and value of the properties selected and the income that can be derived from them. The fewer and larger the assets (the lower the diversification), the more detailed this analysis becomes. Besides analysing each property, the scope of the due diligence report may be wider and include a review of the corporate health, business practices and level of experience of the originator (Kothari 2006a:205). This is especially important if the originator will retain the property management role.

### *3.4.1.1 Due diligence on the commercial properties*

The properties are examined for two main purposes. Firstly to determine the current and future expected value of the properties. This is important because the properties serve as collateral for the loan extended by the issuer SPV and they secure the capital portion of the notes issued to the investors. The size of the borrower's loan is also partially determined by the value of the properties (i.e. the loan to value). The future expected value of the properties is important to gauge how much capital could be recovered should the borrower or issuer SPV default. Secondly, the properties are examined to determine the sustainability of the cash flows derived from them and their ability to cover the debt service payments (i.e. the debt service coverage ratio). From a rating point of view, "the strength of the properties' underlying cash flow and value is paramount" (Fitch Ratings 2004:2).

The following property characteristics are typically examined (Moody's Investors Service 2001; Fitch Ratings 2005b; Roulac 1995):

- **Building design**

The property's design in term of its dimensions (e.g. number and sizes of floors, ceiling heights) and aesthetic appeal (e.g. structural design, materials used, spatial arrangements, lighting) are examined. The exterior of the building, for example the landscaping, driveways and parking, is considered along with the position of the building on the site. Functional efficiency in terms of interior space arrangements, plumbing, mechanical and electrical systems are also important factors. A design is successful if it is appealing, functional and has a timeless quality. This is important because a building with a good design will retain or increase in value over time and it is easier to let and to retain the tenants.

- **Construction quality and environmental issues**

The building's construction should be of a high quality. Aspects that are examined include: whether there are structural problems and deferred maintenance; the current wear and tear of the building; and the expected useful life of the building. Potential environmental issues are also considered. A rating agency will use third party engineering reports and environmental studies to assist it in this analysis.

- **Location, movement network and exposure network**

The locational characteristics of the property are examined in terms of its movement and exposure networks. Movement network refers to the property's access to streets and major thoroughfares and proximity to amenities. Exposure network refers to the property's exposure to the land use and zoning of the surrounding neighbourhood; exposure to the sensory environment (views, smells, noise); and overall visibility. These aspects are once again important because a good location will attract higher quality tenants and the property will also retain greater value over time.

- **Building services and amenities within the building**

The type, frequency and quality of the building services should also be examined, for example the on-site maintenance, access control, security, and lobby reception. These aspects can be important in retaining tenants.

- **Tenant quality**

Analysing the tenant quality is important in determining the sustainability of the property's cash flows. In this respect the tenants' business and financial position, credit record, future space requirements, satisfaction with the space rented and the percentage of the building rented are examined. The composition and diversification of the tenant mix are also evaluated.



- **Lease terms**

The lease terms are examined to determine the future income from the property. In this respect the following aspects are important: amount of rent charged; rent escalation and other financial provisions; lease duration; renewal options; and the rights and obligations of the tenants. Properties with investment grade rated tenants where the leases extend beyond the term of the loan are preferred because this gives stability to the cash flows.

- **Cash flows**

The cash flows i.e. the income, operating and capital expenditure related to each property are examined from historical operating and financial statements. Capital expenditure plans and budgets are also analysed. Current (and expected) building vacancy is also an important factor and this is compared to market related vacancy levels.

- **Legal issues**

Compliance with legal aspects and public and private regulations associated with the properties are reviewed. There should be no current or pending litigation or contingent liabilities associated with the properties. It is also verified that the properties' legal documentation is in order.

The diversification of the property portfolio as a whole is examined as well. Diversification by the geographic spread of the properties and by property type is important. The reason for this is that the default risk of the (borrower's) loan decreases if the portfolio of properties is sufficiently diversified because the properties will not all be subject to the same external risk factors or exposed at the same time (e.g. economic and property market risk factors). Diversified property portfolios therefore tend to require lower levels of credit enhancement. (Sanders 2001:667)

#### *3.4.1.2 Due diligence on the originator and property manager*

A due diligence report often encompasses the originator as well. Aspects that are reviewed include the originator's business activities, operating philosophy, strategy and previous lender relationships. The purpose is to determine whether there are questionable business practices or transactions, outstanding legal issues or previous bankruptcies associated with the originator. If there are significant integrity related issues in these areas, a rating agency may not be able to rate the transaction (Fitch Ratings 2004).

Often in a CMBS transaction, the originator will retain the property management function for the securitised properties. Therefore the property management skill and track record of the originator are important factors. Areas that are examined include the originator's expertise and experience with the given property types and markets, the number of years senior management has worked together as a team and the number of properties managed. (Fitch Ratings 2004)

### **3.4.2 Due diligence on bank assets**

If the originator is a bank then a portfolio of commercial mortgage loans is securitised. In this case, the due diligence would focus on three areas: the loans, the properties that secure the loans (discussed above) and the underwriting processes in originating the loans.

#### ***3.4.2.1 Due diligence on the loans***

The due diligence on the loans typically covers the following areas (Kothari 2006:205-206; Moody's Investors Service 2001; Fitch Ratings 2006b):

- The credit quality of loans and the credit profile of the individual debtors.
- The historical performance of the loans in terms of delinquencies, defaults, recoveries and prepayments.
- The debt service coverage ratio of the loans.
- The loan to value ratio of the loans.
- The maturity or term of the loans.
- The mortgage payment structure.
- The loan yields or the interest rate on the loans.

On a portfolio level the diversification of the loans in terms of the debtors, the geographical location of the collateral and the type of collateral (i.e. the properties) are also examined (Moody's Investors Service 2001; Fitch Ratings 2006b).

The legal documentation of the loans should also be reviewed to ensure that the loan securities have been collected (i.e. the mortgage bonds have been registered in favour of the bank), that there are no limitations against assignment or sale of the loans and that there are no law suits concerning any

of the loans (Kothari 2006:205). These aspects are important because the title which the SPV will have to the assets and their cash flows will only be as good as the title of its predecessors (i.e. the title of the originator) (Thompson 2001).

#### *3.4.2.2 Due diligence on the underwriting processes*

Where the originator is a bank, the methods and processes which were followed by the bank in originating the loans are also examined. Arrangers and rating agencies want to make sure that the bank has documented underwriting policies with internal controls to ensure that these were followed (Kothari 2006:206). This is an additional way to determine whether the quality of the loans is adequate.

If the loans are granted or denied based on a credit scoring system then it should be ascertained whether the system was developed based on empirically derived data and that it is periodically revalidated. In addition, it should be determined whether the bank performs credit reviews on the loans, and inspections and physical verifications of the underlying assets. (Kothari 2006:206).

Another aspect that should be examined is whether the data generated on the assets' cash flows are accurate and reliable (Kothari 2006:206). It is also important to verify that the originator's records reflect what is actually owed by the debtors (Thompson 2001). To these ends, a through examination of the management information systems and the administration and accounting procedures of the bank are usually undertaken.

### **3.5 THE TRANSFER OF ASSETS AND SECURITY: THE SPV'S**

Once the assets have been selected and the due diligence process is complete, the transfer of the assets (and related security) to the relevant special purpose vehicles can start. As the name implies, SPVs are established for specific and limited purposes; they are not intended to be operating businesses (Fitch Ratings 2006c). A securitisation structure will always have at least one SPV, the issuer SPV. The mortgage bonds over the properties are usually registered in favour of the issuer SPV and this can be a lengthy process. The role of the issuer SPV has been discussed in chapter two (see section 2.4.1.2) and the legal, regulatory, taxation and accounting aspects as they apply to an issuer SPV are discussed in chapter five.

The South African securitisation structure makes use of a second SPV, the security SPV, which holds the note security and guarantees the issuer SPV's obligations to the investors and transaction creditors (see chapter 2, section 2.4.1.3). This part of the process involves the issuer SPV ceding its mortgage rights to the security SPV. A single borrower CMBS structure involves the creation of a third SPV, the borrower SPV. This is discussed in more detail in this section (see also chapter 2, section 2.4.1.1).

In a single borrower CMBS transaction, the originator is an organisation that owns physical commercial properties. Once the properties that will form the basis for the CMBS scheme have been selected, they should be transferred to and ring-fenced in an SPV that is directly or indirectly owned by the originator (Fitch Ratings 2001 & 2004). This SPV then becomes the borrower in the CMBS transaction. It should have no other purpose besides owning the physical properties and being the obligator on the loan from the issuer SPV (Fitch Ratings 2004).

This isolation of the properties in an SPV ensures that the payments due on the notes are derived solely from the segregated pool of properties and not from their originator (Cowan et al 2003). The SPV structure also makes the properties bankruptcy remote from the originator and because the borrower SPV has limited powers and purpose, the likelihood that the borrower itself will become insolvent or bankrupt is reduced (Fitch Ratings 2001). Therefore, the lender (i.e. the issuer SPV) has greater assurance that should the borrower default on its loan repayments, it would be able to enforce its mortgages and foreclose on the properties without constraints imposed on such actions by bankruptcy laws (Fitch Ratings 2001).

In comparison, if the borrower is not an SPV and it becomes bankrupt, the interest and capital payments to the lender could be stayed during the bankruptcy proceedings. The lender would be unable to foreclose on the properties without relief from the bankruptcy stay (Fitch Ratings 2001).

The advantage of ring-fencing the properties is that the note issuance can achieve a higher rating than the originator could have attained if it issued corporate bonds. The higher rating consequently enables the originator to access a larger pool of funding at favourable rates (Oliver & Sallis 2000). The disadvantage is that there is limited flexibility in selling or substituting the properties in the borrower SPV.

There are certain requirements which a borrower SPV must fulfil to be considered separate from the originator. There are also restrictions placed on the SPV's activities which are imposed to protect the investors. These requirements and restrictions are important from a legal point of view and they are aspects that the rating agency will typically examine during its rating process.

The most important requirements and restrictions placed on the borrower SPV are (Fitch Ratings 2001):

- It must hold itself out as being a separate legal entity from the originator.
- It must have a separate corporate existence.
- It must maintain its own books, records and accounts.
- It must conduct its business and hold its assets in its own name.
- It may only engage in the business of owning and operating properties and the financing thereof.
- It may not have any assets other than those related to its properties.
- It may not have any indebtedness other than the loan from the issuer SPV.
- It may not consolidate with another entity.

A borrower SPV does not need to be a newly formed entity, it can be formed prior to the CMBS transaction. In that case, the SPV needs to make the relevant representations and warranties that the limitations on its purpose, restrictions on its activities and its separateness as a legal and corporate entity have been followed since its formation. (Fitch Ratings 2001)

Another important legal aspect concerning single-borrower, multiple property CMBS transactions is that the properties in the securitised portfolio should be cross-collateralised and cross defaulted. Cross-collateralisation means that each property secures its own allocated debt portion and all other debt in the pool. Therefore the cash flows from all the properties are available to pay all the amounts due, including principal and interest on the loans and property related expenses. This mechanism reduces the risk of default by the borrower. However if the borrower does default, the cross-default provision entitles the lender (the issuer SPV) to exercise all remedies against any or all the properties in the pool. (Fitch Ratings 2004; Sanders 2001:669).

## 3.6 DETERMINING THE NOTE STRUCTURE

While the SPVs are set up and the assets are transferred to them, the note structure and the features of the notes are determined. This involves making decisions about the following aspects (Kothari 1999:189):

- Note structure in terms of pass-through, pay-through or bond structure.
- If a bond structure is used, the payment priority or sequence and the size, number and duration of the note tranches.
- The timing of the principal repayment.
- Whether the notes will pay a fixed or floating rate of interest.
- The currency denomination of the notes.
- Legal features of the notes for example the extent of collateral substitution allowed and the prepayment protection features of the notes.
- The type and level of credit enhancements (see section 3.7).

### 3.6.1 Note structure

There are three main types of note or payment structures in securitisation: pass-through, pay-through or bond structure (this was discussed in chapter 2, section 2.2.4). With a pass through structure, the investors receive a proportional or pro rata allocation of principal payments together with the required interest until the security is retired. All the notes have the same maturity. (European Securitisation Forum [ESF] 1999: 9)

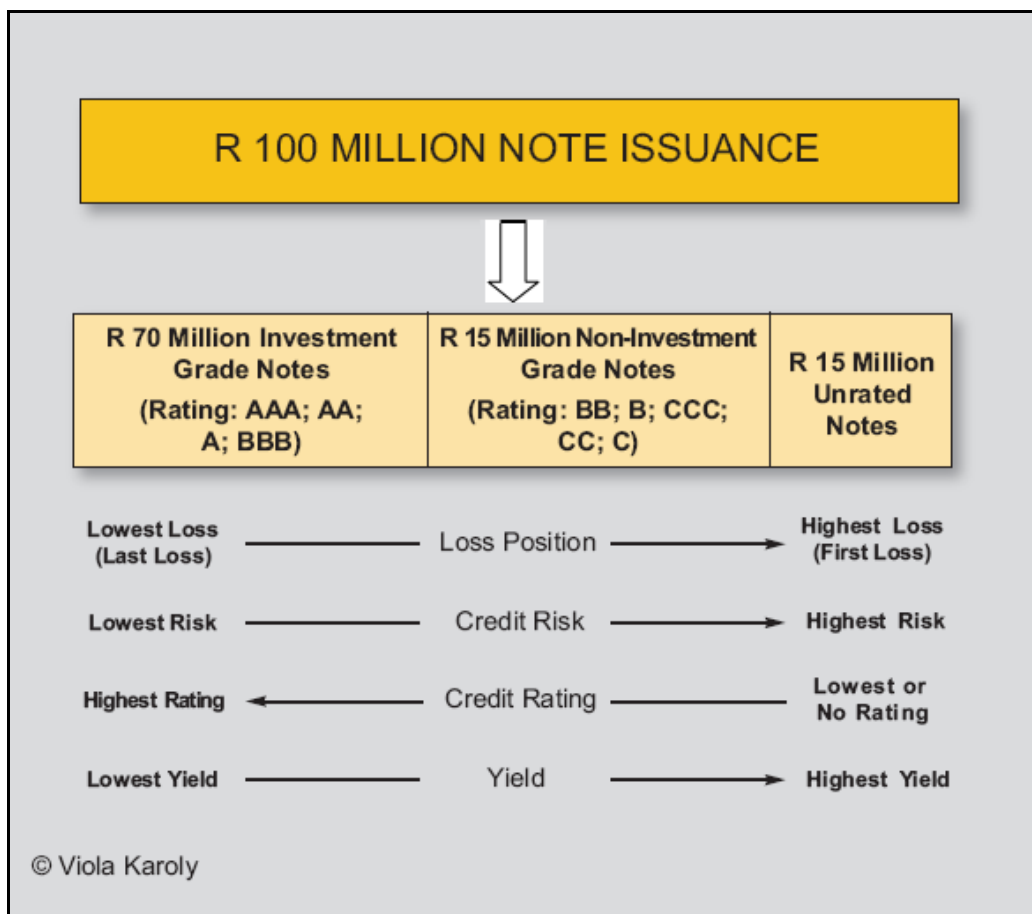
CMBS notes usually have a bond structure whereby the note issue is subdivided into different classes or tranches. The tranches have different priority of claim on the cash flows originating from the underlying pool of assets (Republic of South Africa [RSA] 2004). The various tranches can also have different maturities (Kothari 1999:74-83).



Senior or investment grade tranches have the highest priority over the cash flows with the best (credit) rated class receiving first priority. Investment grade tranches have the lowest default risk (and therefore the highest credit rating) because subordinated tranches with lower payment priority will absorb all the losses before the more senior tranches incur any loss (Cowan et al 2003).

Investment grade tranches bear a low interest rate because of their low credit risk. Therefore, the objective is to structure the transaction and the notes in a manner that results in a high rating for the majority of the note issue (Law News Network 1998). This reduces the cost of funding for the borrower. Figure 3.1 below depicts an example of note tranching together with the characteristics of the different classes of notes.

**FIGURE 3.1: Bond structure and note tranching**

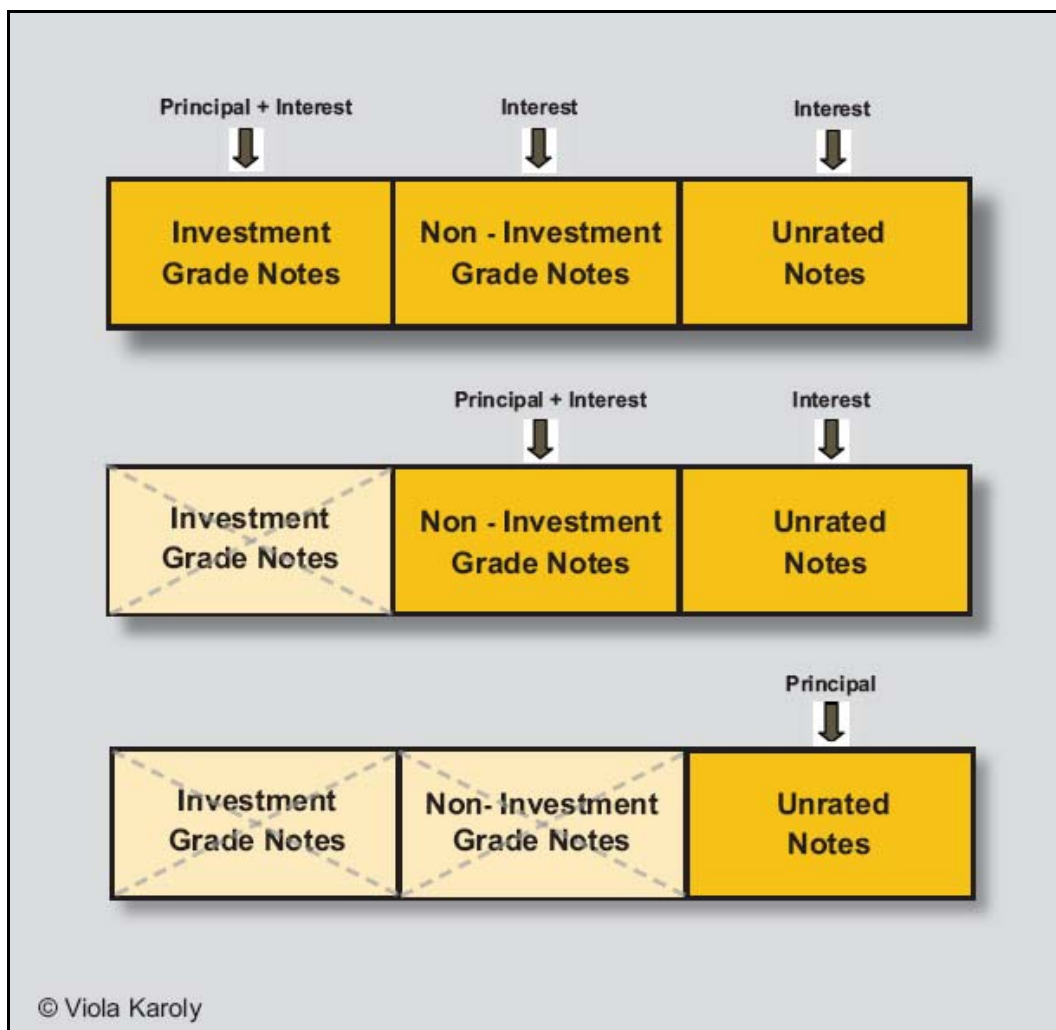


### 3.6.2 Payment priority

The cash flows from the issuer's assets are applied in a pre-agreed order. Firstly, certain defined expenses are paid, for example the administration fees, trustee's fee, loan servicer's fees and liquidity facility fees. With a bond structure, once these expenses are paid, the remaining cash is applied to pay the amounts due on senior notes and then the amounts due on junior or non-investment grade notes. (Thompson 2001)

A possible payment priority structure on the notes is the sequential payment structure. This is depicted in the figure (3.2) below.

FIGURE 3.2: The "waterfall" payment structure



In every payment period interest is paid to each class of investors, starting with the investors who hold the highest rated bonds until all accrued interest on those bonds are paid. Then interest is paid to the holders of the next highest rated bond and so on. Return of principal caused by amortisation or prepayment of the loan(s) is used to repay the highest rated tranche first until the principal amount of the notes is fully retired. Following this, the principal on the next highest rated class of bonds is repaid while the lower rated notes only receive interest payments. This "cascading" of payments is referred to as the waterfall concept. (Commercial Mortgage Securities Association & Mortgage Bankers Association [CMSA & MBA]; Sanders 2001:662; Thompson 2001)

The "waterfall" payment structure results in the tranches having different maturities. It is possible to structure the payments so that all the classes mature at the same time. To achieve this, the principal repayments from the loans need to be allocated to the notes on a pro rata basis during the term of the notes. If the principal value of the notes is only repaid at maturity then the tranches receive sequential interest payments during their term and sequential repayment of the note principal at maturity.

### **3.6.3 Timing of principal repayment**

There are three main methods by which the principal on the notes can be repaid. These methods revolve around the timing of the principal repayment and the method chosen often correlates with the principal repayment on the underlying loans (i.e. the loans to the borrowers). Firstly, the principal amount can be amortised over the life of the notes; secondly the principal can be partially amortised during the life of the notes with a balloon or bullet payment at maturity; or thirdly the principal can be repaid in full only at maturity.

