THE PROPERTY FINANCE BUSINESS IN SOUTH AFRICA

BY

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submitted in fulfilment of the requirements for the degree of

MASTER OF COMMERCE

in the subject

BUSINESS MANAGEMENT

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF V G GHYOOT

NOVEMBER 2001
I declare that THE PROPERTY FINANCE BUSINESS IN SOUTH AFRICA 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.

SIGNATURE

(MR A G WIGHT)

DATE

30.11.2001
SUMMARY OF DISSERTATION

Title THE PROPERTY FINANCE BUSINESS IN SOUTH AFRICA
By A.G. Wight
Degree Master of Commerce
Subject Business Management
Supervisor Prof. V. G. Ghyoot

Problem Statement

The business of property finance has not been properly documented in South Africa. Available resource material focuses on the perspective of the property developer and investor largely neglecting the business of property finance. Thus comprehensive information on this business was not available to students and researchers.

This study set out to correct this deficiency.

Research Procedure

Key property finance personnel in the major banks in the Republic of South Africa were interviewed to establish how the business of property finance is conducted. Jointly the interviewees represent 77% by volume of business over a period of two years.

A parallel process of literature research was undertaken to compliment the interview research and provide technical depth to the findings.

Findings

The empirical and literature research results were combined to comprehensively document the processes, structures, systems, products and risks associated with the business of property finance in South Africa.
**Key Terms**

Property Finance

Property Finance Products

Property Finance Risk

Structured Finance

Loan Application Process

Property Finance Systems

Property Finance Organisational Structures
ACKNOWLEDGEMENTS AND THANKS

To

- Laura and Tamsyn for the time to do it
- Frank Berkeley for his indulgence
- Neville Kain for his insistence and perseverance
- Phillip Wilmot for cattle-prodding me into a university education
- Valmond Ghyoot for his wisdom, guidance, patience, contribution and motivation
- friends and colleagues from all the financial institutions who made the data collection and research phase such an interesting and pleasurable task, and who showed true interest in seeing the job done correctly
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1 PROPERTY FINANCE

1.1 INTRODUCTION

1.1.1 The Subject of Property Finance

The subject of property finance is a rich and varied field of study that has received much attention. The various disciplines in the property industry have created a need for careers in entrepreneurship, architecture, conveyancing, and property valuations and have contributed positively to the economic growth of the country.

This property related expertise has been accumulated over time and documented extensively to provide a continuous flow of information, knowledge and experience through the availability of these subjects in learning institutions such as technikons and universities.

However, the development and documentation of the combined technical expertise and associated knowledge of property, risk, finance and business required to assess the viability of each request for finance at both macro and micro levels, and to manage a loan throughout its life, remains a largely underdeveloped subject.

Property finance is a business with a similar objective to that of any other profit-making organisation, namely to maximise the wealth of its shareholders. In order to achieve this the normal disciplines of business management and economics are applied together with very specialised skills such as property investment expertise, property risk analysis and prudent banking practices.

Property finance is generally understood to comprise the lending of money against the security of fixed property that should hold a value greater than that of the loan. This simplistic view creates the impression that this type of business is low risk and highly profitable, as the value of the property should adequately cover the loan should a default in the loan repayment arise.
A recent newspaper article published by the Business Report (West, 2001:3) which reports on the financial results of a particular financial institution emphasises the incorrectness of this notion. The bank in question had, in a single year, increased its provisioning on development and commercial loans to R418 million from R185 million.

Unfortunately, banks write off millions of rands every year on loans secured by property, which provides a compelling incentive to research and investigate the business of property finance to fully understand its complexities.

The challenge is not to duplicate the various disciplines of property and prudent banking, but rather to develop the property finance function as a discipline in itself, which represents the skill set and knowledge required to effectively operate within the business of property finance.

1.1.2 The importance of the property finance industry in South Africa

Two significant events jump-started the economic development of South Africa, namely the discovery of diamonds and gold in the middle and latter half of the nineteenth century. This caused the economy to move forward from a purely agricultural basis and launched the industrial awakening of southern Africa.

This growth in the economy was in part facilitated by the colonisation of the Cape by the British in 1805, which encouraged the move to free trade and away from the system of bartering that was enforced by the Dutch. In the 1830s this progressive development was extended to the free operation of banks, which in turn provided the foundation for the development of banks and banking products to support the growing mining and associated industries.

Initially, the private banks (district banks) could only provide limited funding and expertise to meet the huge demand for finance created by the mining and support industries. The only significant lending banks in the early part of the nineteenth
century were the Bank van Lening, which supplied long-term credit, and the Lombard Discount Bank, which supplied short-term credit.

The resultant surge in economic activity from the diamond and gold rushes attracted international banks, and they soon bought up the smaller private banks, which were unable to compete owing to their lack of capital. These large banks are still a part of the South African banking society today and include Standard Bank, Nedbank (Netherlands Bank), First National (National Bank, then Barclays National Bank) and Volkskas, which was incorporated into the ABSA group in 1998.

It was the involvement of these banks and others in the rapidly growing South Africa that provided the funding leverage necessary to develop the infrastructure of southern Africa. The health of the South African economy is reliant on the continued growth of this infrastructure, of which property is a predominant element, to support the growing business needs of the future.

By taking cognisance of our history we can see the important role played by the banking industry in providing the funding necessary for the country’s economic growth. This empirical evidence supports the notion that property finance remains and will continue to remain an important factor in the future growth of the economy and of the country.

This is further emphasised in a global context by R. Georgi (2001:1), who states that “the global commercial property market amounts to an estimated $4 000bn, making it the largest asset class”. The Knowledge Factory Ltd estimates the South African commercial mortgage market at R72 billion rand, while Van Den Berg and Van Schalkwyk (1998:39) estimate the middle to lower income mortgage market to be in excess of R300 billion. The magnitude of these statements and their implications enforce the notion that the business of property finance is an important facet of both the South African and international economies.
1.2 MOTIVATION AND OBJECTIVES

1.2.1 Motivation for the dissertation

There is a lack of understanding of the complexities inherent in the business of property finance. The simplistic view that the property value secures the loan exposure is widely held, and there is little understanding of the process, risk, or knowledge required to profitably fund property ventures or investments.

This view is partly the result of the lack of South African literature available on the subject of property finance. Internationally, there are numerous books on the subject that address portions of the business in detail, particularly those areas that are visible to the property investor, such as the application process and credit analysis.

While this body of work provided a measure of content support for the dissertation, it failed to address the core areas of the subject in a business context and framework. Each topic was presented in isolation from the broader business of property finance, focusing rather on specific and specialist areas of property and investment and thus failing to link or integrate these areas across the business.

The motivation for this dissertation is therefore to provide a systemic view and operational clarification of the entire business of property finance in South Africa.

The motivation is strengthened by the fact that this research will deliver new intellectual capital to the broader academic community and the property market. This dissertation will, for the first time in South Africa, provide a qualified and detailed document that exposes the internal operations of the property finance business, which have until now been the sole domain of the financial institutions themselves.
1.2.2 Objectives of the dissertation

The main objective of this dissertation is to contribute meaningfully to the development of the existing body of information in the field of property finance. This subject encompasses the very specialised knowledge and skills of both the property and banking industry.

The secondary objectives are to research and document:

- the loan application process from initial client contact until the loan is dispersed
- property finance organisational structures employed to support the business process
- the Information Technology systems required to support the business of property finance
- the property finance products that are offered to the property investor market
- the risks involved in the funding of property ventures and how these can be identified and reduced
- global trends in the business of property finance

The achievement of these objectives will provide the foundation for an understanding of the unique elements that make up the business of property finance. This foundation will provide further opportunities to build on it, thereby broadening the subject to the benefit of the industry as a whole.

1.2.3 Method of presentation

The dissertation is presented in a logical progression of information blocks. The process, organisational structures, systems, products and risks are described in separate chapters that utilise the knowledge foundations created in preceding chapters. Owing to the incremental nature of the exploration and research process, conclusions are not only reserved for the final chapter, but will also be made, where relevant, in the preceding chapters.
Chapter 2 describes the empirical and literature research undertaken to reveal and document generally accepted methods, policies, procedures, systems, risk assessment and products currently adopted or utilised by South African financial institutions in the business of property finance.

Chapter 3 details the loan application process, providing the reasoning behind the activities that make up this process.

In chapter 4 the structures to support the process and activities are presented, and the advantages and disadvantages of each structure are discussed. The functionaries who perform the activities are presented, together with their roles and operational outputs.

Chapter 5 provides insight into the neglected area of Information Technology, specifically in the context of its support of the business of property finance.

The products and funding mechanisms used in property transactions are discussed in detail in chapter 6. The chapter is prefaced by a discussion on the theoretical elements of finance, such as the time value of money and the difference between nominal and effective interest rates.

Chapter 7 provides detailed insight into the risks associated with property finance and describes how these can be identified, hedged and managed.

Finally, chapter 8 provides a summary of the dissertation, a view of global trends in property finance and ends with pertinent conclusions and recommendations.
2 EMPIRICAL AND LITERATURE RESEARCH

2.1 INTRODUCTION

This research focuses on the areas of the business that are unique to property finance and contribute directly or indirectly to the profitability of the organisation. The research is not intended to investigate best business practices, but rather to document generally accepted methods, policies, procedures, systems and products currently adopted by South African financial institutions.

Preliminary investigation into the availability of South African research material relating to this subject revealed that no significant contribution existed. It would appear that the lack of material on the business of property finance could be attributed to the level of importance bestowed upon it. This is highlighted by Maritz (1983:24) “The four economic activities, agency, investment, trading and counselling, are collectively known as property business”.

Maritz (1983:24) goes on to describe the broader property industry as “All enterprises that derive the major part of their income from one or more activities classed under property business are collectively known as the property industry”.

Significantly Maritz does not make direct reference to the business of property finance as part of either the property business or industry in these statements. Without the business of property finance, the property business and property industry would be severely restricted in the number of viable investment opportunities through the lack of available funding.

The importance of the funding of property investments is however recognised in the Finance chapter by Maritz (1983:324) “The availability of loan capital is often decisive. Without mortgage loans few buyers would be able to buy homes or other properties, or construct buildings on such properties”. However the topics covered by Maritz (instruments of finance, sources of finance and conditions under which finance
will be granted) in this chapter intentionally focuses on finance from the investors perspective.

The business of property finance is part of the property industry and it is crucial that it is researched and documented, from the financiers' perspective, to be included in and to create a more complete body of property knowledge.

Therefore, to maximise the contribution and value of this research, a two-pronged approach was adopted:

- firstly, through interviews, to research and document the current method of operation within South African financial institutions
- secondly, to identify, research and document available and applicable literature, both locally and internationally, that covered the subject of property finance and all its related aspects

This encompassing approach facilitated a holistic dissertation, presenting findings that fairly represent the current business of property finance in South Africa. The majority of the large banking institutions were approached and staff across the entire process of property finance were interviewed. This data resulted in a broad model encompassing process, polices and procedures relating specifically to property finance and provided a framework for the inclusion of the literature research findings.

This literature research extended to libraries, professional publications and training material supplied by educational institutions, which provided technical depth to the subject. The collated, analysed and integrated research material can therefore be collaborated by both the practical and theoretical evidence gathered during the research phase of the dissertation.
2.2 INTERVIEW RESEARCH

The research interviews covered the major financial institutions operating property finance divisions within South Africa, namely ABSA Bank, Board of Executors, Cape of Good Hope Bank, First National Bank, Investec Bank, Nedcor Bank, Nedcor Investment Bank and Standard Bank.

The exhibit below supplied by the Knowledge Factory Ltd (see Annexure C) identifies and justifies the above financial institutions as a representative interview sample. The exhibit summarises all the mortgage bond registrations of each financial institution from 1999 until the end of March 2001, where the purchase price of the property exceeded R1 million. The table indicates that the interview sample comprised 77% of all bond registrations for the period specified.

The limit of R1 million was introduced to ensure that the interview sample would provide a meaningful contribution to understanding the complexities of property finance, and not be adversely influenced by volume financing in the residential market, which typically is far less complex.

While this segmentation achieved the desired restriction, all the financial institutions identified are involved in residential property finance to some larger or lesser extent, depending on their market strategy. This ensured that the research was balanced across the field of property lending, and not unduly dominated by the financing of a specific property type.
<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Bond Amount</th>
<th>Number of Bonds</th>
<th>Percentage by Number</th>
</tr>
</thead>
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<tr>
<td>NEDCOR INV BANK LTD</td>
<td>1,875,688,865</td>
<td>66</td>
<td>3</td>
</tr>
<tr>
<td>CAPE OF GOOD HOPE BANK LTD</td>
<td>882,952,500</td>
<td>112</td>
<td>6</td>
</tr>
<tr>
<td>FIRST NATIONAL BANK OF S A LTD</td>
<td>494,442,626</td>
<td>116</td>
<td>6</td>
</tr>
<tr>
<td>NEDCOR BANK LTD</td>
<td>382,784,517</td>
<td>121</td>
<td>6</td>
</tr>
<tr>
<td>INVESTEC BANK LTD</td>
<td>1,348,783,486</td>
<td>166</td>
<td>6</td>
</tr>
<tr>
<td>STANDARD BANK</td>
<td>1,274,705,019</td>
<td>225</td>
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</tr>
<tr>
<td>B O E BANK LTD</td>
<td>2,667,064,192</td>
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<tr>
<td>A B S A BANK LTD</td>
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<tr>
<td>Other</td>
<td>11,082,324,713</td>
<td>454</td>
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<tr>
<td>Total</td>
<td>22,856,405,587</td>
<td>2003</td>
<td>100</td>
</tr>
</tbody>
</table>

Exhibit 2.1 Interview sample (Source: The Knowledge Factory Ltd)

The interviews were conducted in line with the interview guidelines and questions as described in annexure A. The participants' answers and comments were then incorporated into the appropriate chapter of the dissertation, together with the literature research findings (where applicable), thereby presenting a consolidated view from both a literature and practical experience perspective.

Each respondent (see annexure B) was interviewed specifically on his or her area of expertise and, where the respondent operated at a senior management level, a more strategic approach to the interview was adopted. The interview sample included seven senior managers (General Managers or Directors), eight departmental managers and eight supervisors of which more than 90% had worked in two or more different financial institutions.

This facilitated the inclusion of a tactical and strategic dimension into the dissertation that enhances the understanding of or reasoning behind some of the detailed operational elements and findings.

The interview research provided the in-depth information required to describe the business of property finance. The data collected in this process far exceeded the contribution from the literature researched. This underpins the hypothesis that the business of property finance is not clearly described and that pertinent information on the business is not readily available as a complete source of reference for participants in the property market or other interested parties.
The research revealed that knowledge of this business has been developed within the industry over a long period of time and that the experiences of financial institutions, together with specialist knowledge of marketing, valuations, credit risk, administration and conveyancing, have been assimilated and translated into firm policies and procedures that are endemic to each institution.

Through natural staff attrition and internal training programmes, this knowledge has been dispersed among staff and financial institutions, providing an unofficial yet largely standardised method of operation and business practice.
2.3 LITERATURE RESEARCH

2.3.1 Introduction

The literature research into property finance covered the following main areas:

- educational institutions
- training institutions providing short courses on specific subjects (Lance Hunter, Property Development Programme)
- publications, which included local and international sources, dissertations and articles

The literature supporting the business of property finance has been included in the dissertation to support assertions made in the interview research process, provide technical depth to discussions and, where applicable, continuity within a specific topic.

2.3.2 Educational institutions

Universities

The first phase of this research entailed an Internet search for property finance-related courses offered by South African universities. This form of research requires the university web sites to have adequate search engines, which was not always the case.

The research revealed that most universities offer property or finance-related courses and, when property finance is referred to, it is in the context of investment financing options and not so much the business of property finance. Some of these courses do, however, overlap to a certain extent, for example the postgraduate subject “Property valuation, investment and development” offered by the University of South Africa (Unisa).
Similarly, the University of the Witwatersrand offers the following synopsis of its property finance course: “The core of the course is a complex investment model which is used to analyse various problems facing investors. In the process of developing the spreadsheet-based model, computational skills are developed, as are statistical techniques of risk analysis and forecasting” (www.wits.ac.za).

The University of Pretoria offers an undergraduate BSc degree in Real Estate (a postgraduate Honours degree in this subject will be offered from 2002) through its department of Construction Economics, focusing on students who “plan a dynamic career in the property industry” (www.up.ac.za). The course content, which can be viewed on their web site, offers property industry-related topics such as Property Law, Construction, Theory of Structures and Financial Accounting, which do not contribute significantly to the information available on the business of property finance.

The University of The Free State offers both an undergraduate and postgraduate degree on the subject of Money and Banking for students who “envisage entering the banking sector, other financial institutions or positions in the financial world” (www.uovs.ac.za). These courses focus on topics such as Financial Management, Economics and Monetary Systems, which have some technical and complementary information that could be used in conjunction with the study of property finance.

The following university web sites were also researched but, significantly, no material contribution was found:

- University of Cape Town
- University of Zululand
- University of Natal
- Rhodes University
- University of Potchefstroom
- Rand Afrikaans University
- University of Port Elizabeth
This research result strengthens the hypothesis that the business of property finance is not well documented, nor is information on the subject readily available as reference material in South Africa. Nevertheless, the Unisa course content provided collaborating material that is used in this dissertation and is referenced accordingly.

**Technikons**

Research into the courses offered by technikons revealed two sources, namely:

- Technikon SA
- Damelin

Technikon SA offers a course that extensively covers property finance from the perspective of an investor or developer. According to the Property Finance Study Guide 1 (1987:5): “This tuition program deals with the techniques needed to enable property developers to accomplish their financial (property) planning successfully”. It further explains that “… property developers be made familiar with well proved financial management techniques so they can survive and flourish in the long term”.

These statements are supported by the syllabus, which covers the fundamentals of property investment and development (e.g. investor objectives, strategy, forms of financing and risk), all of which have a direct bearing on the business of property finance.

It must be reiterated that the purpose of this dissertation is to expose and document new knowledge as it relates to the business of property finance. Well-documented property investment techniques and methods are only repeated and emphasised where they make a direct and meaningful contribution to the body of new knowledge.

The study material of the Technikon SA course provides information in the areas of financing and risk, which is acknowledged and expanded on in this text.
Further literature research within the technikon education field revealed that Damelin Management School offered a more specific property finance course that was originally designed to meet the needs of the then property finance division of Syfrets Limited (now Nedcor Investment Bank). The course content and modules were gathered from existing educational material and presented along functional lines (e.g. valuations and credit) together with broader modules covering the concepts of economics, accounting and finance.

2.3.3 Training institutions

The term “training institution” is used in the context of institutions that present short courses, generally of no more than two weeks’ duration. The relevant courses researched provided very specific content and focus, which added to the general body of knowledge of this dissertation.

Lance Hunter Consulting provides a property finance workshop to the industry on a periodic basis. Its stated intention is not to provide an intellectual debate or academic analysis, but rather to provide the investor and analyst with better insight into the risk profile of geared properties, and tools to improve returns.

The training material, titled “Property Finance Workshop”, provides a significant contribution to the structuring of finance. Each option is developed with the intention of achieving some advantage over traditional methods of finance or funding. Other than this, the workshop document contributes little additional information on the subject of the business of property finance.

The South African Property Owners Association (SAPOA) offers a two-week course on property development at the Graduate School of Business in Cape Town. In the first week, the course covers the various theoretical topics associated with property development. It concludes in the second week with a practical group assignment consisting of a feasibility study and a development proposal.
The course material covers similar areas of property development as that of Unisa’s postgraduate offering on Property Valuation, Investment and Development, and as such adds little additional value to that of Unisa’s course.

In conclusion, the educational literature provided a measure of content support to the dissertation. However, it failed to address any of the pertinent issues in a business context or framework. Each area or function was presented in isolation, providing little additional information on the business of property finance and focusing instead on the development of knowledge within a specific function (e.g. law).

2.3.4 Publications

The research into literature available in South Africa yielded contributions originating primarily from the United States of America and the United Kingdom. Aspects of these publications provided useful contributions to the dissertation; however, their primary intent was to focus on the methods of financing property investments and the legal and financial analysis required to achieve this profitably through an optimal funding source.

Brueggeman and Fisher (1993:1) highlight this finding through their stated intention of providing a foundation for the understanding of property law, mortgage underwriting practices, mortgage insurance programmes, financial analysis, valuation principles, sources of funds and income tax laws.

These aspects are a common theme in most publications researched (e.g. Essentials of Real Estate Finance, 1986 by David Sirota and Property Investments and their Financing, 1993 by P. J. Rowland), providing the reader with in-depth knowledge of the business of property investments. Those areas applicable to the business of property finance in South Africa have been included in the dissertation and referenced accordingly. They include:

- secondary mortgage markets (mortgage-backed securities, an emerging market in South Africa)
- origination and securitisation (emerging methods of finance in South Africa)
Direct reference to the processes inherent in the business of property finance was found in Sirota (1986:213), who provides a detailed description comprising an entire chapter of the loan application process generally utilised by financial institutions in the United States of America. The process described by Sirota includes an examination of the following: qualifying the borrower (the application, data verification and credit analysis), qualifying the collateral (property valuation), and approval.

As the USA is characterised by a vibrant secondary mortgage market, particular emphasis is placed on the legal certainty of the title to the property (title deed), to the extent that lenders require title insurance before committing funds. Sirota (1986:240) explains: "Because of the growing activity of this nation's secondary mortgage market and its concurrent necessity for added protection, title insurance is generally required by lenders".

Sirota's description highlights the similar approaches and processes undertaken by financial institutions in different countries, which provides some justification for the processes employed in South African financial institutions and emphasises the international standardisation of these processes.

A rather simplistic view of the business of property finance characterised most of the literature. This view is typified by the lending criteria described by Isaac (1996:146). He contends that "most lenders look for the same aspects of a lending proposal which in simplified terms are the four C's: character, cash stake, capability and collateral".

While these aspects are important, the lending criteria or risk assessment of a loan proposal is complex and requires far more detailed analysis. Isaac (1996:145) and
Isaac (1994:61) does, however, provide a passing mention of some of these considerations (e.g. property type, design, tenant mix, location and quality of the tenant). These considerations have been researched in detail and are documented in this dissertation.

The Australian author Rowland (1993:206) provides an in-depth analysis of financial risk from the perspective of the property investor. He devotes an entire chapter to this topic and clearly describes the actions and risk prevention techniques utilised by financial institutions in funding property investments (loan covenants such as mortgagee approval of new tenants and property insurance requirements) and dealing with problematic loans (legal action, exercising power of sale and taking control of the property management).

This source provided the researcher with detail that collaborated information gained through the interview research process.

As an emerging economy, South Africa faces similar challenges to that of other African states such as Kenya. Research in this direction provided an insightful reference in the form of a recent dissertation by Ndungu (2001), who examines mortgage financing strategies in residential property investments in Kenya, particularly in the light of high interest rates.

While the dissertation does not focus directly on the business of property finance, it does highlight the need for emerging economies to be innovative and to learn from successes achieved in other countries. Ndungu (2001:85), concludes that “it is not the availability of cheap debt financing that is really important but it is the gains available to creative investors who know how to structure debt and equity financing packages to solve problems”.

Significantly, he proposes the development, with government involvement through the introduction of regulatory frameworks, of secondary mortgage markets to provide financing stability in Kenya. This is important and research into this area in South Africa, which has also been subjected to volatile and high interest rates, revealed
some positive advances in the development of debt structuring that are detailed in this dissertation.

In summary, the publication and literature research resulted in a measure of supporting documentation, but the selective coverage or focus of the relevant topics suggests that the business of property finance as a whole is dealt with in isolation. It is not addressed holistically in a business context or framework.
2.4 CONCLUSION

The empirical survey and review of the literature available provided ample evidence to support the assertion that the business of property finance is not well researched and documented. The literature available both locally and internationally is largely focused on the methods and technical aspects of financing property investments, and not on the business of financing property.

The interview phase of the research revealed that at an operational level, individual property finance expertise is largely functional, and that depth of knowledge across the entire spectrum of property finance is rare. This is not so much the case at senior and general management levels, where there is a broader appreciation for the entire business, yet the lack of in-depth knowledge in specific areas of the business is evident.

The development of new knowledge was achieved through researching and developing the threads of information holding the different facets of the business together into a strong, cohesive presentation of the entire business of property finance. The expression of this information is a result of the combined individual knowledge of the interviewees, published literature applicable to the subject and the internal policies and procedures of financial institutions in South Africa undertaking this form of business. The research findings are documented in chapters 3 to 8 of this dissertation.
3  THE LOAN APPLICATION PROCESS

3.1  INTRODUCTION

The purpose of this process is to effectively manage and process the client’s loan application from the point of client contact to the client’s acceptance of the loan conditions.

The loan application process is the start of a relationship between the Client and the Bank that can last from months to decades. For any relationship to be mutually beneficial, it must be built on a solid foundation. The Bank will be taking on an asset for an extended period of time and the performance thereof will largely substantiate the lending decision. The Client, on the other hand, will be relying on the Bank to remain in business and to continue managing his/her funding requirements in an effective and efficient manner.

From the Bank’s perspective, the effectiveness of this process is dependent on the quality of the information supplied with the application. The activities that form part of the process all contribute to a pool of information, which is not only used to determine the risks and pricing, but also to generate the documentation for the agreement, bond and related securities.

The application process may be depicted as follows:

Exhibit 3.1  The application process
- **Client contact:** establishing the requirement parameters for the loan
- **Property valuation:** establishing the market value of the property or proposed development
- **Application screening:** the initial determination of associated risks and the likelihood of approval
- **Loan approval:** the formal approval of the loan and conditions
- **Acceptance:** the formal offer and acceptance of the loan
- **Registration:** the registration of the mortgage bond and disbursement of the loan
3.2 CLIENT CONTACT

The purpose of this activity is to understand the requirements of the client, to explain the bank's requirements in order for it to process the application and to provide the client with information relating to the timing and process the application must follow in order for it to be approved.

**Client requirements:** each Client has a unique set of requirements that can be differentiated on the basis of property type, property location, loan duration, pricing, and timing of disbursements. It is important for the Bank to fully understand and document these requirements at this time to ensure that the Client is effectively serviced and that the risks associated with the application are correctly analysed.

**Bank requirements:** each Bank has a required defined risk profile with which it is prepared to service the market. It is imperative that this profile be explained to the Client in the context of the application so that there is a common understanding between the Client and the Bank. For example, a Bank operating exclusively in the residential market would not consider an application to finance the development of a hotel, and it is important that a potential Client realise this from the outset.

**Process orientation:** one of the frustrating elements of the loan application process experienced by Clients is the time it takes to obtain approval from the Bank. The Client, in most cases, has done all the feasibility and profitability tests and expects the bank to accept them at face value and make the decision accordingly. The process and timing must be fully explained to the Client to ensure that no unrealistic expectations are created.

**Application rejection:** if the loan application does not fit the Bank's risk profile, this is the time to inform the Client that the application has been rejected.

3.2.1 Types of clients

A client must be a legal entity, that is an entity that can acquire rights as well as obligations, and that is governed by the laws of the country. These legal entities include:
**Individual**: a natural person who has full contractual capacity.

**Company**: a corporation that is governed largely by the Companies Act, No 61 of 1973, as well as many common law provisions. It has a legal personality (separate and distinct from the shareholders), limited liabilities (shareholders are not liable for the company’s liabilities) and perpetual succession (continues to exist in terms of the Companies Act).

**Close corporation**: a corporation as defined by the Close Corporations Act, No 64 of 1984, which was brought into being to provide protection of limited liability and perpetual succession, without the onerous formalities required in forming a company.

**Trust**: with respect to common law, a trust exists when property is held or administered by one person on behalf of another. In terms of the Trust Property Control Act, No 57 of 1988 it is the arrangement through which the ownership in property of one person by virtue of a trust instrument is made over to another person(s), to be administered or disposed of according to the provisions of the trust.

**Partnership**: a partnership is not a legal entity; however, the individual members of the partnership each contract in their individual capacity, and may also bind one another contractually.