An amortising asset is paid off over a specific period of time with regular payments of both principal and interest. Residential mortgages and residential mortgage backed securities are principal examples of amortising assets. An amortising security or note can be designed to match the repayments on the underlying assets exactly as with a pass-through securitisation structure. On the other hand, an amortising security may also be structured in a manner that provides greater certainty about the maturity of the notes and which provides greater degree of protection against prepayments on the notes. Prepayment would result in the early return of principal to the investors and consequently this would lower their interest income. (ESF 1999:9-10)

Notes with a balloon or bullet repayment structure have a substantial principal payment on the final maturity date of the notes. The amortisation period is usually set to a longer interval than the time to maturity on the notes. For example, the principal would be fully amortised over twenty years but the notes require full repayment of the outstanding principal at year ten. The purpose of this structure is to keep the periodic principal payments as low as possible. (Sanders 2001:667)

The last main principal repayment structure is where the principal is not amortised at all. Regular interest payments are made on the principal balance which is repaid in full at the maturity of the notes. (Revolving credit card accounts are an example of non-amortising assets.) (ESF 1999:9-10)

Commercial mortgage loans and commercial mortgage backed securities typically have medium term maturities with a bullet or a non-amortising principal repayment structure. Therefore the investors receive periodic interest payments with the majority or the entire principal repaid at maturity. (Brueggeman & Fisher 2005:567; Sanders 2001:667)

Balloon and non-amortising repayment structures pose potential problems and risks due to the large lump-sum payment that must be repaid or refinanced. A major focus of CMBS investors and the rating agencies is the likelihood that the borrowers will be able to make full repayment when their loans mature. The loans can be refinanced by a bank or the securitisation notes can be “rolled” at maturity. If the notes are “rolled”, then new notes are issued by the SPV on the same underlying assets, the proceeds of which would be used to repay the first note issue. However, if the quality and value of the underlying properties and their cash flows decrease, there is a risk that the loans can’t be refinanced or that they can only be refinanced at a reduced amount. This can result in default on the loans and consequently default on the notes. (Sanders 2001:667; Brueggeman & Fisher 2005:568)

There are two types of loan provisions to reduce this refinancing risk. The borrower could be required to obtain refinancing commitment a couple of months before the maturity date. This is referred to as the internal tail loan provision. Or, the maturity date of the notes could be set to a longer period than that of the loans, thereby allowing the borrower more time to arrange refinancing. The issuer would advance interest payments during this period. This is referred to as the external tail loan provision. (Sanders 2001:667)

The South African CMBS notes have an expected (or scheduled) and a final (or legal) maturity date. The borrower’s loan(s) matures at the same time as the expected maturity date of the notes. The legal maturity date is set to two years after the expected maturity date. If the borrower cannot refinance its loan by the expected maturity date, the loan defaults. The recovery agent then has two years to maximise the recovery on the properties. If the notes are not repaid by the final maturity date then there is a default on the notes. The liquidity facility is used to pay interest on the notes during the recovery process.

### **3.6.4 Fixed or floating interest rate**

The interest rate on the notes can be fixed or floating. A floating interest rate is indexed to a designated (floating) funding reference or bench-mark rate, for example the Johannesburg Inter-bank Agreed Rate (JIBAR). In this case, the rate on the notes would be JIBAR plus a spread or margin which is fixed. The interest rate on the notes is reset to JIBAR every few months, for example every three months. Investor preference determines whether the notes will have a fixed or floating rate. The borrower's loan(s) can be fixed or floating as well. When the rates on the loans are fixed but the rates on the notes are floating, cash-flow mismatches result. To prevent this risk, an interest rate swap is set up with a third party, usually a bank. (ESF 1999:9-10)

### **3.6.5 Prepayment Protection**

Prepayment is the early return of the investors' principal due to the borrowers repaying their loans faster than scheduled. This would decrease the maturity of the notes and lower the total interest income that the investors would receive. CMBS bonds are generally protected from prepayment, that is, they are call protected. This is an attractive feature for investors because it enables them to maintain their expected yields. For this reason, investors are typically willing to accept tighter yields on CMBS (a lower interest rate) benefiting the borrowers.

Prepayment protection is usually done at the loan level and it can take the form of: prepayment lockout; yield maintenance; defeasance; or prepayment penalty. These structural constraints severely restrict the borrower's ability to prepay because prepayment is either not allowed at all or it involves high costs which would deter the borrower from prepaying. Therefore the cash flows of a CMBS transaction are generally highly predictable. (Sanders 2001:664-665; Vanderbilt Capital Advisors 1999; CMSA & MBA 2004)

### *3.6.5.1 Prepayment lockout*

This is a period during which the borrower is contractually prohibited from prepaying the loan. It is the strictest form of call protection because it removes the option to prepay before the end of the lockout period. (Sanders 2001:664)

### *3.6.5.2 Yield maintenance*

With yield maintenance, the borrower must pay a “make whole” penalty to the lender if the loan is prepaid. This penalty is calculated as the difference between the present value of the loan’s remaining cash flows and the principal repayment. If the notes are repaid early however, the penalty that the borrower must pay compensates the investors for the loss of yield. (Sanders 2001:664)

### *3.6.5.3 Defeasance*

Defeasance is the substitution of government securities for the property collateral. The borrower pledges a portfolio of government securities to the issuer SPV and the properties are released from their mortgage bonds. Technically it is not prepayment because the notes remain outstanding. The difference is that they are repaid from the cash flows generated by the government securities. Obviously these securities must have the same cash flow structure as the substituted collateral. However, restrictions on substitution of collateral might make defeasance infeasible. (CMSA & MBA 2004; Sanders 2001:665)

### *3.6.5.4 Prepayment penalties*

With prepayment penalties, the borrower must pay a fixed percentage of the outstanding capital as at the time of prepayment. This penalty usually declines as the loan ages. (Sanders 2001:664-665)

### 3.7 CREDIT ENHANCEMENT

Credit enhancement is the term used to describe the various techniques which can be used to improve the credit rating of the bond classes (Thompson 2001). Some form of credit enhancement is typically required by the rating agency to ensure that the investors' security is maintained at an adequate risk level and to protect the SPV from insolvency (Oliver & Sallis 2000; Wood 1995:58).

More than one technique is usually employed. The level of credit enhancement required is determined by the nature of the transaction, the type and quality of the underlying assets, and the rating that the originator wants to achieve (Cowan et al 2003; Oliver & Sallis 2000). The method chosen depends on investor and rating agency acceptance, availability and pricing (Luff 2001:9).

Improved credit rating can bring down the rate at which the SPV can attract funding i.e. the interest rate payable on the issued notes. Credit enhancements however can be expensive. Therefore, when selecting the level and type of credit enhancement, the originator needs to weigh up the cost of the method against the benefit of achieving a lower funding rate (Thompson 2001).

Credit enhancement may be provided internally or externally and it can be transaction specific or programme wide (Deloitte & Touche 2003). Internal credit enhancement is provided by the originator, issuer or the assets themselves, while external credit enhancement is provided by an independent third party (Cowan et al 2003; Oliver & Sallis 2000). Internal credit enhancement is generally a requirement for most CMBS structures (Luff 2001:9).



### **3.7.1 Internal credit enhancement**

#### ***3.7.1.1 Credit tranching or subordination***

Credit tranching is the division of the note issue into different classes or tranches with varying levels of payment priority and therefore varying levels of default risk (Oliver & Sallis 2000). The payment priority of a tranche is subordinated to a tranche with a higher level of payment priority. Therefore any default affecting the securities is absorbed by the most subordinated tranche first before more senior tranches are affected (Cowan 2003). This process acts as credit enhancement for the investment grade notes.

#### ***3.7.1.2 Over-collateralisation***

With over-collateralisation, the monetary value of the securitised portfolio exceeds the principal amount of the bonds issued. This results in more income flowing from the assets than the amount payable on the notes. Any losses will fall on the over-collateralised amount first therefore impacting the originator. Therefore defaults would have to be greater than the amount of over-collateralisation before investors suffer a loss. The level of over-collateralisation is typically based on the necessary debt coverage ratio i.e. the amount of income relative to the interest payment. (Brueggeman & Fisher 2005:571; Luff 2001:10; Cowan et al 2003)

#### ***3.7.1.3 Cross-collateralisation and cross default provision***

This credit enhancement method is suitable if the lender has extended more than one loan to one entity or if the loan is secured by more than one property. A cross-collateralisation agreement provides that all the properties serving as collateral for individual loans will serve to collateralise the entire debt. This is referred to as a blanket mortgage. Therefore in the event that one mortgage

defaults, the financial institution may accelerate prepayments on all the mortgages that are part of the agreement and in doing so prevent default on the notes (see section 3.5). (Brueggeman & Fisher 2005:571)

#### ***3.7.1.4 Reserve funds and excess spread***

Reserve fund and excess spread are types of cash-collateralisation. A reserve fund can be created by retaining a portion of the initial funds raised within the issuer (Luff 2001:10). With excess spread, a percentage of the (positive) difference in interest received on the underlying loans and the interest payable on the notes is deposited into an account of the SPV (Saayman [ca] 2003:8). With this type of credit enhancement, the cash funds act as the first line of defence against cash flow problems or losses from defaults (Luff 2001:10; Saayman [ca] 2003:8). Cash typically has a more stable value than the underlying assets therefore less cash is required to enhance the same portfolio.

#### ***3.7.1.5 Lock-up mechanisms***

If the performance of the securitised assets deteriorates below a certain level, a change in the rules governing the distribution of funds by the SPV can be triggered. In this event, the lowest ranking investors will no longer receive any payments and all available cash will be distributed to the senior investors. (Thompson 2001)

#### ***3.7.1.6 Triggered amortisation***

With securitisation of revolving assets and where substitution of assets is permitted, events can take place that trigger the winding up of the securitisation and the immediate repayment of investors. This is referred to as triggered amortisation. Examples of these events are asset performance or number of assets falling below a pre-set level. (Luff 2001; Saayman [ca] 2003:8)

### **3.7.2 External credit enhancement**

#### ***3.7.2.1 Letters of credit, surety bonds, guarantees and credit wrap***

These types of credit enhancements are provided by banks or insurance companies for a fee. They serve to guarantee the payments of interest and principal due on the notes (Brueggeman & Fisher 2005:571). A letter of credit typically promises to cover the losses of the SPV up to a maximum amount while a credit wrap guarantees to meet the obligation of the SPV if it is unable to do so (Saayman [ca] 2003:8). The guarantor must have a credit rating at least as high as the rating of the senior notes to maintain the rating of the notes (Wood 1995:58-59). This requirement hinders the use of these credit enhancement methods because the highest rating a note can achieve is AAA but there are very few AAA rated financial institutions in existence.

#### ***3.7.2.2 Subordinated loans***

The originator or an external party can extend a subordinated loan to the SPV (Oliver & Sallis 2000). Usually, this loan must be made in advance to fund the purchase price of the underlying assets (Wood 1995:58-59).

#### ***3.7.2.3 Liquidity facility***

A liquidity facility can be set up with a financial institution to meet short-term cash requirements and to cover deficiencies in cash flows within the scheme (Saayman [ca] 2003:8). Liquidity problems can arise from the timing difference between the payments from the loans and the payments due on the notes (Deloitte & Touche 2003). The facility amount is set at a fixed amount or a certain percentage of the notes' value. According to Van den Berg (2000), secondary market liquidity is improved by making liquidity facilities available to SPVs because this addresses unforeseen, adverse asset performance.

### 3.8 FINANCIAL MODELLING AND ANALYSIS

In conjunction with determining the note structure, the cash flows of the transaction are modelled. The outcome of this modelling may show that adjustments must be made to the note structure, transaction structure or even the assets selected. Therefore this is an iterative process and it can be performed in a number of different ways. In this section, a possible method for a single borrower transaction is explained where the borrower has a non-amortising loan and the notes have a bond payment structure.

The cash flow analysis can start at the issuer SPV level. Firstly the inputs and assumptions for the model need to be collated. The cash outflows of the SPV have to be determined and based on that, the level of cash inflows needed. The purpose of a property company originated CMBS transaction is to reduce the company's cost of financing. Therefore, the cash inflows of the issuer SPV (i.e. the amount that the borrower SPV must pay under its loan) need to be matched to its cash outflows.

The following inputs and assumptions are needed to model the cash outflows of the issuer SPV:

- The size of the loan, i.e. the amount of financing that the originator would like to raise. This determines the Rand value of the note issuance.
- The sizes of the different tranches and the expected interest rate that each tranche will attain. This is needed to determine the weighted average interest rate on the notes and therefore the interest payments due.
- The operating costs of the securitisation vehicle. These include items like administration costs, loan servicer fees, trustees' fee and liquidity facility fees.

- The swap base rate if an interest rate swap is put in place.
- The term of the notes, the periodicity of the interest payments due on the notes and the periodicity of all the other cost items.

Once the total value of these cash outflows per payment period is known, the level of interest rate on the borrower's loan and the frequency of interest payments by the borrower can be determined.

The cash flows (income and expenses) of the properties need to be modelled next, for the term of the borrower's loan (the term of the loans and notes are the same). The modeller needs to determine whether the cash flows from the properties will be able to support the interest payments due under the proposed loan in a timely manner. Various scenarios are built into this model to ascertain the impact of possible negative external influences, for example a down turn in the economy which could lead to higher vacancy rates for the buildings or more tenants defaulting on their rent. The purpose of this analysis is to determine the probability of the borrower defaulting on its loan.

The inputs and assumptions that are needed (per property) to model the cash flows from the properties include: the amount of rent charged, lease duration and rent escalation; other income items; operating expenses and capital expenditure budgets; vacancy allowance (current and expected).

The cash flows of the properties are also modelled to determine the expected value of the properties at maturity of the loans/notes. The value of the properties at the maturity of the transaction has a major impact on whether the borrower will be able to refinance its loan or sell its properties for a price that will cover the principal due on the notes.

## 3.9 THE RATING OF TRANSACTIONS

### 3.9.1 The rating agencies and the importance of ratings

Once the note and transaction structure has been determined and modelled, a rating agency or agencies will evaluate all aspects of the securitisation and security issue and assign a risk grading (or rating) to the CMBS note tranches (Van den Berg & Van Schalkwyk 2002). This is an independent assessment which uses consistent and proven methodologies (RMB 2005). According to Kothari (2006:309), “rating is almost indispensable in the process of securitisation”. A significant feature of securitisation is that the ratings are a target not a *fait accompli* (Kothari 2006:309). Note issues have the potential to achieve a given rating; all that is required is determining the level of credit enhancement needed for a certain rating (Kothari 2006:309).

The rating is an indication (or a classification) of the credit risk associated with the notes or put differently it is “the likelihood that interest and capital will be paid timely and in full” (Kolbe et al 2003:76). Credit risk is categorized into expected and catastrophic risk. The credit enhancements that are put in place provide for the expected risk. Catastrophic risk is normally borne by the investors in unrated and sub-investment grade notes or by the financial institutions that provided guarantees to the SPV (Fergus & Jacobs 2000).

Each tranche or class of notes will have its own rating except for some of the subordinated tranches which are unrated (Finkelstein & Fenton 2003). The two main rating categories are investment grade (AAA to BBB or equivalent) and speculative grade (below BBB) (RMB 2005). Usually the main portion of the notes is investment grade with most of them being AAA-rated (RMB 2005). The rating determines the market trading price and the yield on the notes when they are issued (Van den Berg & Van Schalkwyk 2002). The higher the rating

the lower the risk and therefore the lower the interest paid on the notes. Consequently AAA-rated notes have the highest price but also the lowest yield (RMB 2005). The rating also enables comparisons with other securitisation issues in the market. (RMB 2005).

The three internationally recognized rating agencies are Moody's Investors Service ("Moody's"), Standard & Poor's Rating Group ("Standard & Poor's") and Fitch Ratings<sup>1</sup> ("Fitch") (Kolbe et al 2003:76). With most CMBS schemes more than one rating agency is involved in rating the notes (CMSA & MBA 2004). In mature securitisation markets like the American and European markets, these agencies' rating is accepted as a true and accurate reflection of the quality of a securitisation issue (Fergus & Jacobs 2000). According to Kothari (1999:455), rating agencies have played a major role in the "almost clean record of securitisation transactions" because they have viewed securitisation defaults as a direct determinant of their reputation.

The ratings assigned at the end of the securitisation structuring process assume that the credit quality of the underlying assets will not change significantly over time (CMSA & MBA 2004). Therefore, before making decisions concerning the assets, the SPV needs to get confirmation from the rating agency that such actions will not cause a downgrade in the notes' ratings (CMSA & MBA 2004).

The rating agencies will also monitor the securitisation and its asset pool throughout the scheme's life and update their ratings based on performance, delinquency and potential loss events affecting the securitisation (CMSA & MBA 2004; Van den Berg & Van Schalkwyk 2002).

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<sup>1</sup> Duff & Phelps Credit Rating Co. was acquired by Fitch Ratings in 2000.

### 3.9.2 Rating Scales

The table below shows the rating symbols used by Fitch, Moody's and Standard & Poor's.

**TABLE 3.1: The rating scales of international rating agencies**

Ratings	Fitch	Moody's	S & P
Investment Grade	AAA	Aaa	AAA
	AA+	Aa1	AA+
	AA	Aa2	AA
	AA-	Aa3	AA-
	A+	A1	A+
	A	A2	A
	A-	A3	A-
	BBB+	Baa1	BBB+
	BBB	Baa2	BBB
BBB-	Baa3	BBB-	
Speculative Grade	BB+	Ba1	BB+
	BB	Ba2	BB
	BB-	Ba3	BB-
	B+	B1	B+
	B	B2	B
	B-	B3	B-
	CCC+	Caa1	CCC+
	CCC	Caa2	CCC
	CCC-	Caa3	CCC-
	CC	Ca	CC
C		C	
Default	DDD	C	D
	DD		
	D		

Source: Kothari 2006a:310

Notes that are degraded to a default rating have already defaulted on the interest and/or principal payments. The modifiers "+" and "-" in the case of Fitch and Standard & Poor's and the numerical modifiers "1", "2" and "3" in the case of Moody's denote relative status within the major rating categories.

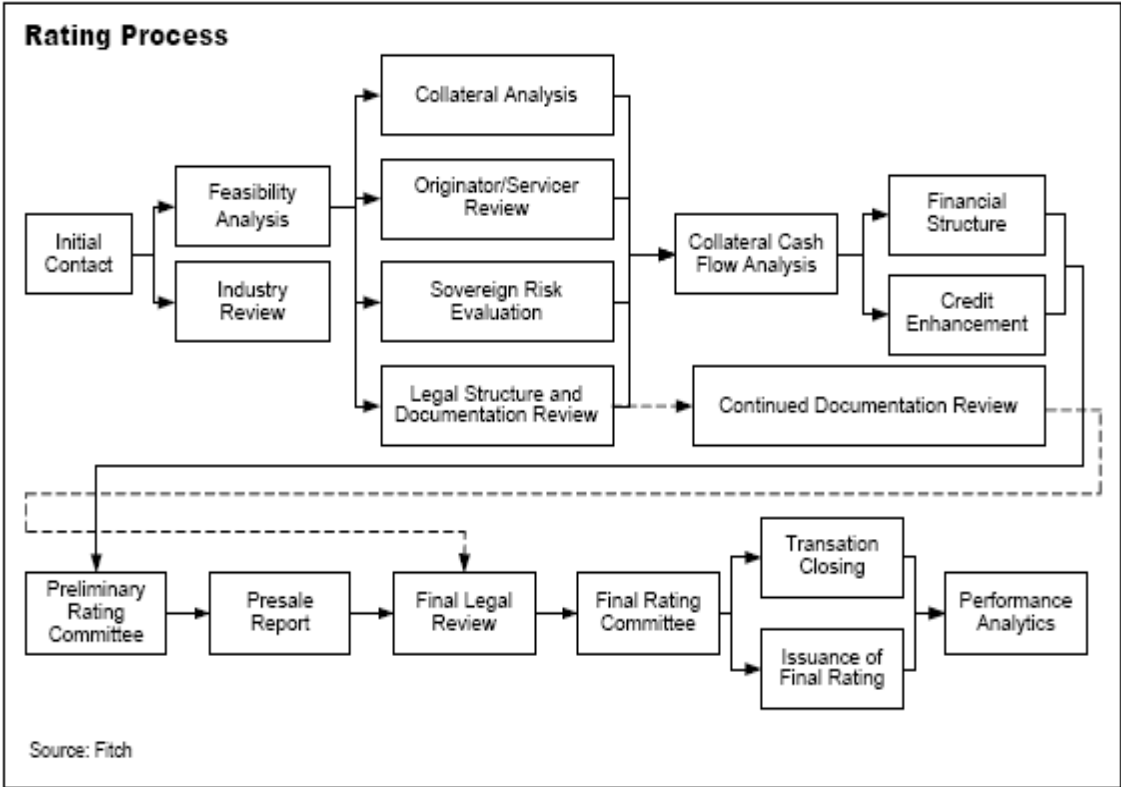


In some emerging markets (including South Africa), a national rating scale specific to the country is used thus removing the need to evaluate sovereign risk. These scales indicate a relative creditworthiness in relation to the best credit within a country, typically the sovereign i.e. the government. National ratings have a special identifier added at the end of the ratings; in the case of South Africa this is “za” or “zaf”. (Fitch Ratings 2006b)

**3.9.3 The rating process and the rating variables**

When evaluating a transaction, a rating agency will examine both qualitative and quantitative factors which can affect the ratings. Most of these have been discussed already in this chapter. The actual steps involved in rating a transaction are best represented by the following figure.

**FIGURE 3.3: The rating process**



Source: Fitch Ratings 2006b

### *3.9.3.1 Qualitative factors*

The qualitative analysis looks at the following aspects (Fitch Ratings 2005b):

- Collateral/asset quality (see sections 3.4.1.1, 3.4.2.1, 3.4.2.2).
- Originator, property manager and key service providers (see section 3.4.1.2)
- Asset portfolio's diversity and concentration (see section 3.4.1.1).
- Transaction's legal structure (see sections 3.5 and 3.10).
- Economic and market trends.

### *3.9.3.2 Quantitative factors*

The quantitative analysis entails a through examination of the properties' operating and financial history, the proposed note structure and the credit enhancements. The rating agency will build its own cash flow model based on the collateral data provided by the originator and it will make adjustments to such data where the revenue and expense items vary significantly from typical levels for that market and property type. Examples where adjustments are made include: where current rent is much higher than market rent or where the vacancy levels are considered unsustainably low. (Fitch Ratings 2005b)

Of primary concern in this analysis is the net operating income and net cash flow from the property portfolio, the properties' value and all the factors including the qualitative factors mentioned above that influence them (Salomon Smith Barney 2001). This analysis feeds into a review of the properties' debt service coverage ratio (DSCR) and loan-to-value ratio (LTV), two critical quantitative measures (Salomon Smith Barney 2001). The DSCR is the ratio of net operating income to the mortgage loan payment and it shows the capacity of the property's cash flows to service debt payment (Kolbe et al 2003:76). The LTV is a measurement of leverage and it is the ratio of the loan

amount divided by the value of the properties that serve as collateral for the loan (Kolbe et al 2003:76). The LTV ratio is an important tool for estimating the margin of safety associated with mortgage loans (Kolbe et al 2003:76). DSCR and LTV are discussed further in the next section.