Each client, new or existing, is assigned a representative of the Bank. This representative is commonly designated as an Account Executive, Relationship Manager, Loans Development Officer or Business Development Officer. The detailed functions performed by such staff members are described in chapter 4, which deals with organisational structures.

### 3.2.2 Information requirements

The primary document used to obtain information is the loan application form, which, when completed, contains information that will be data-captured into the loan system, and used later to prepare the loan motivation and loan approval documents.

Certain banks forgo the use of the loan application form and rely on copies of source documentation. The rationale behind this approach is that source documents must be
obtained in the course of the process to verify information, prepare the legal documentation and update the lending system. The following table illustrates the reliance placed on source information:

<table>
<thead>
<tr>
<th>Source document</th>
<th>Used in process</th>
<th>Used in document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy of identification document</td>
<td>Client contact</td>
<td>Valuation report</td>
</tr>
<tr>
<td></td>
<td>Valuation</td>
<td>Credit comment</td>
</tr>
<tr>
<td></td>
<td>Credit assessment</td>
<td>Loan motivation</td>
</tr>
<tr>
<td></td>
<td>Loan approval</td>
<td>Loan approval</td>
</tr>
<tr>
<td></td>
<td>Loan acceptance</td>
<td>Loan agreement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bond</td>
</tr>
<tr>
<td>Statement of assets and liabilities</td>
<td>Credit assessment</td>
<td>Credit comment</td>
</tr>
<tr>
<td>Audited financial statements</td>
<td></td>
<td>Loan motivation</td>
</tr>
<tr>
<td>Title deed</td>
<td>Valuation</td>
<td>Valuation report</td>
</tr>
<tr>
<td></td>
<td>Credit assessment</td>
<td>Credit comment</td>
</tr>
<tr>
<td>Leases</td>
<td>Valuation</td>
<td>Bond</td>
</tr>
<tr>
<td></td>
<td>Credit assessment</td>
<td></td>
</tr>
<tr>
<td>Rate assessment</td>
<td>Valuation</td>
<td>Valuation report</td>
</tr>
<tr>
<td></td>
<td>Credit assessment</td>
<td>Credit comment</td>
</tr>
<tr>
<td>Feasibility study</td>
<td>Valuation</td>
<td>Valuation report</td>
</tr>
<tr>
<td></td>
<td>Credit assessment</td>
<td>Credit comment</td>
</tr>
<tr>
<td>Building contract</td>
<td>Valuation</td>
<td></td>
</tr>
<tr>
<td>Building plans</td>
<td>Valuation</td>
<td></td>
</tr>
</tbody>
</table>

**Exhibit 3.2  Source information uses**

McMahan (1976: 242) refers to this information as the “loan package” that enables institutions to “assess the risks and yield from an individual loan properly”. Without the correct information the Bank will not be in a position to proceed with the loan application process and the resultant delays could place pressure on the investor as well as the Bank as it tries to meet the Client’s deadlines.
3.2.3 Concurrent activities

3.2.3.1 Credit checks

The Bank, as a matter of course, checks the Court records for any judgements that might negatively affect the creditworthiness of the Client. Judgements such as insolvency, fraud and crime have a serious and negative impact on the success of the loan application. The Bank will endeavour to establish the facts relating to the case and could terminate the loan application immediately if its findings are unfavourable.

Credit agencies in South Africa such as Kreditinform and Information Trust Corporation (ITC) provide dial-up enquiry facilities. Without exception, all banks mandate that this check be done prior to loan approval.

3.2.3.2 Deeds office search

Deeds offices are located throughout South Africa and hold all registered legal documents, of which the title deed and bond documents are of importance to the Bank. These deeds offices are located in Cape Town, Gauteng, Pietermaritzburg, Bloemfontein, King William’s Town, Umtata, Kimberley and Vryburg. The Ministry of Land and Water Affairs provides a dial-up enquiry facility that enables banks to quickly verify:

- the title holder
- the property’s legal description
- servitudes
- restrictive conditions
- endorsements
- bonds over the subject property

3.2.3.3 Desktop valuation

The desktop valuation is a simple, short-form valuation that provides a preliminary estimate of the value of the property. It in no way replaces the full mortgage valuation and is used merely as a guideline. Should the resultant value not closely equate to the Bank’s required maximum loan-to-value, the loan application will in all likelihood be
terminated, failing the availability of any collateral security (additional properties, shares, cash deposits, insurance policies).

The short-form valuation for income-producing properties

Gross lease income (market related)  
minus Operating expenses (market related)  
equals Net lease income  
apply Capitalisation rate (market related)  
equals Property value (as at a specific date)

3.2.3.4 Preliminary cash flow analysis

The purpose of the preliminary cash flow analysis is to determine the ability of the property to repay the loan. The analysis is usually created on a computer spreadsheet and is parameter driven. This allows it to be updated as more factual information comes to hand. The property's performance factors and ratios are also verified and stress-tested for increases in interest rates, operating costs and tenant vacancies.

3.2.3.5 System interaction

Once the application form is complete, the data is entered into the Loan System to set up the client and account details. This is done at various times by different banks, for the following reasons:

System capability: the system does not cater for tracking of the loan process prior to loan approval. In some instances, the Bank reverts to a manual system of tracking loans prior to loan approval, as management needs early-warning indicators to keep track of new business volumes.

Resource constraints: the staff infrastructure is not configured, or unable to cope with this workload. If this is the case, the system update and monitoring of new business occur only once the loan has been approved.

Effective resource allocation: some banks feel that until a loan application has actually been approved, it is a waste of resources to update the system.
3.2.4 Common errors and observations

Mismatched requirements: the Client has a definite business plan, which contains certain financing details. These details include timing (when the money is required), pricing (how much the finance costs), security (what asset the Client is prepared to offer to offset the Bank’s risk) and a repayment profile (when the loan will be repaid).

However, there is a point where the Client’s plan is no longer viable. Many loan applications are pushed through the process and approved with conditions that the Client cannot accept. It is imperative that, at this stage of the process, both the Bank and the Client are clear on what is being proposed. Failure to achieve this results in needless waste of resources, client frustration and, ultimately, negative market perceptions.

Schonberger & Knod Jr (1994:20) emphasises the importance of maintaining a close and realistic communication with the Client. “The operations end of the business is where resources are transformed into goods and services. Proper management of operations demands that close provider-customer connections be maintained. Separation in time or distance invites trouble in the form of poor feedback and misunderstandings”.

Incomplete or incorrect data: there are a surprising number of instances where the wrong property has been valued and the application approved on this information. In some cases, this error is only discovered by the registering attorneys during the bond registration process. Other problems include the identification of an incorrect legal entity as debtor, incorrect entity registration numbers, and misrepresentation of information by sellers and brokers.

Lack of management information: because very little data has been captured in the loan system at this point in the process, management has very little empirical evidence as to the volume of new loans prior to loan approval. Since this information is unavailable, it is difficult to determine the number of loans lost prior to approval, and the reasons they were lost. Banks that do utilise their system at this point in the process have identified the major reasons for loans lost, which include:
• **Competitors:** loans are often lost to competitors with more favourable pricing or security requirements.

• **Speed of approval:** unique opportunities identified by the Client usually have option maturity dates, which means that the bank with the fastest approval process will secure the loan.

• **Changing circumstances:** clients may lose an opportunity, their financial positions might change, or the required leases may not materialise.

Banks that determine the reasons for the loss of business are able to change their operations or strategies to improve their success rate, while those ignoring these reasons will continue to lose out on opportunities.

**Future cash flow requirements of the bank:** All countries are faced with economic and interest rate cycles that can change the cost of funds. The Treasury operation of the Bank is far better off to position itself relative to its forecasted money market prediction, where it has reliable future funding demand. The cheaper the funding acquired, the better the margin (interest earned minus funding cost) earned by the Bank.

**Success of new business targets:** those banks waiting until loan approval before starting the data capturing process lose the ability to proactively foresee or predict trends, and therefore lose the ability to effectively and efficiently react to market forces.

Only once all the relevant information is available can the decision to commit further resources to the loan application be taken. The activities following client contact utilise expensive resources and it is foolhardy to push a marginal risk position. There is a saying in the banking industry that has much merit: “If you are going to say no, then say it quickly”. While this is a disappointment to the Client, it allows the Client the time to redirect his/her efforts elsewhere, and the Bank to reduce the expenditure it would have incurred had the loan application process continued.

All property-related information is collated and a full valuation of the property requested. The relationship manager then prepares the loan motivation. The exhibit displayed below is taken from an actual case and demonstrates the level of detail required to fully enlighten the loan-granting authorities as to the pertinent information regarding the loan.
At this point in the process not all the information is available to fully prepare the loan motivation, as the full valuation, credit comments and final loan structure have yet to be determined. These are included in the document as and when they become available.

A typical loan motivation includes the following:

- **Introduction**: introduces the Client, the property and the background to the funding requirement.
- **Purpose**: details the use to which the funding will be put.
- **Structure**: proposes the term, loan amount, interest rate, period of interest payments and disbursement requirements.
- **Serviceability**: comprises a synopsis of the ability of the property to service the repayment obligation and can include the financial "muscle" of the Client.
- **Security**: proposes the mortgage bonds to be registered, the sureties and sundry security such as cession of shares that can be liquidated in the event of default.
- **Recommendation**: a brief statement by the relationship manager, highlighting the risk points that have been covered, endorsing the loan.

The following exhibit is a typical example of a loan motivation:
ABC INVESTMENT BANK LIMITED

LOAN PROPOSAL

GROUP:

APPLICANT: SCOOTER PROPERTIES CC FOR NEWCO

INTRODUCTION:

It is the intention and confirmed at our last meeting to form a new entity (NEWCO). The deal is referred to us by Gary Tyler ex Eagle Properties Manager (Western Cape) who will be an indirect shareholder with J Robbie CEO of Redcoal Ltd in an entity Deerast CC which will own 50% of the development. The other shareholders will be:
- Scooter Properties CC – 40% which is owned by AV Debeer 50% and CB Pilar 50%
- The Fannie Trust – 10% which is owned by MH Dragagnet 100%

Gary has extensive experience in commercial and retail developments. The development will however be driven by Andre Debeer, a shareholder and also project manager. He has successfully developed a parking garage in Long Street for Moses Sharp Trading consisting of 200 parking bays, 2000m2 office and 1000m2 of retail space. Andre was employed for 7 years by Standard Bank in the Corporate Advance division. He then joined Mark Sloth to form Steeff Sloth projects and completed various developments in Cape Town. He was also employed at BP (service station developments) and worked with Mike Leveten for 4 years where he gained lease negotiation experience. He was also employed by ABC Developments and Blind Projects (Durban based company which started an office in Cape Town).

He has been on his own since 1995

Andre has teamed up with Chris Pilar and Mike Dragagnet and will trade under a new entity called Driftwood Projects (Pty) Ltd. Chris Pilar a Civil Engineer and MBA (ex MD Group Ten Residential East London and Western Cape, ex CEO NEWCO Western Cape) will not be actively involved with the development. Mike Dragagnet (ex MD Old Mutual Properties and ex MD ABC Developments) now with Brox Group, will not be actively involved in the development. Mike is also a consultant to the Airports Company (ACSA).

The clients have ample experience to develop such a project and will only proceed with the development if tenants are committed. The following prospective tenants have approached the client:
- Land Rover, Nissan, Alfa and Jaguar (wholly owned by Combined Motor Holdings Ltd - 3000m2 (Will have to be a joint development with Edge Properties – known to the Gauteng office)
- Incredible Connection (Computers)
- 2223 Long Street 50 p/bays
- Submarine House – 75 p/bays – Old Mutual
- The Terraces – 30 p/bays – RMI

PURPOSE / PROJECT DESCRIPTION:

The client has signed a deed of sale to acquire 1657,1658,1663,158870,1673,9307 and 9308 Cape Town which forms a parcel of properties situated in Kebeck Street and flanked by Bece, Loop and Assurance Lane. The buildings are fully tenanted by retail businesses paying an average gross rental of approx. R 27 per m2 (Gross). (See valuation report)

The site is located directly between the established CBD of Cape Town (more towards foreseen) with modern high rise buildings and successful developments such as Safron House and The Terraces as its immediate neighbours. To the north is the rapidly expanding Waterfront area. This infill activity will soon be further consolidated and upgraded with the construction of the new conference and Exhibition Centre and canal linkage to the V&A Waterfront. In addition this node will be strengthened with the completion of Investec Cape Town, Head Office.

A further opportunity exists to participate with the owners of the adjacent half block to develop the full city block. Discussions have been held with them in JHB and they have indicated that they would consider a joint development. This will increase the parking efficiencies of the development as well as other buildings in the area.
The loan has been structured as a "vacant land" loan for a period of 3 years (interest only) and it is proposed that the client pay a penalty fee each year of R 71 000 (Plus VAT) for not commencing with the development. Should the development not commence within the 3 year period the outstanding loan must be settled and/or cancelled and an exit fee of R 111 000 (plus VAT) is payable at that stage. Also should the clients not provide us with an opportunity to quote on the proposed development during the loan term, a fee of R 111 000 is payable.

Interest at Prime - 1% and an administration fee of 0.5% (R 37 000 + VAT) is payable on bond registration.

FINANCIAL ANALYSIS/SERVICEABILITY:

The income of the property is sufficient to service a loan of R 7 400 000 (66%LTV including the collateral) Purchase Price R 7 500 000

In addition the clients will deposit into the bond account at registration an amount of R 400 000 to be utilised for the payment of fees and any interest shortfall during the three year period.

Sureties to the transaction
- Debeer CC - 50% - R7m NAV
- AV Debeer - R 0.65m NAV (providing cash contribution of R 400 000)
- CH Pillar - R 1.026m NAV
- MH Dragmest - R 6.6m NAV
- Surety Properties CC - 40% - Holding entity for Debeer and Pillar
- The Fannie Trust - 10% - Holding entity for Dragmest

Note: Assets have been verified and all parties are cleared on credit check

Redshold shares to the value of R 2.5m will be pledged as additional security. The value of the shares to remain at R 2.5m throughout the 3 year period. (Top up clause)

Redshold LTD

Redshold started 10 years ago (91) when a bank backed MD Jacques Robbie’s consortium in a management buy out of the Richard Groups retail liquor division. Label was purchased from Rembrandt and Gilbey’s in Oct 1995. The company has since expanded into wholesale distribution of food-related products and international freight forwarding/clearing.