The rating agency will build a base-case model which represents the anticipated performance of the transaction under a non-stressed scenario. This base-case model is then run through economic and property market related stress scenarios at each desired rating category and the level of credit enhancement needed for those ratings is determined. A DSCR per rating scenario can be used to quantify the cash flow stress associated with each rating category. (Fitch Ratings. 2006b)

#### **3.9.4 Expected loss**

The rating models built by the rating agencies are designed to compute the expected credit losses for the collateral type at each level of credit rating (Kothari 1999:215; Moody's Investors Service 2005; Heap 2006). The required level of credit enhancement at the different rating levels is based on the expected loss which is calculated as follows (Kothari 1999:215):

$$\text{Expected Loss} = \text{Default Frequency} \times \text{Loss Severity}$$

Default frequency or default probability refers to the percentage of cases that will default i.e. how often will the underlying loans default or what is the probability that the loans will default (Kothari 1999:215; Barclays Capital 2005). DSCR is considered as a good indicator of default probability (Salomon Smith Barney 2001). Loss severity, at an assumed default probability, is the loss as a percentage of outstanding loan value (Kothari 1999:215). LTV is an important

indicator of potential loss severity because the amount that can be lost upon default depends greatly on the properties' value relative to the outstanding debt on the properties (Murray 2006; Salomon Smith Barney 2001).

At every incrementally higher rating level, the cash flows from the assets are expected to hold up under increasingly severe economic conditions (Salomon Smith Barney 2001). For example, an AAA-rated tranche is supposed to withstand the worst case scenario (Kothari 1999:215). Theoretical or modelled default frequency and loss severity is higher at higher levels of rating because the cash flow scenario is more and more stressed (Kothari 1999:215). Therefore, progressively greater credit support is needed at higher rating levels (Salomon Smith Barney 2001). On the other hand, because tranches with a high rating receive a greater amount of credit support or enhancement, the actual (not modelled) loss on those tranches will be less (Barclays Capital 2005).

### **3.9.5 The size of note tranches**

As explained already in this chapter (see sections 3.6.2, 3.6.3 and 3.7.1.1), credit tranching or subordination is a widely used note structuring and credit enhancement method in commercial mortgage backed securitisation. This type of note structure reallocates the risk among different classes of notes (it does not eliminate the risk) (Gordon 1999).

Rating agencies decide how much subordination is required per rating class and consequently the size of the note tranches relative to the total note issue (Gordon 1999). The level of subordination is in turn determined by the expected loss of the different rating classes (see section 3.9.4).

As an example, assume that under various stress scenarios, the default frequency and loss severity per rating is as shown in table 3.2. The expected loss is equal to the default frequency times the loss severity. N/R is the unrated class of notes or it could be some other form of credit enhancement.

**TABLE 3.2: An example of expected loss calculation**

Rating	Default Frequency	Loss Severity	Expected Loss
AAA	50%	60%	30%
AA	40%	60%	24%
A	35%	57%	20%
BBB	30%	53%	16%
BB	20%	50%	10%
N/R			

The values shown in the expected loss column above, is the amount of subordination that a particular tranche requires. Based on the expected loss and number of classes in this example, the size of the tranches would be as follows:

**TABLE 3.3: An example of note tranching**

Rating	Subordination Required	Size of Tranche as % of Total
AAA	30%	70%
AA	24%	6%
A	20%	4%
BBB	13%	7%
BB	10%	3%
N/R	0%	10%

A 30% subordination level for the AAA-class means that 70% of the total note issuance can be AAA-rated (i.e. 70% of the total with 30% subordination behind it). By requiring 24% subordination for an AA-rating, the size of the AA-class can be 6% of the total (i.e. 100% minus 70% in AAA minus 24% subordination for AA). Therefore the sum total of all the classes below AA is 24%.

### 3.10 LEGAL STRUCTURING

A very important part of structuring a securitisation transaction is the legal structuring and the drafting of the legal documentation. Legal and regulatory aspects as they apply to South African securitisation are discussed in chapter five. This section discusses aspects that are important from a legal structuring and rating point of view. Typically, an independent legal advisor has to examine the transaction and its related documents and report on it through an opinion letter (also referred to as the “legal opinions”) (Kothari 2006:208). Rating agencies use these legal opinions to assess whether the transaction structure demonstrates the legal characteristics on which a given credit rating is based (Fitch Ratings 2004).

The legal opinions usually address and confirm the following issues (Fitch Ratings 2004 & 2006c):

- **Due incorporation.** Confirmation of the establishment and existence of the SPVs.
- **Authorisation.** That the transaction parties and the SPVs have the power and capacity to enter into and perform their obligations under the transaction documents.
- **True sale.** That all the rights, title and interest in the underlying assets have been transferred to the issuer SPV and that this transfer cannot be re-characterised as a secured loan or otherwise invalidated in the event of the originator’s insolvency.
- **Non-consolidation.** That upon insolvency of the originator, no bankruptcy court would be permitted to consolidate the assets of the issuer with those of the originator.

- **Bankruptcy remoteness.** That the potential for bankruptcy proceedings to be brought against the issuer SPV is remote.
- **Security structure.** That the issuer SPV has granted first-priority perfected security interests over the collateral to secure the claims of the investors.
- **Enforceability.** That all transaction documents are valid, binding and enforceable in accordance with their terms against all transaction parties.
- **Regulatory, legal and tax requirements.** That these aspects and the way they affect the transaction and the SPVs have been addressed.

If the originator makes use of a multi-issuance vehicle (i.e. a securitisation programme) rather than a single issuance vehicle, the legal opinions will assess whether the multi-issuance vehicle achieves the same desired results for the investors in its individual issuances or note series as if it was a single issuance structure (Fitch Ratings 2006c). The most important aspects addressed in this case include the following (Fitch Ratings 2006c):

- Whether there is effective legal segregation or compartmentalisation of particular pools of assets and their cash flows for investors in each series issuance (i.e. is there commingling risk).
- Whether there is any risk of the liabilities of one series attaching to the assets of another series.
- Whether any existing series can be prejudiced by the terms of issuance of a subsequent series.
- How the structure allocates responsibility for third-party liabilities and costs.
- Whether the structure provides for separate enforcement of security for individual note series.

### 3.11 SUMMARY

This chapter has explained how a CMBS transaction is set up, the various elements and aspects that must be considered and the steps that are taken. Firstly, the originator must examine the legal and financial feasibility of the proposed securitisation. If after the feasibility study the originator decides to go ahead, its asset portfolio is analysed to determine which assets should form part of the securitisation. Asset selection was explained both from a property company's and a bank's point of view.

A due diligence audit of all aspects related to the selected assets is performed next. If the originator is a property company then the audit will focus on the commercial properties, the originator and the property manager. If the originator is a bank, the due diligence audit will focus on the commercial mortgage loans and the underwriting processes of the bank.

The assets and related security are transferred to the relevant special purpose vehicles once the due diligence process is complete. The transfer process can be quite time consuming therefore it is started as soon as it is possible. The three SPVs used in a South African CMBS structure were explained i.e. the issuer SPV, the security SPV and the borrower SPV.

While the assets and security are transferred to the SPVs, the note structure and note features are determined. With a bond structure this involves determining: the size, number, duration and payment priority of the note tranches; the timing of the principal repayment; the type of interest rate on the notes (i.e. fixed or floating); the prepayment protection features; and the type and level of credit enhancements that will be used. The importance of credit enhancement and the various internal and external types were described in detail.



In conjunction with determining the note structure, the cash flows of the transaction are modelled. The outcome of this modelling may show that adjustments must be made to the note structure, transaction structure or even the assets selected.

Once all these processes have been completed and the legal documentation is drawn up, a rating agency will perform its analysis to determine the credit risk of the different tranches and assign ratings to them. The importance of ratings and the rating process was explained. The rating agency will point out problem areas in the transaction and these aspects are then corrected by the arrangers. If the originator is unhappy with the proposed ratings then the transaction and note structure is re-examined, certain aspects changed and the notes are rated again. Lastly, this chapter explained the aspects that are examined in a transaction's legal documentation that are important from a rating perspective.

## CHAPTER 4

# ADVANTAGES, DISADVANTAGES AND RISKS OF SECURITISATION

### 4.1 INTRODUCTION

Securitisation is considered to be an important financial innovation (Cowan et al 2003; Kothari 1999; Wilkomm 2006). Solans (2003) gives the following definition for the concept of financial innovation:

Financial innovation refers both to technological advances which facilitate access to information, trading and means of payment, and to the emergence of new financial instruments and services, new forms of organisation and more developed and complete financial markets. To be successful, financial innovation must either reduce costs and risks or provide an improved service that meets the particular needs of financial system participants.

Securitisation is an important and successful financial innovation as it reduces both costs and risks for the originating institution and at the same time meets various needs of investors and provides numerous benefits for economies.

This chapter will explain the advantages of securitisation from the viewpoint of originators, investors and economies as a whole. The growth of securitisation markets can be attributed to these benefits. To provide a balanced view, this chapter will also discuss the disadvantages of securitisation and the risks inherent in securitisation investments. The last section lists the attributes of an ideal securitisation transaction from the investors' perspective.

## **4.2 ADVANTAGES OF SECURITISATION FOR ORIGINATORS**

As explained in chapter two, the two categories of securitisation originators are non-financial institutions (e.g. a property company) and financial institutions, usually banks. Securitisation offers some of the same benefits for both groups; however (non-financial) companies and banks can have very different motivations and requirements when setting up a securitisation. For this reason the advantages of a CMBS transaction for the originator will be explained from the two different perspectives.

### **4.2.1 Advantages for a property company**

When a property company initiates a CMBS programme, it places the collateral physical properties in a ring-fenced SPV and provides mortgage bonds over those properties as a security for the CMBS notes. It will still own the actual buildings just in a different legal form. The main purpose of CMBS for a property company is to raise funding at a lower cost. Two scenarios are possible. Firstly, if the properties are not mortgaged then the company can use the cash raised to free up equity capital, to invest in new assets or to improve its liquidity. Secondly, where the properties are already mortgaged by a bank, the company can use securitisation to replace its bank funding. The question is what advantages securitisation has to offer that makes it a more attractive funding method than bank loans, corporate bonds or equity capital. These advantages are discussed below.

#### ***4.2.1.1 Lower cost of funding***

A company can obtain cheaper long-term funding through securitisation than it could through bank loans, corporate debt or equity (Rand Merchant Bank [RMB] 2005). This is usually the most important motivation for a company in

setting up a securitisation programme (Kothari 2006a:97). Reduced funding costs can lead to increased profitability and improved shareholder returns which provide the originator with a competitive advantage (Wilkomm 2006).

#### ***4.2.1.2 Better rating of securities***

The SPV structure used in securitisation separates the assets' cash flows from other cash flows of the originator and makes the assets bankruptcy remote (Thompson 2001). This results in the isolation of the securitised assets' credit risk from the overall risk of the originator and enables the notes to be rated purely on the strength and quality of the underlying assets regardless of the originator's ratings (Luff 2001:15). This SPV structure in combination with credit enhancements enables the notes to achieve a much higher rating (even the highest rating of AAA) than the rating of the originator or the rating that the originator's corporate bonds could attain. It is this high rating for the majority of the note issue that decreases the funding cost (Kothari 2006a:99).

A high rating means that the credit risk or the probability of default on payments due on the notes is low. According to investment principles, investors are compensated for taking on more risk by receiving a higher return. Therefore the low risk of AAA-rated notes translates into a lower interest rate on the notes and hence lower cost of funding for the originator.

#### ***4.2.1.3 Provides increased funding***

Securitisation can lead to increased funding since it does not disturb traditional lines of credit and debt with a financial institution. Therefore securitisation can be used in conjunction with other forms of funding and not in place of, thereby increasing the total financial resources available to a company. (Kothari 1999:97)

#### *4.2.1.4 Diversifies funding sources*

Securitisation provides companies with an additional and alternative source of finance. This enables them to diversify their funding sources and become less dependent on traditional sources like bank loans, corporate bonds and equity capital. (RMB 2005; Thompson 2001)

#### *4.2.1.5 Lowers the weighted average cost of capital*

The capital structure of a company is made up of equity and debt. Both lenders of debt funding and equity share holders expect a return on the capital they have provided. The overall combined required return by these two groups represents the firm's weighted average cost of capital (WACC) which is calculated as follows (McClure 2003):

$$WACC = (E/V * Re) + (D/V * Rd * (1-Tc))$$

Where:

$E$  = market value of the firm's equity

$D$  = market value of the firm's debt

$V$  = total capital invested in the firm (equals  $E+D$ )

$Re$  = required rate of return on equity or cost of equity

$Rd$  = cost of debt (the interest rate on loans)

$Tc$  = corporate tax rate

This shows that WACC is the average of the cost of equity and the cost of debt, weighted by the proportion of equity and debt in the firm's capital structure. The after tax cost of debt is used because interest paid on debt is tax-deductible resulting in tax savings. (McClure 2003)

Securitisation results in a lower WACC for two reasons. Firstly since securitisation is a form of debt funding, it increases the  $D/V$  ratio and at the same time reduces the  $E/V$  ratio. In other words by increasing debt funding the amount of equity required for a given amount of asset creation is reduced (Kothari 1999:94). This is important because equity is the most expensive source of capital as it carries the highest risk. Secondly securitisation results in a lower interest rate payable than for example the interest rate on bank loans and this reduces the cost of debt.

#### ***4.2.1.6 Functioning of the assets remain unchanged***

As already mentioned, the property company that originates the securitisation still owns the properties. Therefore the capital appreciation in the buildings' value (that is not tied into the securitisation) accrues to the originator. In other words the originator retains the future growth potential. Also the excess income from the properties above the interest payable on the loan from the issuer SPV flows back to the originator. (Van den Berg 2000)

#### **4.2.2 Advantages for a bank**

When a bank originates a CMBS programme, it sells its portfolio of commercial mortgage loans to the Issuer SPV. These loans which are the bank's assets are then removed from its balance sheet. The result is that illiquid assets are transformed into tradable instruments providing cash inflow for the bank. Therefore securitisation enables a bank to realise the value of its loans immediately. At the same time, the bank's relationship with its customers remains unaffected since the originating bank will typically service the loans on behalf of the issuer. (Wilkomm 2006; European Securitisation Forum [ESF] 1998; Cowan et al 2003; RMB 2005)

#### *4.2.2.1 Improves balance sheet structure*

Securitisation can be used to manage the size and structure of a bank's balance sheet. The removal of assets from the balance sheet in conjunction with the accelerated income from the assets improves the bank's accounting presentation and can also improve the gearing ratios and performance measures such as return on equity and return on assets. Securitisation also allows a bank to reposition its balance sheet, if for example it is too exposed to a certain asset class or credit risk. The cash generated from selling certain assets can be used to diversify its portfolio and enables a more efficient use of capital. (Gumata & Mokoena 2005; Lyons [ca] 2002; ESF 1998; Cowan et al 2003; Fitch Ratings 2006a; Deloitte 2005; Kothari 1999:96-98)

#### *4.2.2.2 Helps with capital adequacy requirements and multiplies asset creation ability*

For banks and other financial intermediaries, a true sale securitisation is treated as an off-balance sheet funding method from a regulatory capital requirement viewpoint. This is very important for banks and it is often the main reason for initiating a securitisation programme. Capital adequacy requirement refers to the amount of capital (equity) that a bank must hold against the loans that it has extended i.e. against the credit risk that the bank has taken on. The need for this is because banks use the depositor's money (which is on-balance sheet funding) to extend the loans. Securitisation allows a bank to sell some of its assets (profitably) and therefore reduces the amount of capital needed for regulatory purposes. Alternatively, since the amount of capital that a bank has restrains the amount of assets that can be generated, the proceeds from the asset sale can be used to create new assets. Therefore the bank is able to finance more loans without having to increase its own portfolio and without the need

for additional equity offerings. This increased asset generation ability contributes to the growth of the bank. (Kothari 1999:95-97; Cowan et al 2003; Thompson 2001; Lyons [ca] 2002)

The need to manage a bank's capital more efficiently because of the Basel Capital Accords has resulted in more extensive use of securitisation by banks world wide. Under the Basel Accords banks are required to hold capital based on the risk level of individual assets and need to hold capital not only for exposures to credit risk but also against exposure to market and operational risk. (Luff 2001:16)

The increased use of securitisation by banks in turn has led to the introduction of regulations on capital requirements for securitisation. These regulations define the conditions which have to be met for a securitisation to be treated as off-balance sheet and the capital requirements for the risks that are retained by the originating bank. (Kothari 1999:96)

#### ***4.2.2.3 Increased fee income***

As already discussed in chapter two, a bank performs a number of supporting roles in a securitisation transaction whether or not it is the originator. For these services the bank earns both up-front fees and ongoing servicing fees.

Securitisation can transform a risky lending business based on interest income into a limited risk, fee income business. Therefore it enables the bank to manage its income mix and makes the bank less sensitive towards unfavourable movements in interest rates. Securitisation also enables a bank to increase its income. It allows the bank to create assets, make interest income on



them, transfer them off from its balance sheet and then make more income on the same assets (the fee income) without the capital requirements. (Van den Berg & Van Schalkwyk 2002; Lyons [ca] 2002; Luff 2001:16; Kothari 1999:96)

#### ***4.2.2.4 Perfect matching of assets and liabilities***

Banks typically fund long-term assets like mortgage loans with short term liabilities i.e. with the bank deposits of clients. This results in maturity mismatches that the bank needs to manage. The profitability of a bank is also dependent on long-term interest rates being higher than short-term rates. Through securitisation, the term or duration of the assets can be matched with the duration of the liabilities. If the Issuer SPV buys commercial mortgages that have an average duration of five years then it can fund the purchase of the loans by issuing five year notes. (Kothari 1999:95; Wilkomm 2006; Luff 2001:14)

#### ***4.2.2.5 Reduces or reallocates risk***

Securitisation is a very effective risk management tool. Various risks are transferred from the bank to the investors and to the capital markets. A bank can use it to transfer its interest rate risk arising from maturity mismatches and interest rate mismatches i.e. lending at a fixed rate while borrowing at a floating rate. Secondly, securitisation isolates the credit risk of the loans from the operating risks of the bank and transfers this credit risk in distinct tranches to the investors. Usually the bank will retain the unrated portion of the notes, thereby taking the first loss. In this case securitisation caps the bank's credit risk; but it does not eliminate the entire credit risk. Thirdly, it reduces funding risk by diversifying and increasing the sources from where the bank can obtain funds. (Kothari 1999:98; Gumata & Mokoena 2005; Barclays Capital 2005; Deloitte 2005; Luff 2001:14; Cowan et al 2003; Wilkomm 2006)

### **4.3 ADVANTAGES OF SECURITISATION FOR INVESTORS**

All over the world, including South Africa, investors have shown a great interest in investing in securitised products. These investors mainly include institutional investors like insurance companies, pension funds, banks, investment funds and finance houses. As the buyers of and market for securitisation issues, investors are vital to the success of a securitisation programme. Originators would not be able to gain the above mentioned benefits unless securitisation was an attractive option for investors as well. (Kothari 2006:102; Luff 2001:21)

#### **4.3.1 Exposure to more assets**

Securitisation provides investors with a wide variety of assets and investment alternatives. It enables them to gain exposure to property, corporate, retail and bank assets without having to originate and manage these assets. For example, investors can gain exposure to the commercial property market by buying CMBS notes instead of buying and maintaining commercial properties themselves. Including securitised assets in an investment portfolio also enables investors to diversify their portfolio and the corresponding risk. (RMB 2005; Barclays Capital 2005 & 2006; ESF 1998; Fitch Ratings 2006a)

#### **4.3.2 Better matching with investment objectives**

For investors one of the biggest advantages of securitised assets is that the terms of the securities or notes can be tailored to meet specific investor requirements. Through different structuring techniques, issuers can vary the coupon type, the maturity, the payment structure and the seniority of a security according to investor's needs. Since a securitisation issue is divided into different classes of notes according to credit risk, it enables investors to buy

notes that meet their risk and return requirements. This flexibility makes securitisation issues attractive to investors and it also contributes to a more efficient capital market since investors and portfolio managers have access to securities that meet their investment objectives. (Luff 2001:22; Kothari 2006:103; Barclays Capital 2005; Cowan et al 2003; ESF 1998; RMB 2005)

#### **4.3.3 Attractive yields**

Historically, securitisation issues have provided an attractive yield (interest rate) for investors. This yield is typically higher than the yield on government bonds of comparable credit risk and maturity. Generally the returns have a low volatility due to the stable performance of the underlying assets and the credit enhancements built into a securitisation structure. (RMB 2005; Cowan et al 2003; Deloitte 2005)

#### **4.3.4 Bankruptcy remote and credit rated**

With the securitisation structure the assets that secure the investors' interest are protected from a potential bankruptcy or insolvency of the originator. The credit risk of the assets is also isolated from the operating risks of the originating company. Consequently, investors only need to consider the quality of the underlying assets and their cash flows and not the strategies and corporate risks of the originator. The independent credit rating by a highly reputed rating agency provides further comfort for the investors concerning the quality of a securitisation issue. (RMB 2005; Cowan et al 2003)

#### 4.4 THE ECONOMIC IMPACT OF SECURITISATION

Securitisation also has benefits from a broader social and economic perspective; these are as follows (ESF 1998; Kothari 2006:26-28; Cowan et al 2003; Luff 2001:15; Wilkomm 2006):

- **Increases the availability of financing.** This can lead to the provision of more widespread housing finance and consumer credit which are important governmental objectives in many countries.
- **Decreases the cost of financing for consumers.** Financial institutions achieve a cost saving when they securitise their loans. This cost saving can be passed on to borrowers in the form of lower interest rates.
- **Encourages an efficient allocation of capital.** Through securitisation, the lending activities of banks are affected by the demand, pricing and valuation principles of the capital market forces. This facilitates an efficient allocation of capital.
- **Reduces portfolio and systemic risk among financial institutions.** By shifting credit and interest rate risk to the capital markets, financial institutions reduce their own risk. With the reduction of risk within individual institutions, the risk faced by the overall financial system declines.
- **Results in functional specialisation.** Securitisation separates the roles of origination, servicing, administration and funding. This results in the formation of specialist functions and businesses which improves the efficiency of the financial system as a whole.
- **Improves business practices.** Securitisation requires a large amount of quality data about the assets that will be securitised. Through the

structuring process originators need to re-examine their business processes and if required they need to improve their information systems.

- **Results in greater transparency.** Since the notes issued are typically rated by an (independent) rating agency, securitisation results in a high degree of transparency concerning the securitised assets and their cash flows.

#### 4.5 THE DISADVANTAGES OF SECURITISATION

Along with all the advantages, there are a number of disadvantages to securitisation which can become barriers for companies wanting to initiate a securitisation programme. These are the following:

- **Expensive to set up.** The costs involved in setting up a securitisation vehicle can be substantial, in particular the arrangers' fees, rating agency fees and legal costs (Thompson 2001).
- **Time consuming to set up.** All securitisation transactions are unique in structure to some degree. This is because the structure is determined by the asset class, originator and investor requirements and country of jurisdiction. Due to this relative lack of standardisation, securitisation transactions are complicated and time consuming to set up (Lyons [ca] 2002) especially in countries where securitisation of certain asset classes is a novelty.
- **Uneconomical for low financing requirements.** Due to the high set up costs, securitisation is only economical or cost effective for a large note issuance (Kothari 2006:104). To determine whether a securitisation will result in cost savings, the originator needs to make an assumption concerning the amount and period over which to amortise the set up costs

- (Luff 2001:20). If these expenses are very high, they will have a disproportionate effect on a smaller transaction.
- **Requires a large amount of quality historical data.** If historical data concerning the assets' performance is not available, it is difficult to assess the initial credit risks involved. This can result in an inaccurate assessment of default rates on the assets, which is a key input for deriving credit ratings. (Lyons [ca] 2002)
- **Passes on data-base to investors.** The information about the assets and their cash flows are passed on to the SPV and investors have a right to inspect this information. Therefore the transparent nature of securitisation can become a negative aspect for an originator especially if some of the investors are the originator's competitors. (Kothari 2006:105)

## 4.6 SECURITISATION AS AN INVESTMENT

Besides looking at the advantages, investors also need to consider the risks inherent in securitisation issues and the attributes that a securitisation vehicle should possess to make the notes a safe and attractive investment option. These are discussed below.

### 4.6.1 Risks inherent in securitisation investments

#### 4.6.1.1 Credit Risk

As explained in chapter three, credit risk is the probability that interest and capital on the notes will be repaid in full and on time (Fergus & Jacobs 2000). The quality of the underlying asset portfolio and the level of credit enhancements determine the level of this risk, provided that the transaction was properly structured at its outset (Kothari 2006:933). If borrowers in a

securitisation transaction default on their loans, the issuer SPV could experience cash shortfalls (Luff 2001:19). In this event, the SPV would not be able to make the payments due on the notes in time unless there are sufficient credit enhancements or a liquidity facility in place. At very high borrower defaults, it is possible that the credit enhancements will not be sufficient. Therefore, the special servicer would start the recovery process on the defaulted assets through the liquidation of the assets or through legal actions.

#### ***4.6.1.2 Operational Risk***

Securitisation isolates the credit risk of the assets from the operating risk of the originator and only transfers the credit risk to the SPV. Despite this, the securitisation process itself can introduce new operational risks due to the complexity of running a securitisation vehicle. For example more borrowers might default because the collections (servicing) function is not carried out properly. In the case of a CMBS where the underlying assets are commercial properties, the vacancy rates can increase if the properties are not adequately maintained. This would lead to reduced rental income and potentially decreased property value. (Thompson 2001; Luff 2001:19)

#### ***4.6.1.3 Counterparty Risk***

This risk is associated with the performance of counterparties in a securitisation transaction (Kothari 2006:935). Counterparties include the liquidity provider, swap provider, administrator and recovery agent among others. For example, a liquidity facility is vital to prevent default on the notes therefore a decline in the financial standing of the liquidity provider can lead to increased credit risk.

#### ***4.6.1.4 Legal Risk***

Legal risk refers to the possibility that owing to some legal issues or invalid assumptions, the legal structure of the securitisation is threatened. For example, due to a legal error a court may disregard the SPV's title over the receivables in the event of originator bankruptcy. If this happens, the investors could lose their capital. (Kothari 2006:935)

#### ***4.6.1.5 Cash Flow Risk***

Cash flow risk arises from irregular cash flows, for example prepayments, delayed payments and reinvestment cash flows. As already discussed, the risk of delayed payments is absorbed by the liquidity facility or credit enhancements. The risk of prepayment refers to the possibility that borrowers will repay the capital amount of their loan before the maturity date. This would have a negative affect on the investors' return. Prepayment risk is countered by introducing structural constraints, such as a hard lockout period, yield maintenance or prepayment penalty, all of which severely restrict the borrower's ability to prepay. Reinvestment risk is related to securitisation because the SPV will typically reinvest the cash available between scheduled payment dates on the notes. This risk arises because reinvestment rates vary based on the interest rates prevailing at that time and therefore the return on the reinvested cash is uncertain. (Kothari 2006:936; Luff 2001:19; Vanderbilt Capital Advisors 1999)

#### ***4.6.1.6 Catastrophic Risks***

This is the risk that due to a once off abnormal event the investors lose the capital amount that they have invested. Examples of these events include fraud, natural disasters and country risks like war. Catastrophic risks are related to all types of investment. (Lyons [ca] 2002)



#### **4.6.2 Investor requirements for securitisation**

To mitigate the risks mentioned above, a securitisation transaction should have certain attributes which would make the transaction and its note issuance a safe investment option. According to Thompson (2001) these are as follows:

- The originator is competent and prudent in its asset generation.
- The originator has a high financial standing and integrity.
- The assets generate regular, predictable and secure cash flows.
- The borrowers have an acceptable risk profile.
- The portfolio of assets is sufficiently diversified.
- The securitisation structure has an adequate level of credit enhancement.
- The issuer SPV is controlled by an independent trust and the functions of the SPV are carried out on its behalf by independent and competent service providers.
- The legal documentation is comprehensive and meticulously prepared so that the rights of the transaction parties are protected.
- The note issue is rated by a highly reputed rating agency.
- The accounting records of the SPV are audited by an independent auditor.
- The administrator of the SPV and the rating agency provides regular reports on the performance of the transaction.

## 4.7 SUMMARY

Chapter four explained the advantages, disadvantages and risks inherent in securitisation transactions in general. First of all the advantages were discussed from the originator's and investors' perspectives. If the originator is a non-financial company like a PLS the main advantage of securitisation is that it lowers the company's cost of debt which in turn lowers its average cost of capital. This can lead to increased profitability and improved shareholder returns. Other advantages are that it diversifies the company's funding sources and reduces its reliance on bank funding.

For a bank originator, securitisation facilitates the removal of assets from its balance sheet. This enables the more efficient use of capital and helps with regulatory capital adequacy requirements. These aspects lead to increased asset creation which contributes to the growth of the bank. Another important advantage is that it enables the bank to shift the risks related to its asset portfolio to investors in the capital market.

Securitisation notes as an investment provides a number of advantages. It enables investors to gain exposure to more types of assets which offer attractive yields compared to government bond issues of comparable credit quality and maturity. Securitisation also offers flexibility and variety in terms of credit quality, maturity and payment structure of the notes. These attributes may be tailored to meet specific investors' objectives.

The next section discussed the economic impact of securitisation.

Internationally it has been demonstrated that the existence of a broad and efficient securitisation sector can increase availability and decrease the cost of financing for consumers. Securitisation also encourages the efficient allocation

of capital and reduces systematic risk among financial institutions. The growth of securitisation markets can be attributed to the numerous benefits it offers originators, investors and the economy as whole.

Along with the advantages, there are a number of disadvantages and risks involved in securitisation. A transaction is expensive and time consuming to set up and uneconomical for low financing requirements. These disadvantages can become barriers for companies wanting to securitise their assets. For investors the disadvantages are the potential risks inherent in securitisation issues including credit, operational, counterparty, legal and cash flow risks. These risks can threaten the investors' rights and the capital they have invested. Lastly, the chapter listed the attributes which a securitisation transaction should have to mitigate these risks.

## CHAPTER 5

# LEGAL, REGULATORY, TAXATION AND ACCOUNTING ASPECTS

### 5.1 INTRODUCTION

According to Kothari (1999:222), legal issues in a securitisation are “as significant as they are complicated”. A primary objective of the securitisation structure is to provide investors with legal rights over the securitised assets without the interference from the originator and with protection from a potential insolvency or bankruptcy of the originator. The legal issues of securitisation pose problems in most jurisdictions of the world. Consequently, securitisation typically requires intensive legal structuring and the drafting of numerous “complicated” legal documents often at very high costs. (Kothari 1999:221-222)

Regulatory aspects also play a paramount role in securitisation transactions. Unfavourable or ambiguous securitisation regulations can completely obstruct a country’s securitisation market. This was the case in South Africa where the main trigger for the accelerated development of securitisation was the change in the securitisation regulations in December 2001<sup>1</sup> (“the 2001 Regulations”). (Van Vuuren 2004)

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<sup>1</sup> For the full text of the “2001 Regulations” consult Government Notice No. 1375 published in Government Gazette No. 22948 of 13 December 2001.

Securitisation is regulated by the Banks Act <sup>2</sup> (Thompson 2001) and previously it fell within the meaning of “the business of a bank” which meant that only registered banks could securitise. This and other regulatory constraints limited the development of securitisation prior to 2001. In terms of the 2001 Regulations, the operation of a securitisation scheme is no longer regarded as “the business of a bank” provided that certain conditions are complied with (Van Vuuren 2004). Therefore corporations as well as banks can make use of securitisation. The 2001 Regulations also make provisions for a bank to fulfil multiple roles in a securitisation transaction (Van Vuuren 2004).

The latest amendments to the securitisation regulations were introduced in June 2004 <sup>3</sup> (“the 2004 Regulations” or “the Regulations”). These regulations broaden the types of assets that may be securitised (for example future flow receivables can be securitised), provide more detailed conditions for securitisation, allow for the creation of synthetic securitisations and prescribe the disclosure of certain information in the disclosure documents (Republic of South Africa [RSA] 2004). The 2004 Regulations aim to facilitate the development of the South African securitisation market under prudential supervision, recognising the potential benefits for the various transaction parties (Deloitte 2005). According to Fitch Ratings (2006a:5), the current legal and regulatory environment in South Africa is “sufficiently stable and robust to sustain a viable securitisation industry”.

Further amendments to the securitisation regulations are expected because there are plans to incorporate the new Basel Capital Accord requirements into the South African Banks Act. According to Moody’s Investors Service, the

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<sup>2</sup> Banks Act Regulation No. 153 dated 3 January 1992.

<sup>3</sup> For the full text of the “2004 Regulations” consult Government Notice No. 681 published in Government Gazette No. 26415 of 4 June 2004.

changes to the regulatory capital requirements<sup>4</sup> of banks, as per the new Basel Capital Accord, will influence the types of assets that will be securitised by banks. It will also lead to new structural features in securitisation transactions. (Moody's Investors Service 2006:7)

Taxation and accounting issues are also important in securitisation transactions because they can have a huge impact on the economic viability (e.g. cost implications) of a transaction. These aspects can also determine the extent to which the benefits of securitisation, as discussed in chapter four, can be attained. In this chapter the main legal, regulatory, taxation and accounting aspects of South African securitisation schemes will be summarised as they apply to traditional transactions.

## **5.2 LEGAL FRAMEWORK**

This section discusses two main legal aspects that apply to securitisation: the right to sell receivables; and the security structure used in South Africa. Following this, the legal documentation in a CMBS transaction is listed. The scope of this study does not provide for a comprehensive legal analysis.

### **5.2.1 The right to sell receivables**

In some legal jurisdictions the approval of the debtors needs to be obtained before their debt can be sold (Kothari 1999:186). This can become an insurmountable or a very costly problem for securitisation. Under South African law, a seller can sell or transfer its receivables by ceding all its rights,

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<sup>4</sup> For further explanation see chapter 4, section 4.2.2.2.

title and interest in the receivables to the purchaser of the receivables. This may take place without the consent and consultation of the debtors unless the receivable contracts with the debtors specifically state otherwise or unless the seller wishes to delegate his obligations under the contract to a third party. If the sale of the receivables weakens the debtor's position or if it makes the debtor's position more onerous, the sale of the assets will be unenforceable. (Werksmans Attorneys 2005:222)

### **5.2.2 Security structure**

The South African security structure makes use of two bankruptcy-remote SPVs: the issuer SPV and the security SPV. The purpose of this is to ensure not only the rights of the investors but also the rights of the transaction creditors. This was explained in chapter two (see section 2.3.2.3 and section 2.4).

### **5.2.3 The legal documentation**

In setting up a securitisation transaction numerous legal documents need to be drafted. The following is a list of the typical legal documentation in a South African CMBS programme, based on the series supplements of the four CMBS transactions to date.

- Programme memorandum ( incl. the terms and conditions of the notes)
- Programme management agreement
- Memorandum and articles of association of the issuer and security SPVs.
- Trust deeds of the owner trust and the security SPV owner trust
- Common terms agreement
- Series supplement
- Sale agreements
- Servicing agreement

- Calculation agent agreement (including transfer agent agreement)
- Settlement agent agreement
- Derivative contracts
- Liquidity facility agreement
- Guarantee
- Indemnity or counter-indemnity
- Security agreements (i.e. the issuer security cession)
- Account bank agreement
- Series note subscription agreement
- Loan agreements and related security agreements
- Reserve fund loan agreement
- Pricing supplement

## **5.3 THE SOUTH AFRICAN SECURITISATION REGULATIONS**

### **5.3.1 Transfer of assets to an SPV and “true sale”**

In a securitisation transaction there must be a transfer of an asset or assets (i.e. a traditional securitisation) or a divestment of a risk (i.e. a synthetic securitisation<sup>5</sup>) from the originator. The concept of “true sale”<sup>6</sup> in traditional securitisations is provided for in the Regulations through the transfer of assets to an SPV (i.e. the issuer SPV). There are certain criteria concerning the (“true sale”) transfer of assets to an SPV, these are as follows (Fitch Ratings 2006a:6-7; Werksmans Attorneys 2005:225):

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<sup>5</sup> For regulations concerning a synthetic securitisation scheme refer to Government Notice No. 681 published in Government Gazette No. 26415 of 4 June 2004 and where the originator of a synthetic securitisation scheme is a bank, also refer to the Government notice R1112 published in Government Gazette 21726 of 8 November 2000.

<sup>6</sup> See chapter two, section 2.2.5.



- The originator (i.e. the seller) must have owned the assets before they were transferred to the SPV.
- The originator must totally divest all its rights and obligations in connection with the assets that are transferred. (In a secondary role, for example as a servicer, the originator is permitted to assume some risk in relation to the assets that were transferred.)
- The originator may not provide support to the securitisation transaction beyond the contractual terms relating to the scheme.
- The assets may not be transferred to the SPV if this would result in a breach of any terms of the relevant underlying transactions.
- The SPV (i.e. the purchaser) may have no right of recourse against the seller in respect of losses incurred from the transferred assets (unless the loss was incurred due to the breach of a warranty provided by the seller).
- A bank originator cannot replace non-performing asset in the securitisation vehicle. It can however replace performing assets with assets of similar credit quality.
- A bank originator may repurchase assets from the SPV but only under market-related term and conditions.
- The SPV must pay the purchase price of the transferred assets to the seller by no later than the date of asset transfer.

### **5.3.2 Control of the SPV**

An SPV is defined as “a company incorporated or a trust created, insolvency-remote, incorporated or created solely for the purpose of the implementation and operation of a traditional or a synthetic securitisation scheme” (RSA 2004:11). In this context, “insolvency remote” means that the assets of the SPV are protected from the originator if it becomes insolvent (RSA 2004:6). As such, the originator is only allowed a limited amount of control over the SPV.

The Regulations stipulate the following in terms of the ownership and control of an SPV <sup>7</sup> (Fitch Ratings 2006a:7; Werksmans Attorneys 2005:228):

- The SPV must have an independent board of directors <sup>8</sup> in the case of a company or a body of trustees <sup>9</sup> in the case of a trust.
- The originator can appoint one director or a single trustee.
- The board of directors or trustees must comprise of at least three people.
- The originator cannot hold more than 20% of the equity share capital of the SPV or 20% of the interest, beneficial or otherwise (in the case of a trust).
- The originator may not have the right to determine the outcome of voting at any meeting of the SPV.
- The name of the SPV may not include the name of the bank acting as the originator in a securitisation transaction.

### **5.3.3 Credit enhancement**

According to the regulations any bank, including originators to the securitisation scheme, may provide a credit-enhancement facility for the scheme provided that certain requirements are met. These requirements include the following (Fitch 2006a:7; Deloitte & Touche 2003):

- There is no recourse to the bank or other institution within the banking group beyond the fixed contractual obligation specified in the facility.
- The credit-enhancement facility has a specified maturity date.

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<sup>7</sup> The SPV refers to the issuer SPV.

<sup>8</sup> Where the SPV is a company, the board of directors must comply with the provisions of the Companies Act, 1973 (Act No. 61 of 1973).

<sup>9</sup> Where the SPV is a trust, the body of trustees must comply with the Property Trust Control Act, 1988 (Act No. 57 of 1988).

- The credit-enhancement facility is documented in a manner that clearly distinguishes the facility from any other facility provided by the bank.
- The credit-enhancement facility is transacted on market-related terms and conditions, including matters relating to price and fee.
- The credit-enhancement facility is subject to the bank's normal credit-approval and review processes.
- The details of the facility are disclosed in the disclosure documents issued in respect of the relevant securitisation scheme.

#### **5.3.4 Liquidity facility**

Prior to the 2001 Regulations, an SPV was prohibited from using funding arrangements other than the debt program for facilitating the securitisation (Van den Berg 2000). This meant that an SPV could not make use of a liquidity facility. According to the 2004 Regulations a bank, provided it is not the originator of the securitisation, may provide a liquidity facility to the transaction if a number of conditions are met (Fitch Ratings 2006a:8). The most important of these conditions are as follows (Deloitte & Touche 2003):

- A liquidity facility may not be associated with the credit risk of the underlying assets (it may not constitute a credit-enhancement facility).
- The debt resulting from the utilisation of the liquidity facility may not be subordinated to the interests of investors in the securitisation scheme.

In simple terms this means that the liquidity facility cannot be used as a credit enhancement technique nor can it cover defaulted assets. It can be used to solve temporary cash flow problems due to market disruptions. If the borrower defaults and the assets are sold, the liquidity facility can be used to pay interest on the notes during the recovery process (RSA 2004:39).

If the liquidity facility does not meet these conditions, it will be treated as a first-loss credit enhancement facility on the balance sheet of the bank. This means that for the purpose of calculating the bank's prescribed capital requirement, the liquidity facility will be treated as an impairment against the bank's primary capital and reserve funds. (Fitch Ratings 2006a:8; RSA 2004:37)

Given that a bank cannot act as the liquidity provider to its own securitisation transaction, South African banks are making use of alternative methods to structure a liquidity facility. These methods include using part of the note issuance to fund a cash reserve and capturing the excess spread in a cash reserve (see chapter 3, section 3.7.1.4). A bank may also make use of other liquidity facility providers i.e. other financial institutions. (Moody's Investors Service 2006:7)

### **5.3.5 Disclosure requirements**

The Regulations (RSA 2004:58-60) specify the information that must be stated in the disclosure documents that are given to investors. Disclosure documents refer to the programme memorandum, placing document or offering circular. Very importantly, investors need to be made aware that the securities or bonds are subject to investment risk including: possible delays in repayment, loss of interest income and loss of principal invested. In addition, the originator and its associated companies do not guarantee the capital value or performance of the notes issued by the SPV. Besides the disclosure of these aspect, the documents must state the following among others:

- the name of the SPV
- the name of the SPV's auditor
- the total amount of notes issued by the SPV

- whether or not the note issue is listed
- a description of the securitised assets and the cash flows that will be utilised for the payments due on the notes
- the details of any credit enhancement facilities
- the details of any liquidity facilities

The documents should also include all other information that may be reasonably necessary for investors to ascertain the nature of the risks in their investment. A confirmation by the SPV's auditor that the notes issued comply in all respects with the regulations must also be included in the documents.

## **5.4 TAXATION ASPECTS**

### **5.4.1 Income tax**

There is no specific provision in the South African Income Tax Act which regulates the tax treatment of securitisation transactions therefore general tax principles apply. The amount paid by the SPV for the assets is deductible as an expense incurred in the production of income in the tax year in which it is incurred. Also the interest received on the borrower's loan is taxable while the interest payable on the notes held by the investors is tax deductible. In 2004, the South African Revenue Service issued a draft proposal on the tax treatment of securitisation. This document indicated that securitisation schemes would become "reportable arrangements" under Section 76A of the Income Tax Act. As of this date (September 2006), this proposal has not been made into legislation. (Fitch Ratings 2006a:5-6; Deloitte 2005; South African Revenue Service [SARS] 2004:10)

### **5.4.2 Value Added Tax**

According to the Value Added Tax Act of 1991 (subject to two exceptions), the sale of a receivable is a financial service and therefore exempt from Value Added Tax (VAT). Consequently, the SPV does not pay VAT on the purchase price of the securitised assets. The SPV usually only makes supplies that are exempt from VAT therefore VAT paid by the SPV is not allowed as an input tax deduction. In general the SPV is not required to register as a VAT vendor. (Fitch Ratings 2006a:6)

### **5.4.3 Stamp duty**

Under the Stamp Duties Act of 1968, the original issue of a listed interest-bearing debenture (i.e. bond) is exempt from stamp duty. The transfer of a bond if it is listed on a financial exchange or stock exchange, as defined in the Financial Markets Control Act of 1989, is also exempt from stamp duty. Similarly the redemption of bonds at any time (i.e. early redemption or redemption at maturity), does not attract stamp duty. (Fitch Ratings 2006a:6; Werksmans Attorneys 2005:230)

## **5.5 ACCOUNTING ASPECTS**

Typically a bank originator aims to achieve an off-balance sheet treatment for its traditional securitisation transaction. This is needed if the main purpose of the securitisation is: to manage the bank's balance sheet; to improve its performance measures; and most importantly to reduce the bank's regulatory capital requirements (see Chapter 4, section 4.2.2.2). Two accounting statements or standards regulate the accounting aspects of securitisation transactions.