The current market cap of Redshold is R 4 billion with annual growth earnings of 35-40%.

Current share price - R 15.70/share

SECURITY:

First Mortgage Bond in the amount of R 7 400 000 over Kemnader Llcren 1657, 1658,1653,15870,1673,9307 and 9308 Cape Town.

Sureties as per the loan approval

Redshold Ltd shares to the value of R 2 500 000

RISK ASSESSMENT/RECOMMENDATION:

We recommend the loan based on the following:

- ability and experience of the project team
- strong financial backing from the sureties on whom full reliance can be placed
- collateral security which results in an acceptable LTV
- early exit, with appropriate pricing should the development not proceed

ACCOUNTS EXECUTIVE/ OFFICER: G Botla
STAFF NO.: 1859
DATE: 2 June 2000
I have applied my mind to the provisions of:

a) Section 38 of the Companies Act (Act 61 of 1973)
b) Section 226 of the Companies Act (Act 61 of 1973)
c) Section 40 of the Close Corporations Act
d) Section 26 of the Insolvency Act

so as to establish whether the above mentioned loan would contravene any of these sections. In my opinion, there are no such contraventions.

REGIONAL CREDIT ANALYST

NAME: ____________________________
DATE: ____________________________
SIGNATURE: ________________________

REGIONAL CREDIT MANAGER

NAME: ____________________________
DATE: ____________________________
SIGNATURE: ________________________

Exhibit 3.3  Loan motivation document
3.3 THE PROPERTY VALUATION

Once the preliminary analysis of the loan is complete and it is found to meet the risk profile requirements of the Bank, a formal valuation of the property is requested. The valuation is of primary concern as it establishes the first sound indication of the Loan-to-value (LTV), which is the amount of the loan as a percentage of the value of the property.

There are many pitfalls surrounding the LTV, which are discussed in the chapter on risk (chapter 7). Suffice to say that it is used extensively as a primary indicator of the viability of the application. In the event of the debtor defaulting, it provides the extent by which the market value of the property can be discounted in a forced sale in order to recover the Bank's money. Typically, the maximum LTV that banks are prepared to accept, excluding any additional security, is between 70% and 80%.

In addition to the LTV, the valuation details three critical property factors, lettability, saleability and condition, which can receive a rating from 1–9. The ranges are categorised into 1–3 (poor), 4–6 (average) and 7–9 (good).

- **Lettability:** this indicator provides the Bank with a probability factor of the building being re-let should the current tenant default or not renew the lease. The level of demand for the type of property is crucial, as it inherently affects the serviceability of the loan. This indicator also takes into consideration the property potential for further rental growth.

- **Saleability:** this factor is used in conjunction with the LTV in that the higher the LTV and the lower the saleability, the more difficult it will be sell the property and still recover the loan amount. The valuer will apply his/her market research results with regard to demand and location to determine this indicator.

- **Condition:** this indicator provides a guide as to the extent of maintenance the property requires and the effect this will have on expenses, lettability and saleability.

The process followed by real estate valuers is an extensive course on its own, and the following section merely provides an outline of the basic valuation process of a retail property.
### 3.3.1 The valuation process

<table>
<thead>
<tr>
<th>Definition of the problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of real estate</td>
</tr>
<tr>
<td>Identification of property rights to be valued</td>
</tr>
<tr>
<td>Date of value estimate</td>
</tr>
<tr>
<td>Description of scope of appraisal</td>
</tr>
</tbody>
</table>

### Preliminary analysis and data collection

<table>
<thead>
<tr>
<th>General</th>
<th>Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Sales</td>
</tr>
<tr>
<td>Economic</td>
<td>Cost</td>
</tr>
<tr>
<td>Government</td>
<td>Income tax</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
</tr>
</tbody>
</table>

### Marketability analysis

- Property productivity analysis
  - Physical attributes analysis
  - Legal/political analysis
  - Locational attributes analysis

- Market (supply and demand) analysis
  - Inventory and analysis of competitive properties
  - Demand studies

### Highest and best use analysis

- Land as though vacant
- Property as improved

### Conclusions – specified in terms of use

- Time (probable use or occupancy date)
- Market participants
- User of space
  - Most probable Buyer

### Selection and screening of specific comparable data

### Land value estimate

### Application of the three approaches

- Cost
- Sales comparison
- Income

### Reconciliation of value indications and final value estimate

### Report of defined value

---

**Exhibit 3.4** The valuation process

1 Source – AIREA (1987:63)
3.3.2 Definition of the problem

The property to be valued and the purpose for which the valuation is to be used must be clearly established to ensure that the risks and value are correctly determined. There have been cases where the valuer has indeed valued the incorrect property, which reinforces and supports the process of gaining a co-operative agreement between the relationship manager and the valuer in terms of:

**Completion date:** when the valuation will be complete. Clients have the unerring habit of identifying opportunities and securing purchase options with tight expiry dates that are conditional on finance being approved. A firm commitment by the valuer provides the relationship manager with a guideline as to when the Client can expect a decision.

**The property:** it is important for the relationship manager, the valuer and, ideally, the Client, to visit the property together, so that there can be no misunderstanding as to exactly which property is to be valued.

**Property rights:** rights are accrued to both the property and the Client through the rights associated with the property (e.g. zoning) and ownership rights (e.g. partial interests or ownership).

**Date of valuation:** the estimated value of a property is date dependent. The very nature of property makes its value highly dependent on a broad range of influences. Changes in the economy, the property market and tenant location preferences can all change the value of a property dramatically. Banks are invariably faced with this fact when they attempt to liquidate a property and find that the value placed on the property a number of years ago no longer holds true. As can be seen in the valuation report exhibit (displayed later on in this section), the valuer includes a three- and five-year forecast on the sustainability of the value derived.

**Purposes of valuation:** Banks have two primary uses for the mortgage valuation, namely to determine the ability of the property, when liquidated, to repay the loan (market value) and to determine the value for which the property must be insured (replacement cost).
3.3.3 Preliminary analysis and data collection

Once the valuation requirement is fully understood, the relevant factors that will influence the final value are identified. This entails the analysis of both the broader and property-specific areas that have an indirect or direct effect on the property.

Exhibit 3.5 Property value influences

The American Institute of Real Estate Appraisers (1987:106) differentiates general and specific data in the following manner: “General data are items of information on influences that derive from the four forces originating outside a property. Specific data are details about the property being appraised, comparable sales and rental properties, and relevant local market conditions”. These four forces and the more property-specific influences are shown in exhibit 3.5.

General data provide the valuer with valuable information regarding the macro influences affecting the property through the following four forces:

- **Environmental force**: those natural or man-made features relevant in the area or in proximity to the property. These features can have a positive (parks, shopping centres, rivers and access) or negative (sewerage works, squatter camps, soil condition and industrial works) effect on the value of the property.
• **Economic force:** the financial ability of the local population in that area to support the property in terms of owning, renting or utilising its functional attributes. A major shopping centre located in a farming town would not receive the same economic support as one situated within a thriving metropolitan area.

• **Government force:** those laws and regulations that can have an influence on the property value. These are generally manifested in property taxes, zonings and building regulations. An example of government force in South Africa is the Land Redistribution Act, which has to be considered in determining property value, particularly in areas that were historically characterised by forced land removals.

• **Social force:** social preferences within a certain area or neighbourhood, such as community clubs and organisations, are difficult to equate to value. However, certain characteristics of an area, such as population density, age levels, education and crime, can provide a motivational force to support the value of a property.

These influences can also be discerned through forecasts in economic trends such as interest rate cycles, business confidence and industry growth patterns.

The valuer conducts his/her search for this data through the following sources:

- government agencies
- business agencies
- financial publications

**Specific data** provide the valuer with information directly influencing the value of the property. This usually entails the analysis of similar properties with regard to sales prices achieved and the characteristics of such properties in relation to the subject property.

These characteristics can be categorised as:

- sales
- demand
- locational
- physical
- use
3.3.4 Highest and best use analysis

This stage in the valuation has two main areas of analysis: the value of the land as a vacant lot and the value of the land with improvements.

The purpose of analysing the value of the land as a vacant lot is twofold:

- to enable the valuer to identify comparable properties with similar land values
- to identify the use to which the property may be employed to produce the highest income-generating potential

Similarly, the analysis of the land with the addition of certain improvements provides the valuer with comparable properties with similar highest and best uses and a view of modifications required on the property to attain the highest and best use. It might have to be modified, renovated or demolished and rebuilt to achieve its maximum income-generating potential.

Zoning might have a serious impact on the ability to employ the highest and best use methodology. In previous years, local authorities had a narrow view when considering modifications to the original town-planning scheme. Little or no consideration was given to economic factors that might have improved the area or swelled the coffers of the local authority. Nowadays, local authorities are energetic in their endeavours to derive maximum return on properties. This is done through property taxation and by increasing the general economic activity levels of their constituencies. This provides the property investor with some latitude to increase the highest and best-use potential of his/her property.

3.3.5 Land value estimate

Besides helping to determine the highest and best-use values, the land value estimate is also important in light of the fact that land and buildings are separate entities. This is because land has no depreciation qualities, whereas buildings are subject to deterioration and therefore increased maintenance costs.
In establishing the land value, the valuer applies procedures such as the following:

**Direct comparison**: direct comparison of similar and recent vacant land sales.

**Allocation**: recent sales are analysed and prices allocated to both the land and the improvements. The price allocation ratio developed through this process produces a typical or average ratio that can be used on the subject property.

**Development**: the property is costed as if fully developed and sold, taking into consideration the cost of development, holding costs and discounting the sales proceeds for the time it should take for the market to absorb the property.

**Land residual**: the property is analysed as if improved to its highest and best use and thereafter the net income of the property is allocated pro rata to the land and building separately. The allocated land net income is then capitalised to give a land value estimate.

### 3.3.6 Application of the three approaches

In determining the value of a property, a valuer uses one or more of three applicable approaches. The recognised valuation approaches are:

**The sales comparison approach**: this approach relies on the availability of recent or current comparable property sales. Any conclusions made as a result of this approach are therefore based on empirical market-related sales. To determine whether a property is suitable to be assessed using this approach, the valuer analyses the conditions of the sale, finance terms, market conditions, location, physical and income characteristics. Both negative and positive adjustments are then made to the price to equate it to the subject property.

**The income capitalisation approach**: with this approach the future net income of a property is discounted to a present value. To accurately determine the net income stream, extensive research is required into the determinants of the income stream, namely vacancies, operating expenses, rentals and likely resale value of the property. The capitalisation rate is determined by examining the rates of return achieved on comparable properties. By way of an example: net income stream (1,200,000) divided
by the capitalisation rate (0.12) results in a value of 10,000,000 (direct capitalisation).

Alternatively, the net income stream over a period of time is discounted to a present day value (yield capitalisation).

**The cost approach:** this approach assumes that the value of a property is related to the cost of its construction. The valuer identifies the cost parameters through construction companies, building publications and current comparable construction costs. Using this approach, the value can be stated as the cost of construction minus depreciation plus the land value. If entrepreneurial profit is not included in the construction cost estimate, it may be added separately.

All three of these approaches are used to determine property value in the property finance business. The sales comparison and income capitalisation approaches are used extensively in analysing existing properties while the cost approach is used to verify proposed costings for developments and the replacement value for insurance purposes.

### 3.3.7 Reconciliation of value indications and report

The three approaches mentioned in the previous section can produce very different values, which the valuer reconciles using the purpose of the valuation as a guide, that being the value the bank can rely on should the Client default.

In many cases the cost approach produces a much higher value than the income capitalisation and sales approaches. To ensure that the Bank’s interests are covered, the loan agreement will require the property to be insured at the replacement cost, which is closely associated with value derived from the cost approach. The insured value is further escalated each year to maintain a market-related replacement cost.

The following two exhibits provide extracts of a typical short-form valuation for mortgage lending purposes.
Example of valuation report for mortgage lending purposes

<table>
<thead>
<tr>
<th>VALUATION REPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC. EXEC.</td>
</tr>
<tr>
<td>FILE NAME</td>
</tr>
<tr>
<td>VALUER</td>
</tr>
<tr>
<td>AC NO.</td>
</tr>
<tr>
<td>PROPERTY NO.</td>
</tr>
<tr>
<td>PROPERTY TYPE</td>
</tr>
<tr>
<td>VALUATION</td>
</tr>
<tr>
<td>DATE</td>
</tr>
</tbody>
</table>

| NAME OF APPLICANT | Vesper Properties cc |
| TITLE DEED DESCRIPTION | Erven: 1657, 1658, 1653, 168970, 1673, 9307 & 9308 |
| STREET ADDRESS | Cnr. of Loop & Reiebeek & Bree Streets, Cape Town |
| LOCAL AUTHORITY | Cape Town |
| DEEDS REGISTRY | Cape Town |
| LAND SIZE | 1,683.00 m² |
| USE ZONE | Business 1 |
| HEIGHT RESTRICTION | 6 Stories |
| COVERAGE | 100% |
| FAR | 1.50 |
| BUILDING LINE | Nil |
| PARKING REQUIREMENT /100m² | Offices | 4.00 |
| | Retail | 6.00 |
| SERVITUDES | Nil |
| OTHER | On redevelopment, on-site parking required as per above |

| TITLE DEED INFORMATION |
| NAME OF REGISTERED OWNER | ABC (PLC |
| TITLE DEED INSPECTED | Yes |
| DEED NUMBER | 1234/98 |
| ONEROUS CONDITIONS | National Monument, façade must be retained |

| ESTIMATED SITE VALUE | 1,683.00 m² at a cost of | 1,000.00 | 1,683,000.00 |
| SHOULD PROPERTY BE BONDED | Yes |

<table>
<thead>
<tr>
<th>MUNICIPAL VALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
</tr>
<tr>
<td>Improvements</td>
</tr>
</tbody>
</table>

I, David Crosser HEREBY CERTIFY THAT I HAVE INSPECTED THE ABOVE DESCRIBED PROPERTY TO THE BEST OF MY SKILL AND TAKING INTO ACCOUNT ALL RELEVANT MATTERS, I VALUE THE PROPERTY FOR MORTGAGE PURPOSES, AS IT EXISTS AT R 7,421,000.