These are AC 133 (recognition and measurement of financial instruments) and AC 412 (consolidation of special purpose entities). These statements make it difficult to obtain off-balance sheet treatment for a securitisation (SARS 2004:9).

#### **5.5.1 Accounting statement AC 133**

AC 133 regulates the accounting treatment of financial assets (physical assets and future receivables are not financial assets) and financial liabilities including their recognition and de-recognition on a balance sheet. In order to achieve an off-balance sheet status, the financial assets that will be securitised must be transferred or sold to an SPV. This allows for accounting de-recognition of the assets on the originator's balance sheet. Therefore a synthetic securitisation, where only the risks (and not the assets) are transferred to the SPV, does not obtain off-balance sheet treatment. (SARS 2004:8-9)

#### **5.5.2 Accounting statement AC 412**

AC 412 specifies the conditions under which an SPV must be consolidated with the originator's or remote originator's company. More specifically, if the originator controls the SPV in substance and with the objective of obtaining the majority of the risks and rewards from its activities, the SPV's and the originator's balance sheet must be consolidated. Therefore in this case the securitisation would not achieve off-balance sheet status.

## 5.6 SUMMARY

This chapter reviewed the main legal, regulatory, taxation and accounting aspects of South African securitisation with a focus on traditional transactions. These issues play an important role in structuring a transaction.

Firstly the legal aspects were looked at, in particular the law relating to the right to sell receivables, the security structure utilised in South Africa and the legal documentation that is drafted during the legal structuring process. This was followed by a summary of the key provisions in the securitisation regulations of 2004 concerning: the transfer of assets to an SPV, the control of the SPV; the conditions for the use of credit enhancement and liquidity facility in a transaction; and the information that must be disclosed about a transaction.

Taxation aspects including income tax, Value Added Tax and stamp duty as they relate to securitisation were explained. The chapter ended with a discussion of the accounting standards AC 133 and AC 412 which apply to the accounting treatment of securitisation transactions. These legal, regulatory, taxation and accounting aspects can have a major impact on the success, risks, economic viability and advantages of a securitisation scheme.



## **CHAPTER 6**

### **RESEARCH METHODOLOGY**

#### **6.1 INTRODUCTION**

Research methodology refers to the steps or approach taken to link the research questions and objectives to data collection, analysis and interpretation in a logical manner (Hartley 2004:326). This chapter describes the research methodology used in this study. First, it reiterates the aims and objectives of the entire study and the reason for undertaking the empirical research. It then discusses the case study as a research strategy and the research design and why this approach is suitable to meet the aims and objectives of this study. This is followed by a description of the data collection (interviews and documentation) and the data analysis. The chapter concludes with a discussion of the researcher's compliance with research ethics.

#### **6.2 AIM AND OBJECTIVES**

The aim of this study is to provide a comprehensive analysis of commercial mortgage backed securitisation within the South African context. This aim is met through the literature review presented in the previous chapters and through the empirical research by means of a case study presented in this and the next chapter. The case study will cover the four CMBS programmes that have been launched in South Africa to date (July 2006) and its purpose is to add further depth, realism and clarification to the theoretical issues discussed.

### 6.3 THE CASE STUDY AS A RESEARCH STRATEGY

In chapter one Yin's (1994) definition of a case study was presented. Another definition for a case study is as follows (Datta 1990:15):

“A case study is a method for learning about a complex instance, based on a comprehensive understanding of that instance obtained by extensive description and analysis of that instance taken as a whole and in its context.”

The case study as a research strategy is a comprehensive method because it encompasses research design, data collection techniques and approaches to data analysis (Yin 2003:14). According to Ghauri (2004:109), “a case study is both the process of learning about the case and the product of our learning”. It is a flexible research approach that is suitable for in-depth investigation into new or emerging issues, processes and behaviours, and when “how” or “why” questions are being posed (Ghauri 2004:109; Hartley 2004:325, 329, 332; Yin 2003:1)

Case studies allow the researcher to make use of multiple types and sources of evidence or data. Documents, records, interviews, surveys, observations and physical artefacts may be used in various combinations. The use of diverse data sources on the same phenomenon, collected through different methods, is referred to as triangulation. (Hartley 2004:324; Ghauri 2004)

According to Ghauri (2004), “triangulation is one of the defining features of a case study”. It increases the reliability and validity of the data collected, reduces the likelihood of misinterpretation and therefore strengthens the conclusions drawn from the data (Hartley 2004:324; Tellis 1997b; Soy 1997). Another benefit of triangulation is that it produces a more complex, holistic and contextual portrait of the object under study (Ghauri 2004).

## **6.4 RESEARCH DESIGN**

In designing a case study certain decisions need to be made concerning: the selection of the unit of analysis (i.e. the case); the type of case study design that will be adopted; whether a single case or multiple cases will be analysed; and whether a qualitative or quantitative approach will be used. These research design aspects are explained in this section along with the design chosen for this empirical study.

### **6.4.1 The case**

“Case” refers to the research object or unit of analysis in a case study. Gillham (2000:1) defines the concept of “case” as a unit of human activity embedded in the real world, which can only be studied in context and which exists in the here and now. The case can be an event, a situation, an entity, an organisation, a person, a group, a decision, a programme, an implementation process, an industry and a policy among many others (Soy 1997; Yin 2003:23; Ghauri 2004).

In this study, the unit of analysis is the South African CMBS scheme.

### **6.4.2 Types of case studies**

There are three main groups of case studies: descriptive, explanatory and cumulative. These are explained briefly (Datta 1990:9-10, 37-40, 56; Morra & Friedlander [ca] 1999:3):

#### ***6.4.2.1 Descriptive case studies***

These studies have a relatively narrow focus which allows for a detailed analysis to take place. There are three types of descriptive case studies namely illustrative, exploratory and critical instance.

Illustrative case studies use one or two instances to analyse and explain a situation. The primary purpose is to make the unfamiliar familiar, to add realism and in-depth examples to other information about a case. They describe what is happening and why. The site or sites that are selected to represent the case should be typical or representative of important variations

Exploratory studies are usually performed before a large scale investigation is implemented. Their basic function is to help identify questions, form hypotheses and select types of measurement prior to the main investigation.

Critical instance studies are used to examine a single situation of unique interest or to challenge a highly generalised assertion by testing one instance.

#### ***6.4.2.2 Explanatory case studies***

The purpose of explanatory case studies is to explain the relationship between a programme's components. These studies involve multiple cases and sites with the aim of generalising the output and making assumptions and interpretations based on these generalisations. Explanatory case studies have a broader focus than descriptive studies and usually involve highly diverse programmes. There are two types of explanatory case studies: programme implementation, which investigate the implementation and operations of a programme, and programme effects which are used to determine the impact of a programme and to deduce reasons for its success or failure.

#### ***6.4.2.3 Cumulative case studies***

These case studies bring together findings from past case studies to answer a question. They enable greater generalisation without the additional costs and time of conducting a number a new case studies.

The purpose of this case study is to analyse the four South African CMBS programmes to date, in terms of their characteristics and structure. The objective is to examine the programmes from the originating listed property companies' perspective as well: how has it benefited the originators; what disadvantages have the originators experienced; and what was the overall impact on the originators. The research topic, purpose and objectives lend themselves to an illustrative case study, the purpose of which is to describe what is happening and why.

### **6.4.3 Single vs. multiple case design**

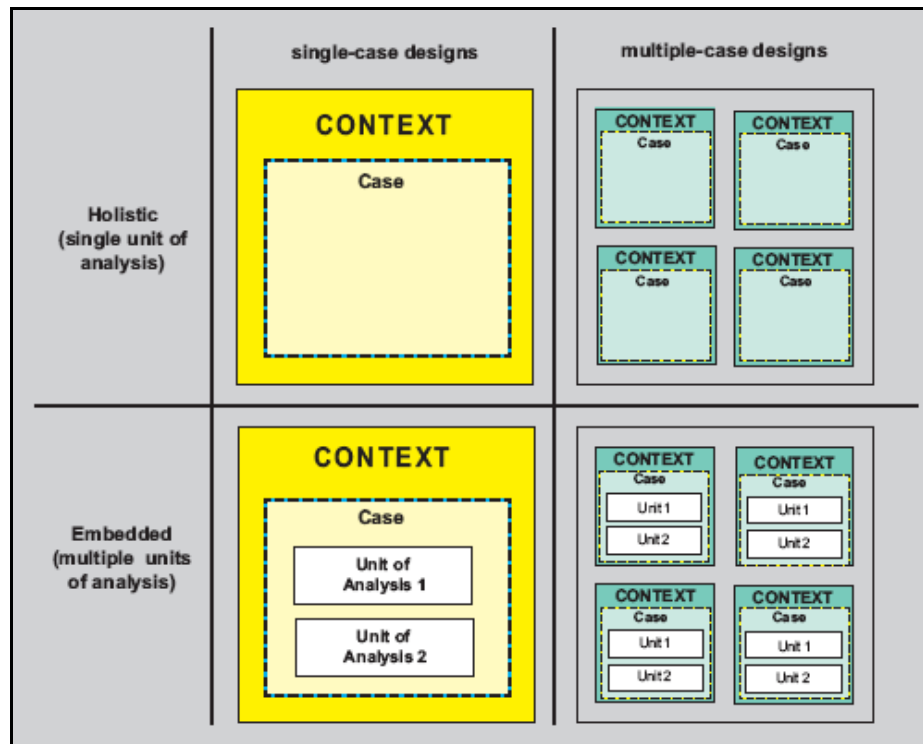
Case studies can have a single or multiple-case design. This is largely determined by type of case study chosen. According to Yin (2003:45-46), single case designs are appropriate when the case represents one of the following: a critical case to test an existing theory; an extreme or unique circumstance; a typical situation; a revelatory case or exploratory study; or a longitudinal case.

Descriptive case studies therefore typically have a single-case design, while explanatory case studies generally need to have a multiple-case design.

Multiple case studies use a replication logic (not a sampling logic) where each individual case is an entire study on its own (Yin 2003:47). The multiple studies ask the same questions, in a number of organisations and then they are compared with each other to draw conclusions (Ghauri 2004).

A case study may include more than one unit of analysis, that is, within a single case attention is given to subunits. This type of design is referred to as an embedded case study. If the case study only examines the overall nature of a case, then the resulting study is called a holistic case study (Yin 2003:42). Figure 6.1 summarises the different combinations of case study designs according to single vs. multiple and embedded vs. holistic designs.

**FIGURE 6.1: Types of case study designs**



Source: Yin (2003:40)

This study has a single, embedded case study design where the overall case is the South African CMBS scheme and the embedded subunits of analysis are the four CMBS programmes that have been launched to date.

#### **6.4.4 Qualitative vs. quantitative approach**

A case study can make use of both qualitative and quantitative data sources and methods of analysis (Ghauri 2004:109). Qualitative methods focus on descriptive data that facilitate an understanding of what is going on (Gillham 2000:10). Quantitative methods focus on numerical data and statistical analysis. Case studies are predominantly qualitative in nature but quantitative data can add to the overall picture (Gillham 2000:10, 80). According to Yin (2003:14), a case study can be limited to quantitative data and its analysis only and therefore “a case study should not be confused with qualitative research”. This study makes use of mainly qualitative data sources and methods of analysis.

## 6.5 DATA COLLECTION

This section describes the different types of data and data collection methods that were used in this study i.e. documents and interviews. It then explains the interview process that was followed: the creation of an interview guide, the selection of the participants and finally the interview setting.

### 6.5.1 Sources of data in a case study

Yin (2003:85-96) lists six sources of evidence or data that can be used in a case study: documents, archival records, interviews, direct observation, participant observation, physical artefacts. This study makes use of documents and interviews as the main data sources.

#### 6.5.1.1 Documents

Documents are important data sources for case study research and typically include: study reports, newspaper articles, memoranda, administrative documents, regulations, letters, agendas or any document that is relevant to the investigation. One of the most important uses of documents is to substantiate evidence gathered from other sources and they are also useful for making inferences about events. The documents that form part of the content analysis in this study include:

- The annual reports of the four Property Loan Stock Companies that have set up a CMBS programme.
- The programme memorandums and series supplements of the four CMBS programmes.
- The rating agency pre-sale or new issue reports on the CMBS programmes.
- Newspaper articles and press releases concerning the CMBS programmes.

### *6.5.1.2 Interviews*

Interviews are one of the most important sources of case study information. They are particularly useful for getting the story behind a participant's experiences and they allow the interviewer to pursue in-depth information around a topic. There are three main forms of interviews: open-ended, focused, and structured or survey. Open-ended and focused interviews are typically in-depth interviews. In this study, the researcher conducts focused, in-depth qualitative interviews.

In-depth interviews are used to gather detailed information from a small sample of people with the aim of delving deeply into their understanding and perspective on the research topic (Hatch 2002: 94). These interviews use mostly open-ended question and they are usually conducted face-to-face (King 2004:11). In focused interviews the same open-ended questions are posed to all interviewees. This approach is intended to ensure that the same general areas of information are collected while allowing the respondents to choose how they answer the questions. They therefore enable a “richness of communication” (Gillham 2000:62) and according to King (2004:11) allow the interviewee to shape the course of the interview rather than just passively respond to the questions. The researcher needs to have a sound prior knowledge of the subject matter when conducting in-depth interviews.

According to Gillham (2000:62), this type of interview technique is suitable if:

- a small number of people are involved
- they are accessible
- they are ‘key’ to the research
- the questions are open-ended and require an extended response
- the material is sensitive in character so that trust is involved



The advantages of in-depth interviews are that they can provide elaborate information on the interviewees' opinions, motivations, recollections and experiences. They also enable the researcher to obtain multiple viewpoints on the same subject. Another benefit is that these interviews allow the researcher to rephrase questions that the interviewees do not understand and enables the researcher to probe into new areas that arise during the interview. (Thomas 1998:12; Hatch 2002:94 )

There are however disadvantages to using in-depth interviews. Preparing for and carrying out the interviews and then transcribing and analysing them are all highly time consuming activities. Carrying out these interviews also requires a substantial amount concentration and on-the-spot thinking from the researcher. The time-consuming element may also make it difficult to recruit interviewees from some organisations or occupations. (King 2004:21)

## **6.5.2 The interview process**

### ***6.5.2.1 The interview guide***

With focused interviews, the researcher typically develops a framework called the interview guide which is used to direct or steer the interview process. This is a written list of questions in a logical order or it can just be a list of topics which the interviewer intends to cover (Wilkinson & Young 2004:211). Both King (2004:17) and Rapley (2004) stress that the interviewer does not have to ask the questions in the same way and order at each interaction. What is important is flexibility which means following the interviewees' conversation, 'working' with them and not strictly delimiting the interview to a predetermined agenda (King 2004:17; Rapley 2004). This type of interviewing enables the researcher to gather contrasting and complimentary answers to the same questions or broad areas (Rapley 2004).

Before the interviews were conducted for this study, an interview guide was drawn up which outlined themes of questions. A prior analysis of the case study documents (see section 6.5.1.1) and the review of related literature helped to identify and delineate the broad themes and questions to be covered in the interviews.

#### *6.5.2.2 The participants*

Participants or interviewees were selected by making use of the purposive sampling method. According to Wimmer and Dominick (2000:122) this is the sampling methodology that is typically used with in-depth interviews.

Purposive or known group sampling is a type of non-probability sampling procedure which can be used if a criterion for admission to the sample exists (Wimmer & Dominick 2000:84). The aim of this method is to choose “information rich” participants who are likely to be knowledgeable about the research topic and the case under investigation (McMillan & Schumacher 1993:378).

The criterion for choosing the participants in this study was the participants’ knowledge and understanding of the CMBS programmes in South Africa. For this reason, the directors of the listed property companies that originated the CMBS, the arrangers of the CMBS programmes and the analysts involved in rating the CMBS notes were asked to participate in the interviews.

Gillham (2000:63-64) refers to this as elite interviewing. This is when the researcher interviews someone in a position of authority or someone who is an expert in the field that is being studied. These types of participants have a large amount of knowledge on the research topic and can give insightful answers to the researcher’s questions.

The following seven people were interviewed; they are the main participants who were involved in setting up the four CMBS programmes:

- James Nunes – Director of iFour Properties
- Gerhard van Zyl – Director of Vukile Property Fund
- Damian Botoulas – Lead Arranger for Freestone’s CMBS programme
- Marc Hearn – Lead Arranger for Vukile’s CMBS programme
- Nick Job – Lead Arranger for iFour and Growthpoint’s CMBS programmes
- Anthea Heap – Analyst at Moody’s Investors Service
- Troy Murray – Analyst at Fitch Ratings

#### *6.5.2.3 The research setting*

After the participants were identified, they were contacted either by a letter or by phone. The research project was briefly described to them and a time and date was set for each interview. All seven interviews were conducted at the participants’ offices by the researcher, during the month of July 2006.

During the interviews, the loosely worded open-ended questions from the interview guide were posed to the participants. These questions were asked in a sequence that suited the flow of the conversation. In general the respondents gave detailed and comprehensive answers to the questions. Probing and follow up questions were used where more information was needed. Each interview lasted for approximately one hour.

The researcher requested permission to tape record the interviews and explained that the purpose of the recording was to assist her in the analysis of the data. All the participants agreed to speak on tape and they also allowed their identity to be disclosed. The recordings were later transcribed verbatim.

Tape recording the interviews is necessary because taking verbatim notes stalls the interview process. Writing summary notes is also not adequate because it involves on-the-spot selection which can result in the researcher missing important elements (Gillham 2000:67). According to Gillham (2000:69), "it is impossible to get a complete account any other way". Transcribing the recordings is important because the interview's content can only be analysed properly if it is in a written form (Gillham 2000:71).

## **6.6 DATA AND CONTENT ANALYSIS**

According to Yin (2003:109), "data analysis consists of examining, categorising, tabulating, testing or otherwise recombining both qualitative and quantitative evidence to address the initial propositions of a study". Data analysis is the process of labelling and breaking down raw data and reconstituting them into themes, patterns and concepts (Mouton 2001:108). Ghauri (2004:118) lists six different techniques for analysing case study data (interviews and documents) these are shown in table 6.1.

This study uses the coding technique (second item in table 6.1) to classify and rearrange data from the transcribed interviews and the documents. All relevant data is collated, broken down and then regrouped into themes. This coding or classification technique helps to interpret the data and to relate it to the research questions and objectives (Ghauri 2004:119). According to Leedy and Ormrod (2001:160), there is no single right way to analyse the data in a qualitative study and there is no fixed format for case study reporting. The reason for this is that each case study is unique. The research questions, the case, the data collection and analysis "cannot be placed into a fixed mould as in experimental research" (Tellis 1997b).

**TABLE 6.1: Case study analysis**

<b>Techniques For Case Study Analysis</b>	<b>Explanation</b>
<b>Chronologies</b>	Narratives of the events that took place, organised by date.
<b>Coding</b>	Sorting data according to concepts and themes.
<b>Clustering</b>	Categorising cases according to common characteristics.
<b>Matrices</b>	Explaining the interrelationship between identified factors
<b>Decision tree modelling</b>	Grounding a description of real-world decisions and actions by using multiple cases.
<b>Pattern matching</b>	Comparison between a predicted and an empirically based pattern.

Source: Ghauri (2004:118)

### 6.6.1 Themes

Themes provide the structure for the data or content analysis and interpretation. The themes for this study were identified through an initial analysis of the case study documentation and the review of related literature.

They are the following:

- The advantages of CMBS for PLS companies and their linked unit holders.
- The prerequisites to setting up a single borrower CMBS transaction.
- The asset selection methodology utilised in the four CMBS transactions.
- The general aspects and unique features of the four CMBS transactions.
- The results and impact of the CMBS programmes.
- The disadvantages of CMBS for PLS companies.

## **6.7 RESEARCH ETHICS**

### **6.7.1 Informed consent**

Participants in a research study, for example the participants in interviews, need to be informed about the following (Kumar 1999:92):

- the type of information that is sought from them
- why this information is needed
- to what purpose it will be put
- how they are expected to participate in the study
- how the research will affect them directly or indirectly

Based on this information, the participants are able to give informed consent to the researcher. It is considered unethical to collect information without the knowledge, expressed willingness and informed consent of the participants.

In this study, the researcher explained these aspects to the interview participants, both over the phone when the interview date was scheduled and directly before the interviews took place. All the interviewees participated voluntarily and gave the researcher verbal consent.

### **6.7.2 Confidentiality and anonymity**

According to Reinard (2001:239), the researcher may delete all names and identifiers from the data and report only on the broad categories of responses to help ensure confidentiality. In this study, the interviewees consented to having their identity disclosed. They also allowed the researcher to tape record the interview and in instances where they felt uncomfortable to speak on tape, the researcher obliged.

## 6.8 SUMMARY

This chapter explained the research methodology employed in this study. Firstly, it reiterated the aims and objectives of the study and the rationale for undertaking the empirical research. It then explained the case study as a research strategy and the research design employed which clarified why this method is appropriate in meeting the aims and objectives this study.

The case study analyses the four CMBS programmes launched in South Africa to date (July 2006). It answers the questions posed under the secondary objective and adds a practical element to the theory discussed in the literature review. An illustrative case study is used which falls under the descriptive case study group. It has a single, embedded case study design where the overall case is the South African CMBS scheme and the embedded units of analysis are the four CMBS programmes.

This study made use of various documents related to the CMBS programmes and focused in-depth interviews as the main source of data. The interview process was explained including the interview guide, interview sample and the interview setting. In this study, data triangulation took place when the researcher used several sources of data to clarify the same issue. The seven respondents who were interviewed represent the main participants that were involved in setting up the four CMBS programmes in South Africa to date. Consequently they are the most knowledgeable people about the research topic. The researcher used the coding technique to classify and reorganise data from the documents and transcribed interviews. The relevant data were assembled, broken down and then regrouped into themes. The chapter finished with a statement about the researcher's compliance with research ethics.

## CHAPTER 7

# CASE STUDY OF THE SOUTH AFRICAN CMBS TRANSACTIONS

### 7.1 INTRODUCTION

The first CMBS programme in South Africa was set up by iFour Properties in November 2004. This was followed by Vukile Property Fund's and Growthpoint Properties' programmes in November 2005 and Freestone Property Holdings' CMBS programme in June 2006. These securitisation transactions have been successful and have resulted in numerous advantages for these Property Loan Stock (PLS) companies. CMBS notes provide a secure investment option with yields higher than similarly rated South African government bonds. Consequently, there has been strong demand for CMBS notes from investors. This has contributed to the success of these programmes. (Wilson 2005b & 2006b; Smith 2004)

This chapter will explain why these four PLS companies decided to obtain property finance through a CMBS transaction, it will examine the CMBS programmes' structure and unique features, and it will examine the impact that this form of financing has had on the companies. The chapter will also examine the prerequisites to setting up a single borrower CMBS transaction in South Africa and the disadvantages of CMBS experienced by the property companies<sup>1</sup>. To put these aspects into context, a brief background to Property Loan Stock companies is first provided.

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<sup>1</sup> In this study "Property Loan Stock" and "property company" are used synonymously.



## 7.2 BACKGROUND TO PLS COMPANIES

The listed property sector consists of Property Loan Stock companies, Property Unit Trusts and listed property companies. PLS represent 25 of the 44 property related listed companies, with a market capitalisation of R50.76 billion (as at 30 September 2006). The market capitalisation of the four companies that have set up a CMBS programme is as follows: iFour R 1.78 billion, Vukile R2.28 billion, Growthpoint R9.8 billion and Freestone R1 billion (as at 30 September 2006) (Property Loan Stock Association [PLSA] 2006b)

A PLS company derives its income from property and property related sources. The main difference between PLS companies and other companies is that Property Loan Stocks issue linked units instead of shares. A linked unit consists of a nominal value share and a debenture (or bond). The debenture portion earns interest at a variable rate. PLS companies distribute 90% - 100% of their pre-tax profits as interest thereby avoiding income tax within the company. (PLSA 2006a)

A PLS generates value for its investors in two ways. Firstly through the rental income from the properties in the portfolio, the majority of which is distributed to the investors in the form of interest. Secondly through the appreciation of the property portfolio's value over time. A primary objective of PLS companies is to deliver growth in distributions year on year. This is achieved through escalation on leases, saving in costs (for example interest cost on debt) and buying properties at yields in excess of the yield on the linked units (Van Zyl 2006). A PLS can also increase its distributions by developing and selling new properties and by holding or trading the linked units or shares of other listed property companies (Fife 2005).

### 7.3 THE MOTIVATIONS TO LAUNCH A CMBS PROGRAMME

The main motivation and objective for iFour, Vukile, Growthpoint and Freestone in launching a CMBS programme was to reduce their cost of debt (Nunes 2006; Van Zyl 2006; Wilson 2004 & 2006a). These companies are all fairly geared with debt as a percentage of total funding at 48.2% for iFour, 42.5% for Vukile, 38.3% for Growthpoint and 40.9% for Freestone as at 30 September 2006 (PLSA 2006b). Consequently, interest expense is a large cost item for these companies.

By reducing their interest cost, distributions to unit holders may be increased. Increasing the return to their investors is one of the primary objectives of PLS companies (Nunes 2006; Wilson 2004). Growth in distributions in turn can lead to an increase in unit price which further benefits unit holders (Job 2006; Smith 2004). Lowered funding cost also enables these companies to purchase quality buildings on a lower yield (Nunes 2006).

Another important objective for these companies was to gain access to a larger source of capital and at the same time reduce their reliance on bank mortgage debt (Wilson 2004 & 2005b; iFour Properties [iFour] 2004 & 2005:10). Banks have credit limits on the amount that they can lend to a particular company (Job 2006). Consequently, for rapidly growing property companies it is vital that they have access to funding sources other than bank loans (Nunes 2006, Williams & Job 2005). CMBS enables these companies to fund their growth requirements and gain control over their debt funding process (Wilson 2004).

These benefits that iFour, Vukile, Growthpoint and Freestone have gained through their CMBS funding gives them a competitive advantage over other funds in the market (iFour 2004; Van Zyl 2006; Wilson 2004).

## 7.4 PREREQUISITES TO SETTING UP A CMBS

Before examining the structure of the four South African CMBS programmes and the bonds that were issued, the prerequisites that the four PLS companies had to meet to be able to set up their programme should be examined. These prerequisites would also apply to other companies that plan to set up a CMBS transaction.

The first key aspect is the value of the property portfolio and the level of debt that it could support (Job 2006). According to the arrangers of the CMBS transactions, the entry level for the amount of financing that must be raised through CMBS in South Africa is about R500 million. This means that a property company needs to have at least R500 million of existing bank debt which it would like to convert into securitised debt (Botoulas 2006). If the company has a low debt leverage, the value of the property portfolio must be able to support R500 million of additional debt.

There are two reasons for this: firstly securitisation involves high set up costs and therefore it becomes uneconomical at certain debt sizes (Job 2006); secondly, the size of the note issue is important from a marketability perspective. The main buyers of CMBS notes are institutional investors and they may only buy a certain percentage of any issue (Botoulas 2006).

The second key aspect is the quality and composition of the property portfolio. The properties that are selected for the securitisation vehicle should be of a high quality with a stable history and performance (Job 2006). It is also preferable that the portfolio is diverse in terms of property types and geographical spread (Botoulas 2006).

The third key aspect is the client's attitude towards its property portfolio: whether it is an investment portfolio, with mostly core properties that the company intends to keep, or a trading portfolio. Securitisation needs a stable portfolio. It does not have to be 100% stable because sale or substitution of the properties from the securitisation vehicle is allowed to some extent. However it is preferable to securitise properties that the company intends to keep for the duration of the loan. (Botoulas 2006)

## **7.5 ASSET SELECTION**

The decision behind which properties should form part of the securitised portfolio is mainly determined by the property quality and investment hold prerequisites. The property company will analyse its portfolio from a strategic level and decide which properties form part of its core hold portfolio (Hearn 2006). The core portfolio includes the properties that the company intends to keep for a longer period and excludes those properties that the company intends to sell or develop (Job 2006; Van Zyl 2006; Botoulas 2006). The development of a securitised property is very tightly restricted in securitisation (Job 2006).

Properties that provide a high yield but which are not of a suitable quality and properties that are high quality but are in unsuitable regions should not be securitised even if they form part of the core portfolio. These types of properties would detract from the overall quality of the CMBS portfolio and could have too big an impact on the risk of the portfolio. The properties that are left after this process can be securitised (Botoulas 2006; Van Zyl 2006 )

From this pool of properties, the company has the option of securitising only the best or it can take a broad view (Hearn 2006). The number of properties that will be securitised depends on the value of the properties and the level of debt that the property company needs. This was the process that was followed by iFour, Vukile and Freestone (Job 2006, Hearn 2006; Botoulas 2006; Van Zyl 2006).

Growthpoint's asset selection was slightly different because Growthpoint made use of a trust and not a company as the borrower in the transaction. When assets are sold to a trust there is a capital gains tax implication whereas if the properties are sold to a subsidiary the company doesn't pay capital gains tax because the subsidiaries are wholly owned and there is group taxation. Therefore in Growthpoint's case, a key aspect was to determine which properties had a small capital gains tax implication. These were properties that had not gained a lot in value or properties that had been bought more recently. (Job 2006)

## **7.6 GENERAL ASPECTS OF THE CMBS PROGRAMMES**

This section will explain why the PLS companies set up a programme as opposed to a single transaction, the mechanics of a second note issue, and the general features of the transaction and note structures in the four South African CMBS programmes.

### **7.6.1 The reasons for setting up a programme**

The PLS companies that have set up a CMBS transaction intend to use their securitisation vehicles to raise further funding as their property portfolio grows (Nunes 2006; Vukile Property Fund [Vukile] 2006:5; Growthpoint Properties

[Growthpoint] 2006b:26). This was a major reason for setting up a programme that allows further note issues, as opposed to a single transaction. The set-up costs and the operating costs involved with a second and subsequent note issue is reduced as the company would be using their existing structure which was put in place for the initial issue (Davey & Noble 2006). Another benefit of setting up a programme is the branding element related to the issuer in terms of investor and media awareness (Job 2006).

### **7.6.2 The mechanics of a second note issue**

When the property company wants to raise more funding through its CMBS structure, it has a number of options. It can issue more notes under an existing series; this is referred to as a “tap issue”. There are two ways to achieve this. Firstly, the property company can utilise whatever additional value is in its existing securitised portfolio, for example do a tap on the increase in the property value or increase the leverage on the properties (provided that the rating agency approves this and the initial LTV was low). The second method is to transfer more properties into the borrower (i.e. into the same series) and raise debt against the additional properties. This results in a bigger pool of properties backing all the notes. This is how Growthpoint’s second note issue was structured. (Job 2006; Hearn 2006; Van Zyl 2006; Nunes 2006)

The other option is to place the additional properties into a new series, for example series two under a programme. The South African CMBS structure uses a segregated series technology. The new properties are transferred to a separate borrower (another subsidiary or another trust) and the mortgage bonds over those properties are held separately by the issuer SPV from the mortgage bonds on the properties in another series. Therefore the new notes are secured by a totally separate portfolio and only by that portfolio.

A second series is established when the company wants to raise funding that is completely separate from its existing funding. Growthpoint's third CMBS transaction, which was created to raise funding for the Metboard property company portfolio acquisition, was a second series. A second series could also be launched by another company which is related to the originator. For example Pangbourne is an associate company of iFour but they are two separate listed entities and their portfolios cannot be cross-collateralised and cross-defaulted in a securitisation vehicle. However, Pangbourne may decide to use iFour's platform to securitise by issuing a second series of notes where the loan to Pangbourne would be completely separate from the loan to iFour. (Job 2006, Hearn 2006)

### **7.6.3 Note structure**

The CMBS notes that have been issued in South Africa have a bond structure. The notes are subdivided into different tranches and they have a sequential payment priority in terms of capital and interest payments (Prime Realty Obligors Packaged Securities [PROPS] 2004a & 2004b; Vukile Investment Property Securitisation [VIPS] 2005a & 2005b; Growthpoint Note Issuer Company 2005a & 2005b; Freestone Finance Company 2006a & 2006b). The bonds are listed on the Bond Exchange of South Africa and therefore they are tradable. However due to the relatively small size of the issues (the largest note issue is R1 billion) their liquidity is low and the institutional investors who acquire these bonds do not usually trade them (Williams & Job 2005).

#### ***7.6.3.1 Timing of principal repayment***

The loans to the borrowers in the CMBS transactions are non-amortising loans. Therefore the investors receive their full principal at maturity of the notes and during the term of the notes they receive quarterly interest payments.

PLS companies in South Africa require non-amortising loans for tax reasons and this is the type of loan that they would get from a bank. These companies issue a linked unit which consists of a (nominal value) share and a debenture (or loan) and therefore the units pay interest and not dividends. The PLS company receives taxable rental from its properties and the majority of the income after expenses (but before tax) is paid out to unit holders as tax deductible interest. Therefore a PLS has minimal (if any) taxable income.

If the company had an amortising loan then it would have an expense item that was part tax-deductible interest and part non-tax -deductible capital and therefore the company would have a tax exposure. For this reason PLS companies have interest only loans and because of this, the loans in the CMBS structures had to be interest only loans as well. (Job 2006; Van Zyl 2006)

Non-amortising loans however result in significant refinancing risk at maturity of the notes. This risk decreased the level of debt that the PLS companies could obtain at their target ratings. The rating agencies had to take a view on what the properties' value will be at the note's maturity and tranche accordingly, with the full principal still outstanding at that time. Most of the CMBS notes that have been issued in South Africa are five year notes. Vukile also issued seven year notes. The rating agencies therefore had to take a five or seven year view on property values.

To cover the refinancing risk, the level of over-collateralisation in the transactions is high. The PLS companies had to place more properties (in value terms) into their securitisation vehicle in case the properties devalue to the point where the capital cannot be repaid (Job 2006).

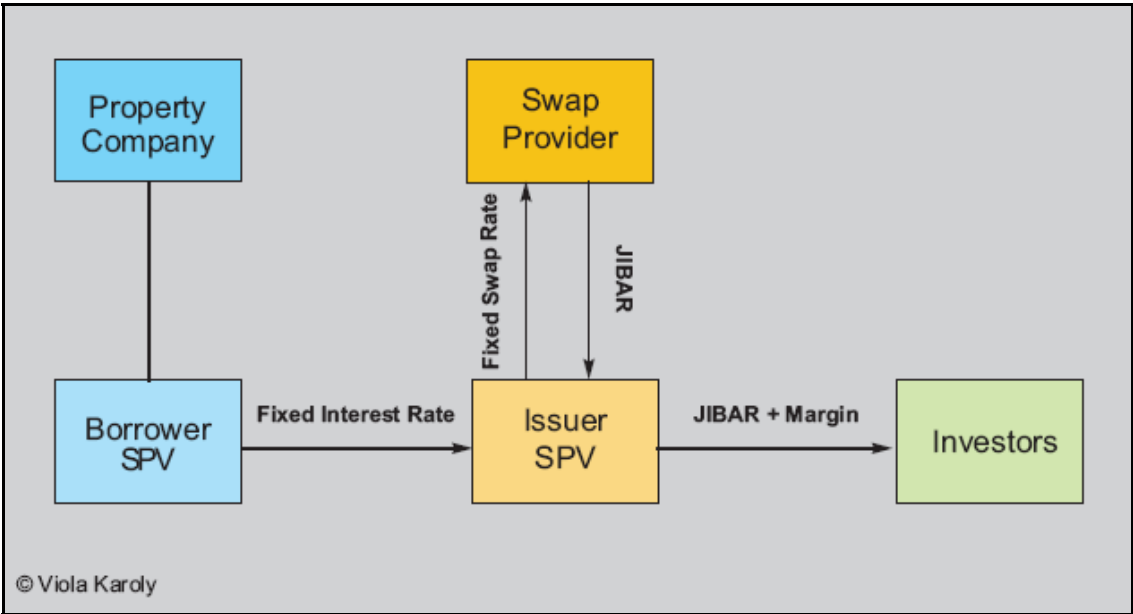


At maturity, the notes are refinanced either by a new note issue or through bank funding. If the borrower can't refinance its loan then the loan will go into default and the properties will be sold to cover the principal payment that is due to the investors. (Job 2006)

**7.6.3.2 Interest payment cash flows of the CMBS transactions**

The main objective of property companies in setting up a CMBS programme is to reduce their cost of debt. A vehicle is established that can borrow at low cost in the capital market and the benefit is passed on to the borrower (Hearn 2006). Figure 7.1 depicts how this is achieved.

**FIGURE 7.1: The interest payment cash flows of the CMBS transactions**



Investors receive a floating rate on the notes every quarter. With the South African CMBS notes, this rate is the 3-month Johannesburg Interbank Agreed Rate (JIBAR) (which is a floating rate) plus a fixed interest margin. The interest margin is different on each tranche of notes because each tranche has a different credit rating and also possibly a different maturity.

Therefore different risk levels are associated with each class of notes. The margin or the spread over JIBAR is determined by the market (Job 2006). The notes are sold at an auction and investors determine the level of margin (i.e. the return) that they will accept for the corresponding level of risk.

The borrower pays a fixed quarterly interest rate to the issuer SPV. This fixed rate or fixed funding cost is made up of three components: the weighted average margin on the CMBS notes, the swap base rate and the operating costs of the securitisation vehicle calculated as a percentage of the note issue (Job 2006; Botoulas 2006).

The weighted average margin component that the borrower pays to the issuer matches exactly what the issuer pays to the note holders (Job 2006). Therefore, the lower the interest rate on the notes, the lower the interest rate on the borrower's loan. The margin is a constant value from the day the notes are issued. (Botoulas 2006; Job 2006).

Most property companies fix the interest rate on the majority of their debt (90%-95%) through fixed rate loans or interest rate swaps. They take a hedged position because they are not interest rate speculators (Hearn 2006). Investors in property companies only want to be exposed to property risk and not interest rate risk (Van Zyl 2006).

In the CMBS structures, the borrower pays a fixed (base) swap rate to the issuer who then pays the fixed swap rate to the swap provider. In return, the swap provider pays 3-month JIBAR back to the issuer. The 3-month JIBAR plus the margin is paid to the note holders (see figure 7.1). In this manner, the interest rate risk within the securitisation vehicle is hedged. (Botoulas 2006).

It was also the rating agencies' requirement to have an interest rate hedge in place for the CMBS structures because they perceive it as an unnecessary risk to be exposed to a floating interest rate (Van Zyl 2006; Nunes 2006). If there is no interest rate hedge in place and the floating rate increases, the issuer will go insolvent because it will have to pay a floating rate on the notes which is higher than the fixed rate it is receiving on the loans (Hearn 2006).

The fixed rate that the borrower has to pay is largely determined by the hedging decision that it took when it first put its interest rate swaps in place (Hearn 2006). Some of the PLS companies fixed their interest rate for a number of years forward several years ago, when the rates were at 14%-15% (Hearn 2006). This means that they would have swaps in place that run into the securitisation vehicle and these swaps cannot be unwound (Hearn 2006). For example, iFour had a hedge in place before its CMBS programme and it rolled this hedge into its CMBS structure (Nunes 2006).

The borrower's fixed interest rate also includes the operating or running costs of the securitisation vehicle. These costs are calculated on a quarterly basis and include items like liquidity facility fees, administration fees and trustee fees (Botoulas 2006).

The overall fixed interest rate that the borrower pays is the sum of the weighted average margin on the CMBS notes, the swap base rate and the operating costs of the securitisation vehicle.

## 7.7 THE FOUR CMBS PROGRAMMES

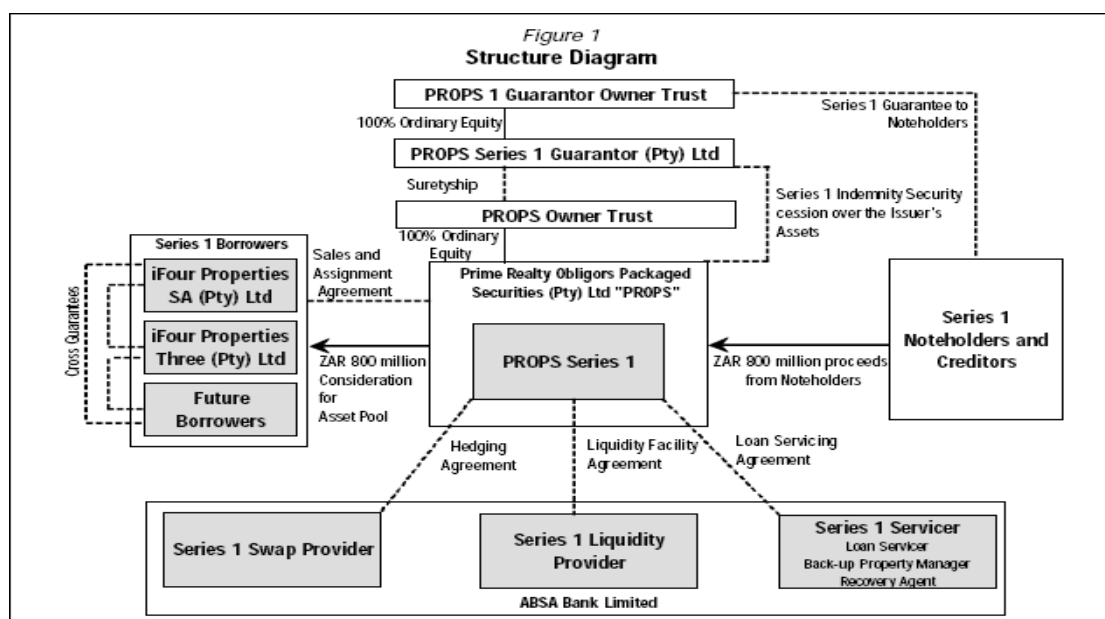
This section will explain the important features and differences between the four CMBS programmes. iFour's, Growthpoint's and Freestone's programmes are very similar in terms of structure. Vukile's CMBS programme is unique because it is a combination of CMBS and whole business securitisation.

A key feature of the South African single borrower CMBS structure is that it allows property companies to sell or substitute properties that are in the securitised portfolio. This enables the property companies to retain operational flexibility. Foreign CMBS structures are a lot less flexible because sale or substitution of the securitised properties is usually not allowed.

### 7.7.1 iFour

Figure 7.2 shows the structure of iFour's CMBS programme. This is essentially the same as the CMBS structure that was described in chapter two.

**FIGURE 7.2: The structure of iFour's CMBS programme**



Source: Moody's Investors Service (2004)

iFour's properties were in property owning SPVs (i.e. the borrower SPV) even before the CMBS transaction was set up. The reason for this is that iFour had been planning to obtain property finance through securitisation since the company was listed on the Johannesburg Stock Exchange in 2002 (Nunes 2006).

The structure has two borrowers. The loan to iFour Properties Three is a 5 year loan while the loan to iFour Properties SA is a three year loan. Correspondingly the CMBS notes are also split into 3 year and 5 year notes. The loans have different maturities because iFour did not want all its securitised debt to mature at the same time (Nunes 2006). Splitting the total loan and the CMBS notes into two maturities reduces the overall refinancing risk because the risk is not concentrated at one time. This results in better tranching i.e. a higher percentage of AAA rated notes.

A key feature of iFour's CMBS programme is the introduction of a statistical measure called the Herfindahl index to calculate a pre-agreed scale for the sale of properties from the securitised portfolio. This has never been done before in a CMBS transaction (Job 2006). The Herfindahl index is explained briefly.

In a CMBS transaction, collateral diversification in terms of number of properties, property type and geographical spread is important because diversification reduces the risks associated with the overall securitised portfolio. When properties are sold from the securitised portfolio this diversity decreases and note holders need to be compensated for the fact that they now have rights to a smaller and potentially more risky portfolio. Investors are compensated through a release premium which is the amount of cash that the borrower must leave in the CMBS structure when it sells or transfers a property out of the securitised portfolio.