I AM SATISFIED THAT THE PROPERTY TO BE MORTGAGED AND THE PROPERTY VALUED ARE ONE AND THE SAME.

DATE | 19 June 2000 |

VALUER: David Crosser

B TREST, JDPV, JDPDM, NHV(SA).

Exhibit 3.6 Summary page of valuation for mortgage purposes
Example of valuation comments regarding the quality of the building

<table>
<thead>
<tr>
<th>DESCRIPTION OF PROPERTY</th>
<th>The buildings of various size and nature span across seven separate erven and the property on erf 1669(Hamrads) is a protected property regarding</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>LETTABILITY</th>
<th>Classification</th>
<th>Average</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMENT</td>
<td>The location of the property is close to the CBD Periphery and is in an area which is considered a transition zone between prime and secondary areas of the CBD. The subject property is quite a distance away from public transport systems. The cafe/restaurant market rental lies between R30/m² to R37.50/m². In valuation R35.28/m² used. Lettability can be described as average. No vacancies exists to buildings.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SALEABILITY</th>
<th>Classification</th>
<th>Average</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMENT</td>
<td>The building as it stands has a limited remaining life period and the investor market will not pay any major attention to the current usage.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONDITION OF BUILDINGS</th>
<th>Classification</th>
<th>Scale 0 - 9</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMENT</td>
<td>Some buildings in a satisfactory state of repair and some that need preventive maintenance. Cannot describe the internal state of repair fully as some parts of the buildings could not be inspected.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| DEVELOPING OR DECLINING AREA | Area of stability however the growth is more foreshore directed. No major effort by surrounding landlords to improve on the efficiencies of their properties. No signs of real decline however there are vacancies within the immediate surrounds. |

| 3 YEAR COMMENTS AND RATINGS | Should be sustainable for a maximum period of three years. |

| 5 YEAR COMMENTS AND RATINGS | For a five year period, levels could drop off to lower ratings should the buildings remain undeveloped. The area lends itself to development opportunities. |

| PROPOSED ADDITIONS | The developer/client is purchasing the property for re-development purposes, this in the form of a parking garage, basement parking of approx. 320 bays, seven floors of parking giving approx 311 bays, keeping some existing retail area to the |

| BASIS OF VALUATION | The request was for the as is "valuation", this done using probable market rentals and on a straight line capitalisation basis. |

| SPECIAL REMARKS | Due to sensitivity of the "sale negotiations" only part of the building could be inspected. No insight to lease details. |

Exhibit 3.7 Valuation comments on sustainability of property attributes
3.4 APPLICATION SCREENING

At this stage of the process, enough information is available to make a judgement on the viability of the loan and the likelihood of it being approved. The screening can take the form of credit assessment and/or a formal committee.

Typically, the committee consists of people representing the functions of marketing and credit, and an approval authority. The aim of this committee is as follows:

**Making a primary assessment**: the deal in its entirety is discussed, bringing together the information presented and the combined experience of the committee. (The property, its condition, location and ability to be let, the client and track record, the cash flow (serviceability), pricing and tenant quality are discussed in detail in chapter 7).

**Identifying application shortcomings**: certain applications have merit, but have been incorrectly structured or areas of concern have not been sufficiently covered. The committee highlights these to the account executive, who then has the opportunity to address these issues and re-submit the application.

**Limiting resource wastage**: it is important to stop the process at the earliest possible time to ensure that expensive resources are not wasted on processing an inherently bad application. This is also a learning experience for the account executive, as he/she becomes familiar with the sound reasoning behind the committee’s decision.

3.4.1 Credit assessment

The process of credit assessment, also termed credit analysis, is a systematic approach to identifying the ability and willingness of the Client to repay the debt. This section deals with the process of credit assessment (in chapter 7 the various aspects of property risk are dealt with in detail).

This task should be performed by an independent functionary, the credit analyst. It requires an analytical and objective approach to studying the facts as presented. Any loan application can be made to look too risky, so the objective of credit assessment is to provide a balanced view of the risks inherent in the deal. Value is added where the
credit analyst identifies an unacceptable risk and provides a solution, which enhances the risk profile and at the same time meets the Client’s requirements. Sirota (1986:222) provides a supporting, but alternative view on credit evaluation where he states “the one area allowing the greatest amount of latitude in the interpretation is the analysis and evaluation of a borrower’s credit ability”.

The framework for credit assessment, used by most institutions, covers the following areas:

**Managerial quality:** this is considered in the light of personnel ability, expertise and experience in the Client’s business.

**Economic situation:** the Client’s market segment of commerce or industry is analysed to understand the trends and identify the opportunities and threats present in that market.

**Financial stability:** the liquidity, profitability, cash flows and business projections are analysed to determine the sustainability of the business and its ability to repay the debt.

**Client requirements:** the Client’s requirements are matched against the Bank’s lending policy to ensure that they are compatible.

**Security:** the security offered by the Client is analysed in line with the risks associated with the loan. This includes an analysis of the valuation. The valuer’s comments regarding the desirability of funding the property carry significant weight in the credit analyst’s recommendation.

**Profitability:** the amount of work required to disburse and manage the loan is considered in terms of the margin the Bank will receive. Typically, a building loan requires far more of the Bank’s resources to manage than the funding of a straight investment property.

Most financial institutions utilise a model to provide a uniform method of rating the risk inherent in a loan. The credit analyst, as an independent functionary, usually enters the parameters into the model and allocates the resultant risk rating or category to the loan. This model will be discussed in detail in chapter 7.
3.5 LOAN APPROVAL

3.5.1 Purpose

The loan approval is a vital phase in the process, as the decisions regarding the loan will impact the performance of the Bank, either negatively or positively, for a long period of time. Granting authorities review all the documentation, which is summarised in the loan motivation/proposal, and decide to either decline or approve the loan based on the information presented to them.

3.5.2 Granting authorities

The loan can be approved by either a group of people or an individual. Typically, the higher the value of the application, the higher the number of people required to approve the application in order to cover the exposure to the Bank.

The granting authorities take ultimate responsibility for the loan and therefore take this task very seriously. The Bank does not delegate this responsibility lightly; qualifying staff are chosen on the basis of their experience, knowledge and business sense.

The granting authorities are usually graded on the above qualifications. They are set maximum limits up to which a loan can be approved. Using these limits and the risk rating applied to the loan, the granting authorities can approve loans in their individual capacity or “stack” their authority limits.

Example

<table>
<thead>
<tr>
<th>Granting Authority Level 1 (GA1)</th>
<th>R20 million</th>
<th>max individual limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granting Authority Level 2 (GA2)</td>
<td>R10 million</td>
<td>max individual limit</td>
</tr>
<tr>
<td>Granting Authority Level 3 (GA3)</td>
<td>R5 million</td>
<td>max individual limit</td>
</tr>
<tr>
<td>Loan amount</td>
<td>Risk category A</td>
<td>Risk category B</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>0 – R5 m</td>
<td>GA3</td>
<td>GA3 * 2</td>
</tr>
<tr>
<td>R5 m – R10 m</td>
<td>GA2</td>
<td>GA2 * 2</td>
</tr>
<tr>
<td>R10 m and above</td>
<td>GA1 * n (stack)</td>
<td>GA1 * n (stack)</td>
</tr>
</tbody>
</table>

Exhibit 3.8  Granting authority matrix

While the above method is still used today, the trend within banks is to provide approvals through joint decision making, rather than placing the responsibility with a single individual.

3.5.3  The Loan approval document

The loan approval document contains, in summary form, all the information gathered and presented thus far in the process. Supporting this document is the loan motivation (prepared by the relationship manager), the valuation (prepared by the valuer), the risk rating model and the consolidated property and funding cash flows.

This is illustrated in the following exhibit:

Exhibit 3.9  Supporting documents for creation of loan approval document

The following exhibit displays a typical loan approval document that has to be signed by the relevant granting authorities.
**ABC BANK LIMITED**

**LOAN APPROVAL**

Matrix Approval Requirements:
- GA2
- Risk Category: C

**Group No.: 1232**
- Group Desc: Second
- Review: Yearly

<table>
<thead>
<tr>
<th><strong>BRANCH:</strong></th>
<th><strong>Cape Town</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BORROWER:</strong></td>
<td>Scooter Properties CC</td>
</tr>
<tr>
<td><strong>C/O/C/REG. NO.:</strong></td>
<td>8615112023</td>
</tr>
<tr>
<td><strong>Contact:</strong></td>
<td>Mr G Flat</td>
</tr>
<tr>
<td><strong>Telephone:</strong></td>
<td>449548</td>
</tr>
<tr>
<td><strong>POSTAL ADDRESS:</strong></td>
<td>PO Box 1526065, Wynberg, 7824</td>
</tr>
<tr>
<td><strong>DOMICILUM:</strong></td>
<td>1374 - 1376 Sir Lowry Road, Cape Town</td>
</tr>
<tr>
<td><strong>AMOUNT:</strong></td>
<td>R 7 267 312</td>
</tr>
<tr>
<td><strong>(Service Fee included in Loan Amount)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PURPOSE:</strong></td>
<td>The purchase of the property for later redevelopment</td>
</tr>
</tbody>
</table>

**EXISTING NIB ACCOUNT BALANCE:**
- A/C No.: 107
- R 900 000

**EXISTING APPROVED NIB FACILITY**
- (This A/C):
- Overall Group Exposures Comprising:
  1. Loans: R 7 000 000.00
  2. Loans (Total Exposure): R 8 457 000.00
  3. Security Exposure: Gerald Ploress Flat (Limited) R 500 000
      Michael Ploress Flat (Limited) R 500 000
      Marion Finani (Limited) R 500 000

**VALUATION:**
- R 14 653 000
- Capitalisation Rate: 12%
- Ratings: L Low
- E Low/Moderate
- Erven 85063 to 85068 Cape Town at Salt River

**EXPOSURE:**
- 54%

**SERVICEABILITY:**
- Net Rental Income: R 248 000
- Actual Servicability Rate: R 295 860
- Annual Surplus: R 52 140
- Total Servicability Rate: R 223 544
- Annual Surplus: R 27 656

**INTEREST RATE:**
- Nedbank's Prime lending rate minus 1% debited monthly in arrear

**DISBURSEMENT TERMS:**
- Upon signature of security documents and compliance of special conditions

**Date:** 12 February 1999
| REPAYMENT PERIOD AND TERMS | Period 8 years (Expanding 26/2/2007) | Installment R 15 814 (subject to alteration) |
| SECURITY | Principal: | Existing Bond Notes, B4152/87 passed by the Debtor in favour of NED will serve as security for the loan. |
| SURETIES | Gerald Poteman Flat | (Unlimited) R 1000 000 |
| | Michael Poklass Flat | (Unlimited) R 1000 000 |
| | Marvin Tisoan | (Unlimited) R 1000 000 |

| FINANCE CHARGES: (EXCLUSIVE OF VAT) |  |
| Conveyancing Fees | R 30 000 (Included in Loan Amount) |
| Service Fee | R |
| Commitment Fee | R |
| Building Fee | R |
| Valuation Fee | R |
| When payable | On acceptance R |
| On disbursement R 1 000 |
| Penalty Fee | R 20 000 |
| (As provided for in Loan Agreement) |

| RETURN | R.O.A. 1.5% | R.O.E. 18.72% |

| INSURANCE |  |
| Name | In House |
| Contact |  |
| Address |  |
| Tel No. |  |

| INTRODUCER |  |
| Name | M A Buck |
| B-1 Code | 1232 |
| Intro Commission | % = R 15 000 |
| Intro Category | Agent |

| ATTORNEYS |  |
| Name | CK Friedland |

SPECIAL CONDITIONS:

1. The standard terms and conditions of the residence option will apply to the loan. This permits the borrower to make additional capital repayments and borrow further amounts from time to time, as set out hereunder;

1.1. The borrower may make early payments in reduction of the capital, without penalty, at any time without limit.

1.2. Minimum advances, against such early payments, of R 20 000 at any one time;

1.3. Subject to 3 days' written notice per advance;

1.4. Limited to one advance in any 30 day period; and

1.5. An administration fee of R 350 per advance.
I have applied my mind to the provisions of:

a) Section 38 of the Companies Act (Act 61 of 1973)
b) Section 226 of the Companies Act (Act 61 of 1973)
c) Section 40 of the Close Corporations Act
d) Section 26 of the Insolvency Act

so as to establish whether the above mentioned loan would contravene any of these sections. In my opinion, there are no such contraventions.

---

ACCOUNT EXECUTIVE

---

APPROVAL

---

TEAM LEADER

---

ACCOUNT AUDIT

<table>
<thead>
<tr>
<th>SIGNATURE</th>
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<td></td>
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<tr>
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</table>

I hereby certify that all pre-regulation conditions, and all conditions precedent, have been complied with and that the conveying attorneys may proceed with registration of the mortgage deed.

Exhibit 3.10  Loan approval document
3.6 ACCEPTANCE

3.6.1 Purpose

The purpose of this activity is twofold:

- to reformulate the loan approval conditions into a loan agreement that will be presented to the Client as a formal offer of finance

- to gain the Client's acceptance of the terms and conditions through his/her signature of the loan offer or agreement

While the Client generally provides the Bank with the details and funding requirements at the outset, the granting authorities can (and usually do) change the terms and conditions proposed by the relationship manager, which can lead to extensive and protracted negotiations between the Bank and the Client.

Naturally, both the Bank and the Client have to protect their own interests. The former requires acceptable risks at a profitable margin; the latter, finance at market rates and on terms that are not unreasonably onerous. It is here that the relationship manager’s skill as a negotiator is tested. On the one hand, he/she has to satisfy the Bank, whose interests must be protected, and on the other, a Client wishing to maximise the return on the proposed investment.