For iFour’s CMBS transaction a release premium scale was developed which is based on the Herfindahl index and the leverage or loan to value ratio of the transaction. The Herfindahl index measures diversity and provides a statistical view of how many properties of equal size a portfolio is equivalent to. Table 7.1 shows a portion of iFour’s release premium scale (see appendix A for the full scale). This was developed specifically for iFour’s portfolio; it cannot be applied uniformly to other portfolios. (Hearn 2006)

**TABLE 7.1: Release premium scale**

Herfindahl Diversity Score	LTV													
	<5%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%
<10	3%	5%	8%	10%	12%	12%	12%	12%	12%	15%	15%	18%	18%	18%
10	3%	5%	8%	10%	12%	12%	12%	12%	12%	12%	15%	15%	18%	18%
15	3%	5%	8%	10%	10%	10%	10%	12%	12%	12%	12%	15%	15%	18%
20	3%	5%	8%	8%	10%	10%	10%	10%	12%	12%	12%	12%	15%	18%
25	3%	5%	5%	8%	8%	10%	10%	10%	10%	12%	12%	12%	15%	15%
30	3%	5%	5%	5%	8%	8%	8%	10%	10%	10%	12%	12%	15%	15%
35	3%	5%	5%	5%	5%	8%	8%	8%	10%	10%	10%	10%	12%	15%
40	3%	5%	5%	5%	5%	5%	8%	8%	10%	10%	10%	10%	12%	15%
45	3%	5%	5%	5%	5%	5%	8%	8%	8%	10%	10%	10%	10%	12%
50	3%	5%	5%	5%	5%	5%	5%	8%	8%	8%	8%	8%	8%	12%
55	3%	5%	5%	5%	5%	5%	5%	5%	8%	8%	8%	8%	8%	12%
60	3%	3%	3%	5%	5%	5%	5%	5%	5%	8%	8%	8%	8%	10%
65	3%	3%	3%	3%	5%	5%	5%	5%	5%	5%	8%	8%	8%	10%

Source: Moody’s Investors Service (2004:16)

A low LTV in combination with a high Herfindahl Diversity Score results in a low release premium. Conversely, a high LTV and a low Diversity Score results in a high release premium. The Rand value of the release premium is calculated as follows: property value multiplied by LTV multiplied by release premium percentage. For a property valued at R40 million, a LTV of 50% and a Herfindahl Index for the portfolio of 5%, the release premium would be: R40 000 000 x 50% x 5%, or R1 000 000.

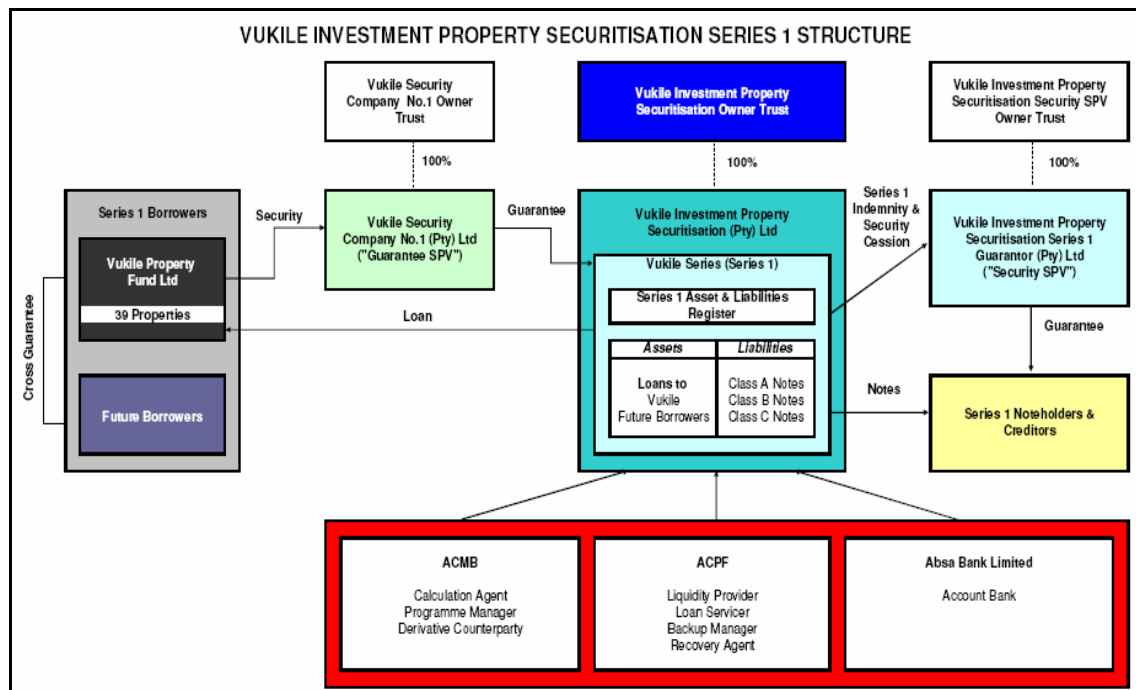
For further detail on iFour’s CMBS programme refer to the Pre-sale Report (Moody’s Investors Service 2004) in Appendix A.

## 7.7.2 Vukile

A key feature of Vukile's securitisation programme is that the securitised property portfolio is owned directly by Vukile and not by a borrower SPV as is the case in iFour's CMBS transaction (see figure 7.3). Accordingly, there is a commingling of operating risk and property risk at borrower level. In iFour's CMBS programme, the operating risk of iFour is removed from the transaction because the properties are isolated or ring-fenced in a borrower SPV whose activities are limited to owning and managing property.

Vukile's transaction is described as a hybrid CMBS structure because it has some operating risk. It is not entirely a whole business securitisation because the operating risk in Vukile is mostly property related. (Hearn 2006; Van Zyl 2006)

**FIGURE 7.3: The structure of Vukile's CMBS programme**



Source: Moody's Investors Service (2006a)

This type of transaction has a higher risk than a true single borrower CMBS transaction. Therefore out of the four CMBS programmes, Vukile had the smallest proportion of AAA rated notes and consequently the highest weighted average margin on its notes. However, by not transferring the properties to an SPV the overall implementation cost of the CMBS programme was reduced (Vukile 2006:16). According to Van Zyl (2006), the cost of transferring the properties into a SPV would have outweighed the benefit of a lower margin.

Another difference between Vukile's and iFour's CMBS structure is that the mortgage bonds over the securitised properties are held by a mortgage bond SPV and not by the issuer SPV. The mortgage bond SPV issues a guarantee to the issuer SPV. Under this guarantee, if Vukile defaults on its loan then the mortgage bond SPV will enforce the mortgage bonds and sell the properties, the proceeds of which will be passed on to the issuer SPV. (Hearn 2006)

This mortgage bond SPV was set up when Vukile was established (i.e. before its CMBS programme). The benefit of this structure is that it saves costs and time. If there is a change in the lender then all that has to be done is the cancellation of the guarantee to the original lender and consequent creation of a new guarantee in favour of the new lender. (Hearn 2006; Job 2006).

For further detail on Vukile's CMBS programme refer to the New Issue Report (Moody's Investors Service 2006a) in Appendix B.



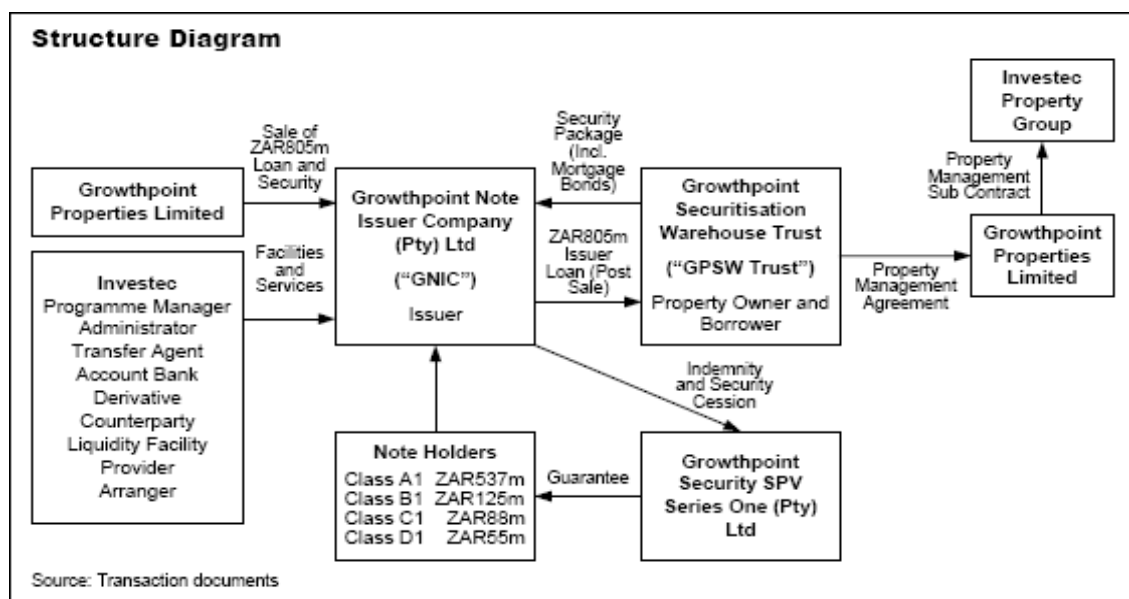
### 7.7.3 Growthpoint

Growthpoint's CMBS structure (see figure 7.4) is essentially the same as iFour's CMBS structure except that the borrower SPV is a trust and not a subsidiary company as in iFour's CMBS programme. Growthpoint is the sole vested beneficiary of the trust in respect of income and capital gains from the properties and the balance sheet and income statement of the trust are consolidated with Growthpoint's financial statements.

A trust was utilised instead of a company for tax structuring reasons. When the trust receives rental income from the properties, the beneficiary pays tax on the income and not the trust. If the borrower is a company then the borrower company must pay the tax and not the originator. This can create tax problems. (Job 2006; Wilson 2005a; Growthpoint 2006b:33)

For further detail on Growthpoint's CMBS programme refer to the New Issue Report (Fitch Ratings 2005c) in Appendix C.

**FIGURE 7.4: The structure of Growthpoint's CMBS programme**



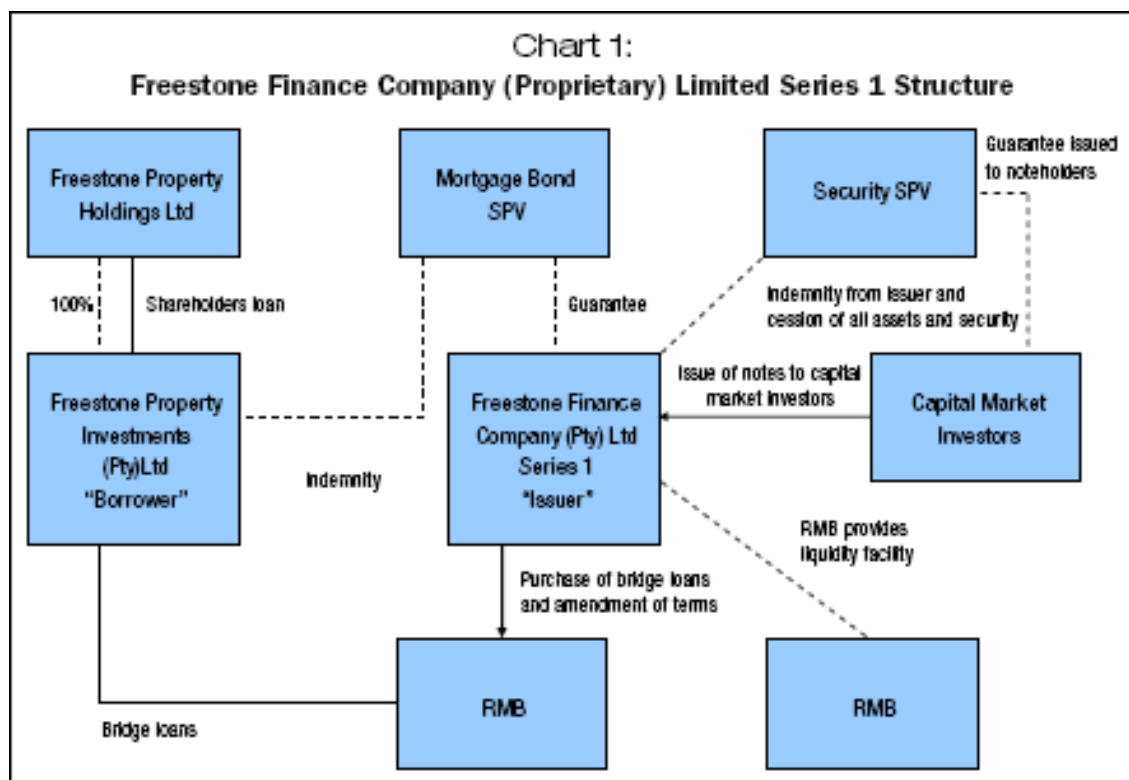
Source: Fitch Ratings (2005c)

### 7.7.4 Freestone

Freestone launched their CMBS transaction towards the end of this study. Their CMBS issue is included here for the sake of complete coverage of the industry, but the details are brief.

Freestone's CMBS structure (see figure 7.5) is similar to iFour's CMBS structure except that the mortgage bonds on the properties are registered in a mortgage bond SPV (as in Vukile's CMBS structure). In iFour's CMBS structure the mortgage bonds are held by the issuer SPV.

**FIGURE 7.5: The structure of Freestone's CMBS programme**



Source: Moody's Investors Service (2006b)

For further detail on Freestone's CMBS programme refer to the Pre-Sale Report (Moody's Investors Service 2006b) in Appendix D.

## 7.8 THE RESULTS AND IMPACT OF THE PROGRAMMES

### 7.8.1 Impact on iFour

iFour launched its R2 billion securitisation programme in November 2004. Its securitisation vehicle Prime Realty Obligators Packaged Securities (Pty.) Ltd. (PROPS) issued notes to the value of R800 million which achieved a weighted average margin of 0.58%. The proceeds of the notes were used to replace R800 million of bank debt. The details of the notes are shown in the table 7.2.

**TABLE 7.2: PROPS's note structure**

Class	Rating	Amount (R million)	% of Notes	Term of the notes	Basis points over 3-month JIBAR
A1	Aaa.za	234	29.3%	2.9 years	38.0
A2	Aaa.za	334	41.8%	4.9 years	40.0
B1	Aa2.za	39	4.9%	2.9 years	55.0
B2	Aa2.za	55	6.9%	4.9 years	62.0
C1	A2.za	39	4.9%	2.9 years	110.5
C2	A2.za	55	6.9%	4.9 years	116.0
D1	Baa2.za	18	2.3%	2.9 years	177.5
D2	Baa2.za	26	3.3%	4.9 years	184.0
<b>Total</b>		<b>800</b>	<b>Average of 3 year notes</b>		<b>56.2</b>
			<b>Average of 5 year notes</b>		<b>59.4</b>
			<b>Average of total funding</b>		<b>58.1</b>

Source: Bond Exchange of South Africa [BESA] (2005a)

According to iFour, the full impact of lower borrowing cost achieved through its CMBS vehicle will only accrue when the company raises new loans or rolls over existing loans via this mechanism (iFour 2005:11). iFour's 3 year notes will mature in 2007 and it intends to issue new notes to replace the existing ones (iFour 2006:74). The company plans to issue more notes under its first series (i.e. a tap issue) in the near future (Nunes 2006)

Nunes (2006) has seen other benefits besides the cost savings resulting from its securitisation programme. According to him it was a huge advantage that iFour was the first to initiate a CMBS programme because of the amount of publicity the company received. iFour's share price also increased from R6 to R13.

### 7.8.2 The impact on Vukile

Vukile launched its R2 billion CMBS programme in November 2005, of which R770 million was issued to refinance a major portion of its existing long-term bank debt (Vukile 2006:2, 16). The notes issued by its securitisation vehicle Vukile Investment Property Securitisation (Pty.) Ltd. (VIPS) achieved a weighted average margin of 0.61% over the 3-month JIBAR. The details of the notes are shown in table 7.3.

**TABLE 7.3: VIPS's note structure**

Class	Rating	Amount (R million)	% of Notes	Term of the notes	Basis points over 3-month JIBAR
A1	Aaa.za	261.0	33.9%	5 years	39
A2	Aaa.za	174.0	22.6%	7 years	45
B1	Aa2.za	64.7	8.4%	5 years	55
B2	Aa2.za	43.1	5.6%	7 years	60
C1	A2.za	136.3	17.7%	5 years	99
C2	A2.za	90.9	11.8%	7 years	105
<b>Total</b>		<b>770</b>	<b>Average of 5 year notes</b>		<b>58.94</b>
			<b>Average of 7 year notes</b>		<b>64.80</b>
			<b>Average of Total Funding</b>		<b>61.28</b>

Source: BESA (2005b)

The CMBS financing has reduced Vukile's overall cost of debt from 11.18% to an all-in rate of 9.99%, a 1.19% reduction. This takes everything into account including ongoing and hedging costs associated with the programme (Vukile 2006:5, 16). The reduction in debt costs translates into approximately R9 million of interest savings per annum (Van Zyl 2006; Vukile 2006:2).

Vukile has attributed the company's increase in distribution by 11.5% (for the year to March 2006) and the distribution growth of approximately 14% (for the six months to March 2006) partly to the savings in debt costs from its securitisation programme (and partly to the strong performance of its properties)( Williams & Van Zyl 2006; I-Net Bridge 2006c).

Vukile plans to utilise its securitisation programme to fund its future property investments and thereby achieve further cost savings (Vukile 2006:5).

### **7.8.3 The impact on Growthpoint**

Growthpoint launched its R5 billion CMBS programme in November 2005 (Growthpoint 2006b:26). The first note series, issued by its securitisation vehicle Growthpoint Note Issuer Company (Pty.) Ltd. was to the value of R805 million and the notes achieved a weighted average margin of 0.47% over the 3-month JIBAR (compared to bank rates of 2% over JIBAR at the time)(Wilson 2005b).

Growthpoint was paying on average, an all-in bank rate of up to 10.5% while the all-in securitisation rate of its first series is 9.34% (Muller 2005). This 1.16% reduction in interest rate is expected to save Growthpoint up to R9.3 million per year (Muller 2005). The details of the first series are shown in table 7.4.

**TABLE 7.4: Growthpoint's note structure – first transaction**

Class	Rating	Amount (R million)	% of Notes	Term of the notes	Basis points over 3-month JIBAR
A1	AAA (zaf)	537	66.7%	4.67 years	34
B1	AA- (zaf)	125	15.5%	4.67 years	51
C1	A- (zaf)	88	10.9%	4.67 years	85
D1	BBB (zaf)	55	6.8%	4.67 years	105
<b>Total</b>		<b>805</b>	<b>Weighted Average</b>		<b>47.07</b>

Source: BESA (2005c)

In June 2006, Growthpoint issued a further R969 million under its first series (a tap issue) which achieved an average margin of 0.45% over 3-month JIBAR (see table 7.5) (Growthpoint 2006b:26). This compares very favourably to the credit margin of between 1.10% and 1.75% (over 3-month JIBAR) that banks charge currently (Davey & Noble 2006). With this second issue, Growthpoint achieved an all-in fixed interest rate of 8.48% (Pickworth 2006).

Growthpoint managed to achieve this fixed rate which is more than 1% lower than the fixed rates that can be achieved today, by taking out forward fixed rate swap contracts in December 2005 and February 2006 (Pickworth 2006).

**TABLE 7.5: Growthpoint's note structure – second transaction**

Class	Rating	Amount (R million)	% of Notes	Term of the notes	Basis points over 3-month JIBAR
A2	AAA (zaf)	672	69.3%	5.08 years	35
B2	AA- (zaf)	121	12.5%	5.08 years	42
C2	A- (zaf)	93	9.6%	5.08 years	71
D2	BBB (zaf)	83	8.6%	5.08 years	105
<b>Total</b>		<b>969</b>	<b>Weighted Average</b>		<b>45.33</b>

Source: BESA (2006b)

The proceeds of the first and second note issues (under series one) were used mainly to finance the cash portions of the first and second Tresso portfolio acquisitions with the surplus used to repay more expensive debt (Growthpoint 2006a & 2006b:26).

Growthpoint launched its second series of notes (its third note issue) in September 2006 by issuing a further R1billion. The notes achieved a credit margin of 0.515% over 3-month JIBAR (see table 7.6). The proceeds of the notes were used to finance the Metboard portfolio acquisition (Growthpoint 2006a).

**TABLE 7.6: Growthpoint's note structure – third transaction**

Class	Rating	Amount (R million)	% of Notes	Term of the notes	Basis points over 3-month JIBAR
A1	Aaa.za	595	59.5%	5 years	40
B1	Aa2.za	110	11.0%	5 years	45
C1	A2.za	295	29.5%	5 years	77
<b>Total</b>		<b>1000</b>	<b>Weighted Average</b>		<b>51.47</b>

Source: BESA (2006c)

A further R1.5 billion issue was planned for the end of October 2006 to refinance Growthpoint's more expensive debt. This should equate to annual interest savings of approximately R14 million (Growthpoint 2006b:26).

The impact of the securitisation programme is being realised already. Growthpoint has among others, attributed its double digit distribution growth to the reduction in the company's cost of borrowings achieved through securitisation (I-Net Bridge 2006a).

#### 7.8.4 Impact on Freestone

Freestone launched its R5 billion CMBS programme in June 2006 through its securitisation vehicle, Freestone Finance Company (Pty.) Ltd. The initial note issue of R500 million was used to refinance a major portion of its bank debt (Freestone Property Holdings [Freestone] 2006). The notes achieved a weighted average margin of 0.41% and the all-in fixed interest rate of Freestone's securitised debt is 9,2% (Freestone 2006). The details of the notes are shown in the table 7.6.