3.6.2 The loan offer

Once the loan application is approved, the approval document, together with all the loan application documentation, is forwarded to the administration supervisor or manager. Before allocating the loan documentation to an admin clerk, the supervisor thoroughly checks all accompanying documentation to ensure that it is complete.

This includes:

**Loan approval document**: the terms and conditions must be clear and no ambiguity should exist.
Signatures: the correct signatures must appear on the document and they should comply with those of the granting authority matrix.

System information: the loan details must be loaded onto the loan administration system and checked for accuracy. Many systems provide for automated document production (e.g. the loan offer) that relies on the data within the system. Clearly, incorrect data will produce inaccurate documents.

The administration clerk then either captures the relevant information into a standardised word processing template or generates the loan offer directly from the loan administration system’s automated document generation facility. Both methods utilise pre-formatted and standard pre-worded (by attorneys) clauses. Only the loan-specific information is entered. This reduces the margin of documentation error, which could prove problematic if litigation were ever instituted at a later stage.

To facilitate a smooth process, the following documents are also created to be presented to the Client together with the loan offer:

- **Resolution**: a resolution passed by the company, close corporation or trust confirming the intention to obligate the entity in terms of the loan.
- **Special resolution**: similar to the resolution discussed above and used where the company, close corporation or trust is standing surety for the loan obligation.
- **Exchange control certificate**: required where foreign ownership of the entity exceeds 75%. This certificate is usually arranged through the Client’s commercial bank and is issued by the Reserve Bank.
- **Consent to arrange insurance**: usually the Bank will arrange the insurance over the property and this document serves as the authority to proceed with this arrangement.
- **Outside broker appointment letter**: where the Bank has approved the use of the Client’s insurance broker, this letter is issued to that broker confirming the appointment and stating the obligations. These include the commitment to notify the Bank of any insurance premium payment defaults, the renewal of insurance on expiry date and any administration fees applicable.
- **Cession of fire insurance policy**: this cession secures the Bank’s risk in the event of the property being destroyed by fire. The Bank then has control of the funds paid out, which can be used either to rebuild or to repay the loan.
Debit order mandate: this authorises the Bank to withdraw funds from the Client’s bank account to meet loan repayment obligations.

The administration supervisor first checks the loan offer and the above documents against the supporting documents and the system, then passes it on to two authorised signatories of the Bank for signature. This process ensures that at least four people have checked the documents prior to it being made available to the Client.

Banks are divided as to how they present the offer of finance. One school of thought is that the offer should be in the form of the loan agreement, while another feels that a loan summary should be produced, detailing only the pertinent terms and conditions of the loan.

Loan agreement rationale: a signed agreement is a legally binding document obligating both parties. By signing the loan agreement the Client accepts the offer of finance.

Loan summary rationale: banks utilising this method recognise that further negotiations are likely and that the loan agreement can change significantly before it is acceptable to the Client. Therefore they do not make an offer, but state the terms and conditions on which they would be prepared to offer the finance. Once these terms and conditions are finalised, the loan agreement is drawn up for signature.

The following exhibit is an example of a loan summary:
1. AGREEMENT OF LOAN

1.1. This document contains a summary of the essential terms and conditions upon which ABC Bank Limited has approved the application for the aforementioned loan. Not all the terms and conditions applicable to the loan are included in this summary and it does not constitute an agreement with, or bind, ABC.

1.2. The terms and conditions relating to the loan will be incorporated in an agreement of loan which is to be signed by the borrower and ABC.

2. NAME OF BORROWER: NEWCO (Company Registration No................................)

3. LOAN DETAILS:

3.1. Amount of loan: R7 400 000

3.2. Type of loan: Ordinary

3.3. Loan Repayment Period: A period of (Thirty Six) 36 months, reckoned from the last day of the month in which the capital or any part thereof is advanced to or on behalf of the borrower

3.4. Loan Amortisation Period: An overall period of (Thirty Six) 36 months, reckoned from the last day of the month in which the capital or any part thereof is advanced to or on behalf of the borrower, which period shall be used by ABC for the purpose of calculating an instalment which comprises capital and interest

3.5. Initial annual finance charge rate: One percent (1%) below the prime overdraft rate charged by ABC Bank Limited from time to time, as certified by any manager of the said bank whose authority need not be proved:

Revised from the date on which the loan or any part thereof is advanced to the borrower or on the borrower’s behalf, provided that if the loan is subject to the provisions of the Duty Act, 1968, ABC will be entitled to finance charges on the amount of the loan in accordance with the provisions of section 2A of the Act from the date of the agreement of loan until the date immediately preceding the date on which the loan is paid to the borrower or on the borrower’s behalf.

3.6. The annual finance charge rate applicable to the loan may be subject to repricing at the option of ABC at any time and from time to time after a period of 24 (Twenty-four) months, provided that where the rate is a prime-linked rate, ABC will not be entitled to vary the prime-linked factor which initially applies to the loan by more than 1.5% (One point five percent).

4. PAYMENT OBLIGATIONS

4.1. Repayment Structure: The capital shall be repaid in such amounts and at such times as the borrower deems fit, provided that the capital is repaid in full on or before the last day of the 30th month ("the loan expiry period") following the date on which the capital or part thereof is advanced.

4.2. Monthly Installment: Not applicable

5. SECURITY

5.1. A first covering mortgage bond for the sum specified in 3.1. over the following properties ("the property")

- Lot 16578, 16588, 16593, 1662780, 16783, 95087 and 96670 Cape Town

5.2. The mortgage bond, including the existing mortgage bonds, if any, passed by the borrower in favour of ABC, will secure inter alia the borrower's indebtedness to ABC in terms of the agreement of loan, as also all present and future indebtedness of the borrower to ABC.

5.3. The mortgage bond will be registered by ABC's attorneys and all costs of and incidental to the preparation of the relevant documentation, including bond registration costs and stamp duty, are to be paid by the borrower on request.
5.4. No mortgage bond may be registered over the property in favour of a third party without the prior written consent of ABC.

5.5. In support of its security, Sunoco CC will pledge and cede to ABC all its right, title and interest in and to JSE listed shares in Revesthold Ltd to the value of R2 500 000.

6. SURVEYSHIPS

6.1. The loan is subject to Cyprek CC (C.K. No. 1995/0527/00) guaranteeing the indebtedness of the borrower to ABC, from whatever cause arising, up to an amount of R3 700 000, together with finance charges and costs and charges incurred by ABC, upon such terms and conditions as ABC requires.

6.2. The loan is subject to Andre Victor (L.D. No. 4716/14-5038.084) guaranteeing the indebtedness of the borrower to ABC, from whatever cause arising, up to an amount of R1 850 000, together with finance charges and costs and charges incurred by ABC, upon such terms and conditions as ABC requires.

6.3. The loan is subject to Christopher Bryant Baker (L.D. No. 5901/15-5065.084) guaranteeing the indebtedness of the borrower to ABC, from whatever cause arising, up to an amount of R1 850 000, together with finance charges and costs and charges incurred by ABC, upon such terms and conditions as ABC requires.

6.4. The loan is subject to Michael Howard Dragset (L.D. No. 5901/15-5067.007) guaranteeing the indebtedness of the borrower to ABC, from whatever cause arising, up to an amount of R740 000, together with finance charges and costs and charges incurred by ABC, upon such terms and conditions as ABC requires.

6.5. The loan is subject to Seabrook Properties CC (C.K. No. 1995/05439/23) guaranteeing the indebtedness of the borrower to ABC, from whatever cause arising, up to an amount of R3 700 000, together with finance charges and costs and charges incurred by ABC, upon such terms and conditions as ABC requires.

6.6. The loan is subject to The Fynpost Trust (Trust Deed No. 17/126/2000) guaranteeing the indebtedness of the borrower to ABC, from whatever cause arising, up to an amount of R740 000, together with finance charges and costs and charges incurred by ABC, upon such terms and conditions as ABC requires.

7. PROPERTY INSURANCE

7.1. All improvements on the property are to be insured in terms of a standard South African Market Buildings Combined Insurance Policy plus SASRIA extension for their full replacement value with an insurance company nominated by ABC. Such insurance will be taken out and arranged by ABC on the borrower's behalf and the policy ceded to ABC. Such insurance will, unless otherwise agreed in writing, be effective from the date on which the loan or any part thereof is advanced to or on the borrower's behalf.

7.2. The minimum replacement value for which ABC requires such improvements to be insured is:

- Nineteen thousand five hundred Rand (R19 500)
- Nineteen thousand five hundred five Rand (R19 505)
- Nineteen thousand five hundred ten Rand (R19 510)
- Nineteen thousand five hundred fifteen Rand (R19 515)
- Nineteen thousand five hundred twenty Rand (R19 520)
- Nineteen thousand five hundred twenty-five Rand (R19 525)
- Nineteen thousand five hundred thirty Rand (R19 530)
- Nineteen thousand five hundred thirty-five Rand (R19 535)
- Nineteen thousand five hundred forty Rand (R19 540)

7.3. In the event that the borrower requires the improvements to be insured for an amount which exceeds the minimum amount required by ABC, the sum insured will, on receipt of written request, be increased to such amount as the borrower requires.

7.4. In the event that the property comprises a sectional title unit, the borrower shall ensure that the body corporate arranges for insurance as contemplated above, in respect of the improvements comprising the scheme, and that an amount being not less than the full replacement value of the unit is allocated to the property. Such insurance is to be effected by, and in the name of, the body corporate. In the event that the borrower fails to comply with the provisions of this sub-clause, the affecting provisions of this clause apply to any such insurance without modifications.

8. FEES AND CHARGES

8.1. The borrower shall pay ABC a service fee of R37 000, which fee shall be paid as follows:

- R18 500 (Eighteen Thousand Five Hundred Rand) on acceptance of the offer of loan facilities.
- R18 500 (Eighteen Thousand Five Hundred Rand) on registration of the mortgage bond.

8.2. The borrower shall pay ABC a penalty fee, which fee will become due and payable as follows:

8.2.1. R148 000 should the mortgage bond be cancelled within a period of 12 months from the date of registration of the said mortgage bond.
8.2.2. R37 000 should the mortgage bond be cancelled within the period from the 13th month to the 36th month after registration of the mortgage bond.

8.3. ABC shall be entitled to charge the borrower a fee, as determined from time to time by ABC, in respect of any administrative, accounting or other banking service rendered by ABC at the request of the borrower or on the borrower’s behalf in connection with the loan. The aforesaid fee is payable in addition to other fees for which specific provision is made.

8.4. Where a fee is payable in terms of the above paragraph, such fee shall be payable on or before the last day of the month during which the fee is levied.

8.5. To the extent that value-added tax is payable in respect of any fees charged by ABC, such fee is exclusive of the value-added tax which is payable by the borrower.

9. SPECIAL CONDITIONS

The loan will be subject to the following special conditions:

9.1. In the event of NEWCO taking transfer of the property, an agreement of loan can only be prepared once the Company has been formed and the requirements specified in the memorandum are satisfied to the bank.

9.2. The standard terms and conditions of the maintenance option will apply to the loan. This permits the borrower to make additional capital repayments and borrow further amounts from time to time, as set out hereunder:

9.2.1. The borrower may make early payments in reduction of the capital, without penalty, at any time provided payment is not in the aggregate exceed 50% of the capital and provided that the loan is not subject to either a fixed interest rate, or a SAPIEX-linked interest rate structure.

9.2.2. Minimum advances, against such early payments (excluding the amount of R400 000 for the fee and interest shortfall payments) of R250 000 at any one time, provided that the borrower is not entitled to make application for an advance where the loan is either within a fixed interest rate period, or a SAPIEX-linked interest rate period other than on a RA Futures reset period date.

9.2.3. Subject to 3 days’ written notice per advance.

9.2.4. Limited to one advance in any 30 day period; and

9.2.5. An administration fee of R 500 per advance.

9.3. ABC is to be provided with a Conveyancer’s Certificate confirming that the Title Deeds of the principal property to be bonded contain no encumbrances, endorsements or conditions of title.

9.4. The borrower shall procure that ABC be provided with an auditors certificate confirming that non-resident shareholders do not own 75% or more of the issued share capital of the borrower. Should it materialise that this is the case then ABC must be provided with a copy of the Reserve Bank approval in terms of Exchange Control Regulations 3(1).

9.5. Northwest CC shall provide ABC with a written undertaking to pledge additional security in the form of Repubroad Ltd shares should the market value of the pledged shares in terms of clause 5.5 reduce below R2 550 000, which additional shares shall restore the market value of the pledged shares to a minimum value of R2 500 000. Such additional shares should be pledged to ABC within a period of ten (10) business days of the reduction of the value of the original shares, failing which ABC reserves the right to place the borrower on notice to repay the capital or the balance thereof outstanding, together with finance charges and all other amounts owing to it claimable by ABC.

9.6. It is recorded that ABC will be afforded the first opportunity to quote on the financing of the proposed development of the property.

9.7. The capital will be debentured as follows:

9.7.1. R7 090 000 (Seven Million Rand) on registration of the mortgage bond.

9.7.2. R490 000 (Four Hundred Thousand Rand) for the service fee and for the extinguishment of the shortfall between the interests due to ABC and the amount paid by the borrower each month.

10. STANDARD TERMS AND CONDITIONS

The loan will be subject to all ABC’s standard terms and conditions applicable to loans.
11. RIGHT OF WITHDRAWAL

11.1. ABC will not be bound by the agreement of loan until such time as the original thereof, duly signed by the parties and completed as required, is received by ABC.

11.2. ABC will be entitled to withdraw from the loan at any time prior to the registration of the mortgage bond, or if no mortgage bond is to be registered, at any time prior to payment of the loan to the borrower or on the borrower's behalf, if in the sole discretion of ABC:

11.2.1. registration is for whatever reason unduly or unnecessarily delayed;

11.2.2. incorrect or misleading information is furnished to ABC;

11.2.3. any relevant fact or information has been withheld from, or become known to, ABC;

11.2.4. there is a change of circumstance which might prejudice the rights or security of ABC or materially alter the risk factor relating to the loan.

========================================================================================================
3.6.3 Acceptance of the offer

The relationship manager is responsible for delivering the loan agreement and supporting documents to the Client and explaining clearly all the terms and conditions of the financing. This can be a stressful time for both the relationship manager and the Client.

Usually the most contentious items are:

**Interest rate**: prudent clients will generally have approached other banks for finance as well. To play one bank off against the other is normal, and it is certainly to the Client's benefit to do so. In chapter 6, which deals with property finance products, the use of structured debt and finance to increase the Client's yield is explained. Clearly, banks with that capability have the competitive advantage when interest rate becomes the deciding factor.

**Term**: banks today are taking a more conservative view on the productivity longevity of properties. Where 20- or 25-year loan periods used to be the norm, banks nowadays seldom entertain loan periods of longer than 10 to 15 years for commercial properties. This means that the Client's cash flow and tax obligations are negatively affected by the escalation of capital repayment (cash flow), resulting in lower interest payments (which are tax deductible).

**Fees**: banks apply significant resources in the pursuit of new business, including the staff and infrastructure resources detailed earlier in this chapter, with no guarantee of a return (the Client might reject the offer of finance). Some of these costs are recouped through valuation and administration fees. This is normal practice and, where necessary, the Bank will capitalise these fees into the loan.

**Early repayment penalties**: the profitability of each loan is calculated by the Bank in terms of return on assets and equity, which is considered against the risks associated with the loan. The term of the loan affects these ratios and, understandably, the Bank would like to be compensated for its risk should the loan not run its full term. In most cases this is not identified as a problem when signing the loan agreement, but it does become a problem when the Client requests cancellation of the bond.
Insurance: the mortgage bond registered over a property provides the security for the loan. It is a condition of the loan that the property must be insured for its replacement value, which is calculated by the valuer when performing the valuation. Since the insurance premiums (cash flow implications) are calculated on the replacement value, the Client may hotly contest this value. A further complication can arise if banks prefer to use their own insurance brokers to ensure that they having some control over the continued insurance cover of the property. Property investors usually have their own brokers who provide preferential insurance rates (premiums) relative to the size of the property portfolio. Arguments may arise as to whose broker should be used.

Any changes to the loan agreement have to be referred back to the original granting authorities for ratification and approval. Thereafter the loan agreement must be redrawn and the entire process repeated. Clearly, where a Bank operates in a complex market, the loan summary is the more logical route to follow as it reduces resource wastage and is more easily managed.

The signed loan agreement is then returned to the administration supervisor for processing of the mortgage bond registration and data capture.
3.7 REGISTRATION

The purpose of registering a mortgage bond over a property is to secure the obligation of the owner (mortgagor) to repay the loan advanced by the Bank (mortgagee). In the event of the mortgagor defaulting on the loan obligations, the Bank is entitled to sell the property to recover the debt.

Fourie (1992:39) reiterates this in the following statement: “The bond enables the mortgagee in the event of the non-fulfillment of the obligation to have the mortgaged property sold and to utilise the proceeds thereof to satisfy his claim against the mortgagor”.

The mortgage bond usually forms the primary security for property lending. However, there are other means by which banks can further secure the debt, such as:

Collateral bond: this is a bond over a different property owned by the Client that provides additional security to the Bank. A collateral bond is usually requested in cases where the Bank does not find sufficient value in the property being proposed as security, i.e. the LTV is in excess of the Bank’s lending parameters.

Surety bond: this is a bond whereby the Bank further secures the loan through the Client’s use of a third party (the surety) who grants a bond in favour of the Bank, thereby placing the surety at risk of the Client defaulting on the loan obligations.

Suretyship: this is a deed of suretyship whereby a legal entity or entities guarantees the indebtedness of the Client, enabling the Bank to institute a claim against the surety should the Client default. The value of the guarantee can be limited or unlimited and usually binds the sureties jointly and severally. This security is used primarily where the Client has no other tangible assets. This would include a situation where the client is a property-owning company; in such a case the shareholders of the property-owning company are usually required to stand surety for the loan amount. Another common situation is where the Client is an individual who does not have a high financial standing and convinces relatives (whose financial situation is acceptable to the Bank) to stand as surety for the loan.
**Pledge:** this is a limited real right over the Client's moveable property as opposed to immovable property in the case of a mortgage bond. The pledge comes into being by way of delivery (not registration) and cannot be used by either the pledgor (Client) or the pledgee (Bank) while it is pledged. This security could comprise a jewellery or art collection and requires the Bank to have a safe custody facility, which can be costly and administration intensive.

**Cession:** this entails hypothecating an incorporeal asset such as shares, insurance rights and deposits. It is a form of pledge whereby ownership does not transfer from the cedent (Client) to the cessionary (Bank), unlike the pledge described above. It is effected by way of an agreement between the cedent and the cessionary.

**Notarial bond:** this entails hypothecating moveable property belonging to the Client, which must be attested by a notary and registered in the deeds office. No physical delivery of the property is necessary and therefore incorporeal things such as liquor licences can also be notarially bonded. An important distinction between a general and specific notarial bond is that specified moveable property confers a preferential right in the case where a Client is declared insolvent; conversely, a general notarial bond is ranked with concurrent creditors.

The mortgage bond and other security documentation are generally drawn up in conjunction with specialist attorneys who merely adapt these "standard" documents to include loan-specific information. Some banks have enhanced this documentation preparation method by generating the documentation on a computer; others have gone even further by transmitting documentation electronically to the attorneys' offices.
3.7.1 Attorney instruction

The Deeds Registries Act 47 of 1937 dictates that only a conveyancer may prepare, sign and execute deeds and documents to be lodged or registered with the deeds registry.

Banks generally utilise a panel of attorneys to transact their legal matters. They are selected on the basis of expertise, reciprocal business (management of trust funds, investments, introductions) and experience. Firms of attorneys are eager to participate on such panels as they enjoy a dedicated line of business.

At times, clients will insist on the use of their own attorneys for reasons such as discounted conveyancing fees, the attorney’s participation in the negotiations and historical relationships. In these cases banks usually accept the Client’s request; however, they will appoint one of their panel of attorneys as the “supervising” conveyancer, which ensures that the conveyancing documents are all checked by the Bank’s attorneys prior to lodgement and registration.

The instruction to the conveyancing attorney is very specific, detailing precise information on the Client, loan and security requirement. The exhibit below shows a typical instruction letter together with its annexes.
Dear Sirs

MORTGAGE BOND: 350 HOPE STREET (PTY) LTD : LLS. NO. 16480

In terms of the attached copy of loan facilities, the parties mentioned therein are required to pass a bond in favour of Nedcor Investment Bank Limited, and we would ask you to attend to registration on our behalf.

Please note that we require this bond to be lodged within 21 days, and registered within 30 days, from date of this instruction.

Should you have any queries or require further clarification, please do not hesitate to contact the writer who will be attending to the conveyancing administration of this bond.

In addition to the information contained in our offer letter of loan facilities we set out below further information which you will require:

MORTGAGOR CONTACT PERSON: Robert Bridgsoen
TELEPHONE NO(S): 461 67612/4625679 (Cell) 083 9005440
BOND DOMICILIUM: 555 Pin Oak Road, Devil's Peak, Cape Town
ADDITIONAL AMOUNT: 10% of bond amount to be registered
SERVICE FEE: R1 250 exclusive of VAT. To be deducted out of the proceeds of the loan. Please obtain Mortgagor’s written authority on our standard format.
DEED OF TRANSFER: Original Deed of Transfer No. T37612/96 was forwarded to Harold Gie & Broadhead on 1/5/99. Copy letter attached.
EXISTING BONDHOLDER: Nedcor Investment Bank Ltd and Nedcor Bank Ltd
BONDHOLDER BRANCH: Cape Town
BONDHOLDER ACCOUNT NO.: 16480
YOUR COSTS: Please recover from Mortgagor.
BOND TO BE LODGED BY: 21 days from date of this letter
BOND TO BE REGISTERED BY: 30 days from date of this letter.

In terms of the attached Annexure ‘A’ we require compliance with and a singular submission of all items mentioned therein.

Please note that we require your fortnightly progress report until registration of the bond.

Kindly note our required lodgement and registration dates. We would ask that you arrange to call on our client the moment all your documentation is ready for signature to expedite the process.

It is essential that you obtain our prior written consent to lodgement in order that we may ensure that all our initial requirements have been met. In addition, we also require your telephonic and written advice of lodgement and registration of this bond.

Please note that we require the return of Bond/s and Title Deed/s within 30 days from date of registration.

Yours faithfully
### Bond

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<th>Description</th>
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<td>1.3. Extracts of Memorandum and Articles of Association / Trust Deed.</td>
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<td>1.4. Copy of Founding Statement.</td>
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<td>1.5. Company / Close Corporation Certificate required.</td>
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<td>1.6. Auditors confirmation of no contraventions to Sections 38, 226 Companies Act.</td>
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<td>1.7. Accounting Officers confirmation of no contraventions to Sections 40, 52 Close Corporations Act No. 69/1984.</td>
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<td>1.8. Exchange Control Certificate in terms of Sections 3(1) (G)(2) of Exchange Control Regulations 1961, as amended.</td>
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<td>1.9. Matrimonial Property Act Questionnaire and Antenuptial Contract of each Individual principal Mortgagor.</td>
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<td>1.10. First Page of Mortgagor's I.D. Document.</td>
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<td>1.11. Enabling Resolution by the Debtor required.</td>
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<td>1.12. Confirmation of borrowing powers, or;</td>
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### Security / Collateral Mortgage

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<td>2.1. Confirmation of powers to provide surety / collateral Mortgage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2. Extracts of Memorandum and Articles of Association / Trust Deed.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2.3. Copy of Founding Statement.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2.4. Special resolution of all shareholders / members / trustees to provision of Surety / Collateral Bond required.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

### Suretyship

<table>
<thead>
<tr>
<th>Description</th>
<th>Required by NRB</th>
<th>Complied by Attorney</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1. Completion of unlimited / limited suretyships (attached) in terms of Clause 1.2.10 of Loan Agreement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2. Matrimonial Property Act Questionnaire and Antenuptial Contract of each individual surety. Should sureties be:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. married in community of property their spouses will be required to consent to the suretyship, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. married in terms of Foreign Law, their spouses will be required to assist in signature to the suretyship.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3.3. First Page of Individual sureties I.D. Document.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4. Confirmation of Powers to provide suretyship.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5. Extracts of Memorandum and Articles of Association / Trust Deed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6. Copy of Founding Statement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.7. Special Resolution of all Shareholders / Members / Trustees to provision of Suretyship.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3.8. Special Resolution of all Shareholders / Members / Trustees to provision of Suretyship in support of Surety Bond.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

### Insurance

<table>
<thead>
<tr>
<th>Description</th>
<th>Required by NRB</th>
<th>Complied by Attorney</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1. Cession of policy(ies) and power of attorney to - principal property / surety / collateral property (attached).</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Please affix and cancel Revenue Stamps in terms of Items 7 and 19 of Schedule 1 of the Stamp Duties Act - (R 5000)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4.2. Syfrets Insurance Advisors (Pty) Limited.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3. Outside Broker approval letter.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4. In respect of Sectional Title Units -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. name of insurer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. policy number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. SASRIA Coupon Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. issuing branch of the insurer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. P.O of unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5. Houseowners Insurance Application.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Title Deeds

<table>
<thead>
<tr>
<th>Description</th>
<th>Required by NRB</th>
<th>Complied by Attorney</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1. Description of properties to be mortgaged to be as stated in offer letter.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5.2. Attorney confirmation that there are no conditions or restrictions registered against the title or subsisting over the property which, in Attorney opinion, may be detrimental to the Mortgagee's interest.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5.3. Property Identification Certificate.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Exhibit 3.12 Attorney instruction**
3.7.2 Bond lodgement

Before lodging the mortgage bond at the deeds office the attorneys must gain the Bank’s consent to do so as they usually have special conditions that have to be complied with prior to lodgement. These could include:

- copy of signed leases acceptable to the Bank
- copy of audited financial statements acceptable to the Bank
- approved building plans that do not differ materially from the draft plans used in the valuation
- confirmation from the attorneys that no onerous title deed restrictions exist
- confirmation from the attorneys that the subject property is not subject to any land redistribution claim

The Bank will not consent to lodgement if any of the special conditions have not been complied with or if the documents highlighted in 3.6.2 not have been signed. A checklist is therefore maintained and signed when completed, thus ensuring that the Bank’s interests have been correctly administered.

It is at this point in the process that relationships between the Bank and the Client can become strained. The Client, of course, is anxious for the loan to be paid out, yet the Bank will refuse to proceed until all the relevant conditions have been met and the supporting documents signed. This typically occurs where the Bank has not yet received signed leases that support the value inherent in the property. Clearly, where reliance is placed on the outstanding lease, the level of the Bank’s comfort in the risk is compromised.

Once the bond documents are lodged, 10 days may pass before the bond is available for registration, and thereafter the attorneys have five days to register. In extreme cases banks will provide the Client with the opportunity to utilise this time to satisfy the outstanding requirements. However, this is rare and puts pressure on the entire process, as the attorneys will have to re-lodge should the allocated time expire, which will increase the Client’s frustration.
3.7.3 Bond registration

Once the mortgage bond has been registered, the Bank will:

- record the disbursed amount in the debtor’s (Client’s) ledger account
- debit any fees (administration, conveyancing) to that account
- advise the Client (in writing) of the disbursement
- advise the Client of the commencement date of the loan, together with the instalment amount and repayment period
- update the administration system with the instalment (or repayment profile) and activate the debit order mandate

The title deed and mortgage bond are sent to the conveyancing attorneys from the deeds office who then forwards them to the Bank. The Bank then updates its administration system with the relevant information from these documents. The documents, together with other security documents (such as pledges, cessions), are then filed in a fireproof safe.

The loan documentation and corresponding securities are audited on a regular basis, usually once a year, to ensure that all conditions and securities required as dictated by the loan approval have been complied with and secured. Both the internal and external auditors of the Bank complete these audits in compliance with both the Banks and Companies Acts.

To increase efficiency and decrease costs, some banks split their physical file on the Client into a correspondence and a security file. Once the Bank’s auditors have audited the security file, it is sealed, thereby reducing the audit time and associated costs. Any change to the loan conditions (particularly security requirements) throughout the life of the loan would result in the seal being broken and the file would then have to be re-audited.
The application process requires the skills, expertise and knowledge of a variety of disciplines that must be managed and co-ordinated in order to deliver a satisfactory outcome to both the Client and the Bank.