**TABLE 7.7: Freestone Finance Company's note structure**

Class	Rating	Amount (R million)	% of Notes	Term of the notes	Basis points over 3-month JIBAR
A1	Aaa.za	335	67.0%	5 years	31
B1	Aa2.za	48	9.6%	5 years	50
C1	A2.za	117	23.4%	5 years	67
<b>Total</b>		<b>500</b>	<b>Weighted Average</b>		<b>41.25</b>

Source: BESA (2006a)

#### 7.8.5 The impact of CMBS on the listed property sector and property finance

Commercial mortgage backed securitisation has made a significant impact on the listed property sector of South Africa. According Van Zyl (2006), CMBS has been a "wake-up call" for banks. To retain their property company clients, banks had to reduce the margins on their commercial mortgage loans (Nunes 2006). When iFour's CMBS programme was launched, bank margins were at 180 to 250 basis points above JIBAR. Currently the bank margins are between 100 and 170 basis points. Therefore, even the listed property companies that have not set up a CMBS programme have benefited indirectly from the introduction of CMBS



Commercial mortgage backed securitisation has also been a catalyst for further innovation in property financing products. Most notably, life insurance companies such as Old Mutual have entered the property financing market (I-Net Bridge 2006b). Life insurance companies do not have the bank's capital reserve requirements therefore they can provide funding at lower margins than banks (I-Net Bridge 2006b). As a result, listed property companies now have access to a larger variety of property financing products that lower their cost of debt.

## **7.9 THE DISADVANTAGES OF CMBS FOR PLS COMPANIES**

The main disadvantages of CMBS financing from a PLS company's perspective are that: it is less flexible than bank funding; it reduces operational flexibility; and it is expensive, time consuming and complex to set up. The extent to which property companies find these to be disadvantages depends on the unique circumstances of each company. According to Van Zyl (2006), "one cannot escape from the fact that there are certain disadvantages compared to if you didn't have a securitisation and one needs to understand that upfront and be prepared to accept that".

### **7.9.1 Less flexible than bank funding**

CMBS funding is fixed from an interest rate and volume perspective. It is fairly difficult and time consuming to increase or decrease securitised funding or to change its terms. With bank funding, the property company can increase or decrease its funding and change from a fixed rate of interest to a floating rate or

visa versa. Property companies need this funding flexibility, but this is difficult to achieve with a CMBS structure. Therefore property companies are advised to keep some of their funding with a bank. (Hearn 2006)

Securitisation is suitable when a property company wants to take up a large loan at one time. It cannot issue incremental CMBS notes when it needs more funding (Van Zyl 2006; Nunes 2006). Therefore a property company needs to raise more equity or take up bank loans until it has a sufficient number (in value terms) of new properties that it can add to its securitisation vehicle.

### **7.9.2 Reduced operational flexibility**

With a CMBS structure the properties that secure the borrower's loan are ring-fenced in a SPV. The credit rating that the note issue receives is predominantly based on the performance of those specific properties. Therefore there are restrictions in place that limit the number or value of properties that can be substituted in the CMBS structure and a release premium is payable if the ring-fenced properties are sold. For portfolio management purposes PLS companies do need to sell or substitute properties in their portfolio. Securitisation reduces this operational flexibility to some extent. However, South African CMBS structures provide significantly more operational flexibility than foreign CMBS structures. (Hearn 2006; Job 2006; Nunes 2006; Van Zyl 2006)

### **7.9.3 Expensive to set up**

A major deterrent to setting up a CMBS programme is the high initial set-up cost (Muller 2005). Upfront or set-up costs include the arrangers' fee, legal fees, rating agency fees and auditor's fee among others and the total cost is in the

millions (Botoulas 2006, Job 2006). The total set-up cost for iFour was R19.5 million (iFour 2005:47), for Vukile R9.8 million (Vukile 2006:45) and for Freestone R6.1 million (Freestone 2006:35).

The high set-up cost is also one of the main reasons why a property company needs to issue at least R500 million worth of notes (Job 2006; Botoulas 2006). The cost must be evaluated in relation to the amount of debt that can be raised (Job 2006). As the debt size decreases, the cost of funding increases because the set-up costs are fixed. For example, if the cost is R10 million and the debt is R1 billion then the cost as a percentage of the debt is only ten basis points (0.1%), but if the transaction is R100 million then it becomes one percent (Job 2006). Therefore CMBS funding becomes uneconomical at smaller debt sizes (Job 2006). For this reason debt securitisation is less suitable for smaller property companies; the amount of money that could be raised would not be worth the costs involved (Smith 2004).

However, for larger property companies, securitisation is a cheaper source of finance than bank loans even with the set-up costs included. For example in Freestone's case, their securitisation funding rate excluding costs is less than half of their previous bank rate and with costs included it is nearly halved. When a bank provides funding, it needs to fund itself and hold capital and liquidity against its loan and this automatically increases the margin at which it can lend. If banks had to lend at the margins of the CMBS deals (including costs), they would be losing money. (Botoulas 2006)

#### **7.9.4 Time consuming and complex to set up**

Setting up a securitisation programme is a complex and time consuming process. It took 14-15 months to set up iFour's programme which was the first of its kind in South Africa (Nunes 2006). However, after the first transaction in this asset class was successfully implemented the subsequent CMBS transactions were executed faster. Vukile's programme was set up in 7-9 months (Van Zyl 2006) and Freestone's was set up in 5-6 months (Botoulas 2006). The time taken is influenced by the problems encountered along the way. Once the programme is set up and the first series of notes have been issued the process becomes standardised and the issuing of subsequent notes becomes a much faster process (Job 2006). Growthpoint's second transaction took about 8-9 weeks to set-up (Job 2006).

From a property company's perspective, compiling the data base on the properties and their cash flows can be a highly time and work intensive process (Van Zyl 2006; Job 2006). Another aspect that takes up a lot of the property company's director's time is the discussion about the transaction structure. A property director needs to evaluate the structure proposed by its securitisation arranger and to assess the implication on the property company as a whole (Van Zyl 2006). Managers of property companies wanting to set up a CMBS programme should not be under the illusion that this a simple process and they should try and ascertain in advance what is going to be required of them (Van Zyl 2006).

## 7.10 SUMMARY

This chapter was a case study analysis of the four current South African CMBS programmes, launched by iFour, Vukile, Growthpoint and Freestone. The chapter explained why these four PLS companies decided to obtain property finance through a CMBS transaction and the impact that it has had on them.

The CMBS programmes' general features in terms of transaction and note structure were explained along with the unique aspects of the programmes and the differences between them. The prerequisites to setting up a single borrower CMBS transaction in South Africa and the asset selection methodology utilised by the four property companies were also discussed.

The case study has found that the main reason for launching the CMBS programmes was to reduce the property companies' cost of funding. By reducing their interest cost, these companies can increase the distributions to their unit holders which is one of the primary objectives of PLS companies.

Another important objective for these companies was to gain access to a larger source of capital through securitisation which enables them to fund their growth requirements. Furthermore CMBS funding reduces the PLS companies' reliance on bank mortgage debt and allows them to gain control over their debt funding process.

Six CMBS transactions have been conducted to date (September 2006). iFour, Vukile and Freestone each have one note issue while Growthpoint has raised funding through its vehicles three times. The six note issues achieved weighted average margins of between 0.41% (Freestone) and 0.61% (Vukile), above the 3-month JIBAR. This is significantly lower than the bank margins of over 2%

(above 3-month JIBAR) when iFour's transaction was set up and the current bank margins of 1.1% - 1.75%. The overall cost of debt of these companies has been reduced by over 1% because of their CMBS funding. The lowered debt costs have already contributed to increased distributions in the case of Vukile and Growthpoint.

Commercial mortgage backed securitisation has also had a positive impact on the overall listed property sector. CMBS financing has been a catalyst for greater competition between financial institutions. This has resulted in lower interest rate margins on bank debt and the creation of new, innovative financing products.

The disadvantages of CMBS financing from the four PLS companies' perspectives were also explained. The initial disadvantages were the expense and time required to set up the programmes. The ongoing disadvantages are that CMBS is less flexible than bank funding and it reduces the companies' operational flexibility.

## CHAPTER 8

### SUMMARY AND CONCLUSIONS

#### 8.1 INTRODUCTION

Commercial mortgage backed securitisation (CMBS) is a recent innovation in the South African property finance field. Since November 2004, four CMBS programmes have been set up in South Africa all of which have been single borrower transactions originated by Property Loan Stock (PLS) companies. The first programme was set up by iFour in November 2004, followed by Vukile and Growthpoint in November 2005 and the latest programme to date (August 2006) was set up by Freestone in June 2006.

CMBS is an important development in property finance. It enables listed property companies to reduce their cost of debt which is usually their largest cost item and thereby increase distributions to unit holders. It also reduces their reliance on bank funding and enables them to gain access to a larger source of capital which is important to facilitate their growth objectives.

The South African CMBS structure is also unique from the level of operational flexibility that the property companies can retain. The use of the Herfindahl Index introduced in iFour's CMBS programme, to calculate the release premium for the sale or substitution of the securitised properties, is unique in securitisation practice in the world. iFour's innovative CMBS structure drawn up by ABSA Bank, received local and international recognition in receiving *The Banker* (a Financial Times of London publication) award for the "Deal of the Year 2004" in South Africa.

Despite the positive impact that CMBS is having on the four PLS companies that have set up a programme and the uniqueness of the South African CMBS structure, information on South African CMBS is limited and fragmented. This study was conducted to address this deficiency by providing a comprehensive analysis of commercial mortgage backed securitisation within the South African context.

This aim was met through the literature review presented in chapter two to chapter five and the empirical research by means of a case study presented in chapters six and seven. The objective of the literature review was to explain the: characteristics; structure and structuring; advantages, disadvantages and risks; and the legal and regulatory aspects of securitisation in general and aspects specifically related to CMBS. The purpose of the empirical research was to examine the four CMBS programmes that have been launched in South Africa to date, the impact they have had on the property companies that originated them and the impact CMBS has had on the listed property sector.

This final chapter will summarise the areas that have been covered in the literature review and summarise the findings from the case study. It will then give possible reasons for why only four PLS companies have set up a CMBS programme so far and what developments are expected in the CMBS market. The chapter will conclude with recommendations for further research.



## **8.2 SUMMARY OF THE RESEARCH**

### **8.2.1 Chapter two**

Chapter two first of all reviewed the different types of securitisation transactions in terms of asset class, type of originator, transaction structure, payment structure and nature of asset sale to the SPV. It then explained the three main phases of a securitisation: asset origination; structuring and issuance; and the holding and trading phase. This was followed by a detailed description of the primary parties, supporting agencies and services providers involved during these phases and the roles they perform. Lastly, the South African commercial mortgage backed securitisation process was explained by way of a diagram that showed the cash and security flows during the three phases of a securitisation.

### **8.2.3 Chapter three**

Chapter three analysed the steps taken in structuring a securitisation transaction with a focus on aspects related to CMBS. First of all the initial feasibility study was described in terms of the general aspects that should be considered before setting up a transaction and the costs involved in securitisation. Different approaches to asset selection and the due diligence process on the selected assets and their originator were then explained.

The transfer of the assets and related security to special purpose vehicles (SPV) and the function of the three SPVs used in South African CMBS structures (namely the issuer SPV, security SPV and borrower SPV) were described. This was followed by aspects related to the note structure namely: payment structure; payment priority; the timing of principal repayment; type of interest rate and prepayment protection features.

The various internal and external credit enhancement methods were described in detail and a possible approach to modelling the cash flows of a single borrower transaction was provided. Next, the credit rating of transactions was examined. Areas that were covered include: the importance of ratings; the rating scales; the rating process and rating variables; the concept of “expected loss”; and how the size of note tranches are determined. Finally legal aspects that are important from a structuring and rating perspective were listed.

### **8.2.3 Chapter four**

Chapter four explained the advantages, disadvantages and risks inherent in securitisation transactions. The advantages were discussed from the originator’s and investors’ perspectives. If the originator is a non-financial company, the main advantage of securitisation is that it lowers the company’s cost of debt and therefore reduces its average cost of capital. This can lead to increased profitability and improved shareholder returns. Other advantages are that it diversifies the company’s funding sources and reduces its reliance on bank funding.

For a bank originator, securitisation facilitates the removal of assets from its balance sheet. This enables the more efficient use of capital and helps with regulatory capital adequacy requirements. These aspects lead to increased asset creation which contributes to the growth of the bank. Another important advantage is that it enables the bank to transfer the risks related to its asset portfolio to investors in the capital market.

Securitisation notes as an investment provide a number of advantages. It enables investors to gain exposure to more types of assets which offer attractive yields compared to government bond issues of comparable credit quality and

maturity. Securitisation also offers flexibility in terms of credit quality, maturity and payment structure of the notes. These attributes may be tailored to meet specific investors' investment objectives.

The next section discussed the economic impact of securitisation.

Internationally it has been demonstrated that the existence of an efficient securitisation sector can increase the availability and decrease the cost of financing for consumers. Securitisation also encourages the efficient allocation of capital and reduces systematic risk among financial institutions. The growth of securitisation markets can be attributed to the numerous benefits it offers originators, investors and the economies as whole.

Along with the advantages, there are a number of disadvantages and risks involved with securitisation. A transaction is expensive and time consuming to set up and uneconomical for low financing requirements. These disadvantages can be barriers for companies wanting to set up a securitisation transaction. For investors the disadvantages are the potential risks inherent in securitisation issues including: credit; operational; counterparty; legal; and cash flow risks. These risks can threaten the investors' rights and the capital they have invested. Lastly, the chapter listed the attributes which a securitisation transaction should have to mitigate these risks.

#### **8.2.4 Chapter five**

Chapter five reviewed the main legal, regulatory, taxation and accounting aspects of South African securitisation schemes with a focus on true-sale transactions. Firstly the legal aspects were examined, in particular the law relating to the right to sell receivables, the security structure utilised in South Africa and the legal documentation that needs to be drafted during the legal

structuring process. This was followed by a summary of the key provisions in the securitisation Regulations of 2004 concerning transfer of assets to an SPV, the control of the SPV, the conditions related to the use of credit enhancement and liquidity facility in a transaction, and the information that must be disclosed about a transaction.

Taxation aspects, namely income tax, value added tax and stamp duty as they relate to securitisation were explained. The chapter ended with a discussion of the accounting standards AC 133 and AC 412 which apply to the accounting treatment of securitisation transactions. Legal, regulatory, taxation and accounting aspects play an important role in structuring a transaction. They can have a major impact on the viability and success of a securitisation scheme.

### **8.2.5 Chapter six**

Chapter six explained the research methodology employed in this study. Firstly, it reiterated the aims and objectives of the study and the rationale for undertaking the empirical research. It then explained the case study as a research strategy and the research design employed which clarified why this method is appropriate in meeting the aims and objectives this study.

The case study analyses the four CMBS programmes launched in South Africa to date (August 2006). It answers the questions posed under the secondary objective and adds a practical element to the theory discussed in the literature review. An illustrative case study is used which falls under the descriptive case study group. It has a single, embedded case study design where the overall case is the South African CMBS scheme and the embedded units of analysis are the four CMBS programmes.

This study made use of various documents related to the CMBS programmes and focused in-depth interviews as the main source of data. The interview process was explained including the interview guide, interview sample and the interview setting. In this study, data triangulation took place when the researcher used several sources of data to clarify the same issue. The seven respondents who were interviewed represent the main participants that were involved in setting up the four CMBS programmes in South Africa to date. Consequently they are the most knowledgeable people about the research topic.

The researcher used the coding technique to classify and reorganise data from the documents and transcribed interviews. The relevant data were assembled, broken down and then regrouped into themes. The chapter finished with a statement about the researcher's compliance with research ethics.

### **8.2.6 Chapter seven**

Chapter seven was a case study analysis of the four current South African CMBS programmes, launched by iFour, Vukile, Growthpoint and Freestone. The chapter explained why these four PLS companies decided to obtain property finance through a CMBS transaction and the impact that it has had on them.

The CMBS programmes' general features in terms of transaction and note structure were explained along with the unique aspects of the programmes and the differences between them. The prerequisites to setting up a single borrower CMBS transaction in South Africa and the asset selection methodology utilised by the four property companies were also discussed.

The case study has found that the main reason for launching the CMBS programmes was to reduce the property companies' cost of funding. By reducing their interest cost, these companies can increase the distributions to their unit holders which is one of the primary objectives of PLS companies.

Another important objective for these companies was to gain access to a larger source of capital through securitisation, which enables them to fund their growth requirements. Furthermore CMBS funding reduces the PLS companies' reliance on bank mortgage debt and allows them to gain control over their debt funding process.

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The disadvantages of CMBS financing from the four PLS companies' perspectives were also explained. The initial disadvantages were that it was expensive and time consuming to set up the programmes. The ongoing disadvantages are that CMBS is less flexible than bank funding and it reduces the companies' operational flexibility.

### **8.3 THE REASONS FOR THE SLOW GROWTH OF SINGLE BORROWER CMBS TRANSACTIONS**

Securitisation market participants expected CMBS to become a big asset class and one that would change the way listed property companies acquire financing. However, over the last two years only four CMBS programmes have been launched even though this vehicle can provide the cheapest form of debt finance to property companies. There are a number of reasons for this.

Firstly, a CMBS programme is expensive to set up and because of this it becomes uneconomical at a smaller debt size or note issuance size. This is a major barrier for smaller listed property companies. The listed property sector is also relatively small in terms of number of companies and according to securitisation arrangers there are only twelve companies (including the four cases documented here) that have a big enough portfolio and debt level to qualify for a CMBS. Finally, while CMBS would enable property companies to fund their growth there aren't sufficient properties on the market for property companies to purchase, thereby increasing their portfolio and debt exposure. (Job 2006; Botoulas 2006; Hearn 2006)

Secondly, even if a property company does qualify for CMBS financing because of its portfolio size and debt level other disadvantages of CMBS, such as reduced operational flexibility, the fact that it is less flexible than bank funding, time consuming and complicated to implement can deter new entrants. If the property company's portfolio is a trading portfolio then CMBS is also not a suitable form of financing because CMBS needs a relatively stable core property portfolio.

Thirdly, as a result of securitisation banks have become more competitive and bank margins have compressed quite significantly (i.e. the interest rate that a bank charges above JIBAR on the funds that it has lent out). When iFour securitised bank margins were between 180 and 250 basis points above JIBAR, now they are between 100 and 170 basis points (Hearn 2006; Nunes 2006). By restructuring its debt, a property company can now reduce its cost of borrowing without securitising and at the same time retain its full funding and operational flexibility.

Lastly, new competing financing products have been brought to the market. Banks now offer property financing via their asset backed commercial paper (ABCP) conduits. These are ready made securitisation structures that raise funding on the short term bond market. A bank is not required to hold capital reserves against its asset backed commercial paper therefore it is able to reduce the margin it charges borrowers by about 20 basis point.

More significantly, life insurance companies like Old Mutual have entered the property finance market. Life insurance companies do not have the banks' capital reserve requirements therefore they can provide funding at lower margins than banks. For example, Growthpoint accessed funding from Old Mutual thereby saving 80-90 basis points on the interest margin payable including costs. Compared to this Growthpoints' first securitisation issue reduced its funding rate by 116 basis points, including costs.

While the competing products offer lower savings than those achieved through a CMBS vehicle these financing methods are more flexible, require limited administration and take a significantly shorter time to set up than a CMBS programme. (I-Net Bridge 2006b; Botoulas 2006; Madison Property Fund Managers 2005:7)



According to securitisation arrangers a few more property companies are planning to launch a CMBS programme. CBS Property Group has already announced its intention to securitise a portion of its debt within the next few months (CBS Property Group 2006). However, significant growth in single borrower CMBS transactions is not expected until the smaller property companies grow or there is a consolidation of property companies through mergers and takeovers. CMBS funding is likely to become a more attractive form of financing than it is currently once bank lending margins and the life insurance company lending levels out.

#### **8.4 EXPECTED DEVELOPMENTS IN THE CMBS FIELD**

CMBS financing is currently only available to large property companies because the size of the securitised debt needs to be at least R500 million. The challenge is how to reduce the costs involved in securitisation and how to make the securitisation structure and pricing technology available to smaller companies that require a smaller loan. South African banks are currently working on how to achieve this. (Job 2006; Hearn 2006)

The financing method that is being developed for this purpose is multi-borrower CMBS programmes (Job 2006, Hearn 2006). Under a multi-borrower CMBS scheme, a bank securitises its commercial mortgage loans. The bank achieves cost savings (especially in regulatory capital costs) by transferring the mortgage loans off its balance sheet and it is then able to pass on a portion of the savings to its borrowers. In foreign securitisation markets multi-borrower CMBS transactions are more prevalent than single borrower transactions. The first multi-borrower CMBS transaction will be launched by Investec Bank in January 2007. (Job 2006)

Another potential development is a securitisation vehicle that is similar to a single borrower structure but which has loans to two or more property companies that are completely separate legal entities. This would enable smaller property companies to assemble a larger debt pool and take full advantage of the low interest rate margins that can be achieved when a transaction is set up solely for the benefit of property companies. (Botoulas 2006; Van Zyl 2006)

In this case, the separate companies' properties would need to be cross-collateralised and cross-defaulted and this would cause legal problems. However if the legal issues can be solved this is a possibility because the listed property industry is fairly small and there is "cross-pollination" between various property companies in the form of cross-shareholdings and commonality in the board of directors. (Botoulas 2006; Van Zyl 2006)

## **8.5 RECOMMENDATION FOR FURTHER RESEARCH**

The researcher recommends two areas of further research, based on the expected developments in the South African CMBS field. Firstly, the structure and features of Investec Bank's forthcoming multi-borrower CMBS transaction should be investigated as well as the potential and willingness of other banks to set up similar structures. Secondly, the viability of a property company originated securitisation vehicle that has a loans to two or more separate property companies should be explored. In this respect feasibility from a legal, structural and property company willingness should be examined.

## **8.6 CONCLUDING REMARK**

Commercial mortgage backed securitisation has made a significant impact on property finance and the listed property sector of South Africa. However its biggest impact has been as a catalyst for greater competition between financial institutions. This has resulted in lower interest rate margins on bank debt and the continued creation of new, innovative property financing products. The introduction of CMBS has therefore not only benefited the companies that have originated CMBS programmes but has benefited the entire listed property sector.

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