This encompasses:

- **Loan negotiation**: the process of establishing Client contact, determining the funding requirements and presenting the loan proposal
- **Valuations**: the process of determining the value of the property associated with the loan and providing a long-term comment on the sustainability of the property value
- **Credit assessment**: the process of establishing a reasonable view of the risks inherent in the loan
- **Loan approval**: the process of reviewing the presented loan and the security offered and making a decision based on the Bank’s desired risk profile
- **Administration**: the process of administering the conveyancing requirements in order to perfect the Bank’s security.

The above activities utilise the diverse, specialist skills of people who, through their participation in the process, limit the risks inherent in the business of property finance. The integration and consolidation of each of these inputs provides a holistic assessment of each deal and ensures that the complexities therein are understood and reasonably covered by the eventual agreement between the Bank and the Client.

This chapter has highlighted the importance of utilising the Bank’s information systems as early on in the process as possible in order to provide information to management throughout the process. The longer the information system component is left out of the process, the larger the gap in valuable information regarding new business being processed.
4 PROPERTY FINANCE ORGANISATIONAL STRUCTURES

4.1 INTRODUCTION

The previous chapter described the loan application process; this chapter describes the functionaries that operate within that process and the organisational structures that are in place to manage the process and functionaries.

4.2 FUNCTIONARIES

This section will describe the roles and responsibilities of the functionaries within the business of property finance. These descriptions are provided to indicate the support roles these staff members play in making the application process effective and efficient.

The responsibilities of the relevant functionaries will be described under the following headings:

- **Job purpose**: this is the reason for the existence of a specific function and should encapsulate the essence of the job and describe the reason for the job's creation
- **Key responsibility areas**: the areas from which at least 80% of the job deliverables and outputs are generated
- **Operational outputs**: these are derived from responsibility areas and budget requirements, are measurable and provide the basis for the calculation of incentives

Irrespective of the organisational structures in place, each role is designed within a support structure to build on underlying and adjacent roles to support the business and to achieve, for example, team, departmental, regional and national objectives.

The vision, mission and objectives are set at national level and these are devolved down to the individual specialist job functions, thereby providing the focus for the
business and a common thrust. Each functionary is incentivised to achieve his/her particular operational outputs, which provides the motivation and momentum for the business as a whole to achieve its objectives.

4.2.1 Relationship manager

Job purpose

Relationship managers are employed to generate new business (loans) for the Bank and to develop new relationships and maintain existing ones.

Key responsibility areas

- **New business**: to deliver to the Bank quality loan applications in line with policy, budget and quality standards
- **Relationship management**: to develop profitable relationships with clients that meet the desired profile and standards
- **Market penetration**: to create delivery channels that provide new networks within the marketing strategy framework, from which quality business can be sourced and the market presence of the Bank established
- **Technical competence**: to develop the technical competence required to effectively service the structuring requirements of the identified target markets

Operational outputs

- **Budget**: the achievement of sales targets on a monthly and annual basis within targeted property type and geographic segments. A measurement of this output should include the attainment of budgeted sales (loans) within minimum margin parameters.
- **New clients**: the development of new client relationships that provide or can provide the Bank with new lending opportunities. While repeat business from existing clients is one of the objectives of relationship management, the
acquisition of new clients is also essential to provide fresh opportunities and expand market penetration.

- **Effective structures**: the presentation of applicable structures that meet both the Bank's risk requirements and the Client's business objectives. The measurement of this should take cognisance of the number of loans granted (meeting the Bank's requirements) and the number of loan offers accepted (meeting the Client's objectives).

In developing relationships with clients, it is quite natural that close bonds, and even friendships, will be formed. This can lead to conflict within the relationship manager and divided allegiances may even result in the Bank's policies being pushed to the limit. The maturity of this functionary is therefore vitally important to ensure that the relationships developed are maintained within accepted business norms.

A negative aspect of relationship management, from the Bank's perspective, is that the Client's relationship is generally stronger with the relationship manager than it is with the Bank. This can result in these relationships being lost to the Bank when the relationship manager leaves the Bank.
4.2.2 Valuer

Job purpose

Valuers are employed to produce objective, high-quality and well-motivated property valuations and to provide the business with advice relating to the property market in general.

Key responsibility areas

- **Property valuations**: the function of developing, maintaining and managing the process and work load of property valuations for mortgage lending and insurance
- **Property market**: the process of developing and maintaining a property market database and related information
- **Valuation principles**: the maintenance of technical standards with regard to the latest accepted methods of property valuation and construction
- **Building loans**: the auditing of expenditures, control of disbursements and authorisation of building draws

Operational outputs

- **Valuation reports**: the timely production of high-quality, well-presented and market-related valuations. The measurement of this output can include the average lead-time from valuation request to presentation.
- **Property management information**: a monthly or quarterly report detailing significant movements within the property market, as well as items such as cap rates, vacancy factors, declining and growth areas. It is difficult to define measurements for this output (other than the regular production of reports) but measurements could include the correlation of valuation report information to the management information report.
• **Technical updates**: the presentation and explanation of new techniques and methods in the field of property valuations. Measurement of this output could include the incorporation of these techniques in the Bank’s policies.

• **Cost-to-complete reports**: the production and authorisation of building draws on construction loans. Measurement should include the number of cost overruns on construction or building loans.

The valuer can be regarded as the Bank’s eyes and ears in the property market and therefore plays a far broader role than described above. Advice and applied knowledge are intangibles that are difficult to measure and reward. The reputation and standing of a valuer within the Bank is developed over time. As the valuer continues to deliver, the Bank will place increasing emphasis and reliance on his/her advice and reports.
4.2.3 Credit analyst

Job purpose

Credit analysts are employed to make the relevant assessment of risks associated with loan applications and to manage arrears in accordance with the stipulated policies of the Bank.

Key responsibility areas

- **Risk assessment**: the risk assessment of loan applications, taking into consideration all aspects of property and finance risk
- **Credit reviews**: the regular review of all loans (property finance and client) in accordance with the Bank’s policy and timetable
- **Policy adherence**: the adherence to lending parameters as defined by the Bank’s policy (e.g. on loan-to-value, property types)
- **Risk categorisation**: the risk rating of all loans in accordance with stipulated guidelines
- **Arrears management**: the management of outstanding loan repayment obligations and co-ordination with attorneys managing legal action on the Bank’s behalf

Operational outputs

- **Correctly identified risks**: the identification of relevant risk areas associated with loan applications and the recommendation of methods that could be adopted to reduce those risks. Measurement could include an analysis of bad debts where the credit analyst should have identified particular non-obscure risks.
- **Optimal risk categorisation**: the risk rating of the loans in a portfolio that fairly represents the overall risk associated with the portfolio. Measurement could include budgeted bad debt ratio per risk category against actual bad debt.
• **Clear audit**: the adherence to policies and procedures as defined by the Bank. Measurement could include the number of policy infringements identified by the Bank’s auditors that could have been prevented by the credit analyst.

• **Effective arrears management**: the maintenance of acceptable levels of arrears and the prudent management of troublesome loans. Measurement could include an analysis of arrears accounts that have not been handed over to the Bank’s attorneys for legal action in accordance with the Bank’s arrears policy.

• **Current review of portfolio**: the review of each and every loan within a portfolio (financials, property and client) in terms of the Bank’s review policy. Measurement should include the number of reviews past due date.

The credit analyst function requires balanced reasoning combined with firm commitment to the Bank’s policies. It is easy to find reasons not to recommend a loan, but it is far more difficult to find methods to hedge against identified risks, thereby producing a satisfactory result for both the Client and the Bank.

It is difficult to find this kind of resource (i.e. someone who finds an acceptable way of doing new business) and some banks have gone as far as to set new business targets for their credit analysts, thereby encouraging them to find appropriate methods of hedging against risks they have identified.
4.2.4 Administrator

Job purpose

Administrators are employed to manage the administration process effectively and efficiently through the implementation of the Bank’s policies and procedures.

Key responsibility areas

- **Preparation of legal and loan documentation**: the correct interpretation of loan approval documents and the translation of conditions into loan agreements and bond instructions, and ensuring compliance with pre- and post-registration documentation
- **Attorney liaison**: direct communication with conveyancing attorneys, providing clear and unambiguous instructions and managing the registration process
- **Accounting**: the processing of ledger transactions (disbursements, receipts and journals) in accordance with the loan agreement
- **System**: the maintenance of mortgage administration system data to reflect the current information and status, thereby ensures data integrity
- **General items**: the preparation of general items (e.g. substitution of surety, release of security) for approval by granting authorities

Operational outputs

- **Appropriate documentation**: drawing up professionally prepared, correctly presented and effectively audited documentation for compliance with legal requirements and policy (e.g. signatures and initials to agreements). Measurement of this output could include the number of irregularities found by the Bank’s auditors.
- **Bond registration**: the effective and efficient management of the registration process, delivering registration and disbursement within stipulated norms.
Performance could be measured in terms of the time taken from loan approval to registration.

- **Compliance**: ensuring the Bank’s and Client’s adherence to loan conditions and legal requirements. Measurement should include the number of errors found by the Bank’s auditors (e.g. pre-registration conditions not fulfilled prior to disbursement).

- **System integrity**: the timely and accurate maintenance of system data. Measurement for this output should include the number of client queries related to incorrect information provided to them (e.g. statements) and the number of errors detected by the system through exception reports.

These functionaries are often referred to as back office or support staff. However, this designation should not obscure the fact that the nature of their work can be very technical and can expose the Bank to large risks such as unsecured loans (disbursement prior to registration). Competent administration staff are as important to the organisation as any other function, as new business cannot be acquired successfully if the administration of the loan is fraught with risks.

While this function is very well defined through its policies and procedures, the nature of property finance is ever changing, and new structures or slight nuances require administration staff to proactively assess each new loan’s administration requirements. Policy and procedure should effectively be in place to deal with these new situations; however, in reality new innovations and variations are part of the business of property finance, which means that documented policy and procedure sometimes lags behind new developments.
4.2.5 Regional manager

Job purpose

Regional managers are employed to provide effective leadership and management to the marketing, valuation, credit and administration functions in order to achieve regional objectives.

Key responsibility areas

- **Marketing strategy**: developing and implementing a marketing strategy for the region within the national marketing strategy framework. This includes the development of control mechanisms to effectively monitor the progress of strategy implementation.

- **Performance**: the delivery of agreed and budgeted income and expense items, which comprise new business written, margin targets, arrears and portfolio size

- **Operational management**: maintenance of standards across all functional areas in line with policy and operating guidelines

- **Staff development**: the development of staff expertise, experience and knowledge within their functional fields

Operational outputs

- **Financial performance**: the achievement of agreed targets as described in the section on responsibilities above.

- **Market penetration**: clear indication that new business is being acquired in targeted market areas at levels that confirm the success of strategies employed.

- **Audit**: a clear audit from both internal and external audit agencies providing evidence that the Bank's interests have been well managed in accordance with stipulated policies and guidelines.
- **Staff:** well-developed staff with defined career paths and/or training plan to broaden education, knowledge and expertise.

The regional manager is responsible for the property finance business of a region and relies on the Bank’s infrastructure (Treasury, Information Technology, Human Resources, etc.) to support the region’s activities. The position therefore requires coordination skills in order to maximise each support area’s contribution to the region’s objectives.

The regional manager therefore has the opportunity to develop leadership and management skills that could provide a career path to head up the entire property finance division. It is a senior position with significant responsibilities and outputs that have a direct impact on the performance of the division and the Bank as a whole.
4.3 ORGANISATIONAL STRUCTURES

4.3.1 Introduction

Property finance institutions are no different from any other business in terms of accepted management practices. The ability to drive strategy through to implementation requires the effective deployment and co-ordination of resources to achieve the desired result.

Smit and Cronje (1992:179) underline this as follows: "Plans devised and strategies formulated will never become a reality if manpower and resources are not properly deployed and the relevant activities suitably co-ordinated". The process of organising activities, manpower and resources provides clarity of responsibility, accountability, communication, synergy and co-ordination.

Property finance as a business used to be just one of the many products commercial banks offered their clients, and resources to administer loan portfolios formed part of a larger resource pool (legal, financial, credit and administration) that also serviced the broad commercial product range.

The recognition that the business of property finance is a complex and risky undertaking forced banks to take cognisance of the specialist and technical expertise required to run and manage property-related transactions profitably, and organise their business accordingly.

Smit and Cronjé (1992:210) explain that organisation design "is to construct and change the organisational structure so that the goals and objectives of the organisation can be achieved in the best possible way". This has clearly been recognised by most banks' management, as property-related transactions now fall under specialist areas.
The traditional fragmented, uncoordinated and ad hoc approach to property finance disappeared and was replaced by dedicated management, specialist resources and structures. These structures are by no means static; in fact, it is changing strategies and objectives that drive reorganisation. Daft (1998:201) explains: "Nearly every firm undergoes reorganisation at some point, and today, many companies are almost continuously changing and reorganising to meet new challenges. Structural changes are needed as the environment, technology, size or competitive strategy changes".

The following section will discuss the most common organisational designs of property finance in the context of the different goals and objectives that they support.
4.4 FUNCTIONAL STRUCTURE

4.4.1 Purpose

The objective of this structure is to group functional areas together, thereby providing the Bank with functional depth, direct functional management and control.

Exhibit 4.1 Functional structure

4.4.2 Advantages

- **Management**: strong central management of the function provides consistent methods, operating environments and procedures throughout the organisation.
- **Control**: since the operating environments are the same across all regions and branches, setting operation targets and auditing the process are simplified.
• **Specialisation:** knowledge transfer is achieved as the functions operate as units, allowing for mentorship, sharing of ideas and experience.

• **Career path:** the staff are easily able to define their own career paths, which are clearly visible, thereby encouraging the development of skills and technical expertise.

• **Succession planning:** the function and structure are well-defined, facilitating identification of management potential and the development thereof.

4.4.3 Disadvantages

• **Ownership:** property finance earns its income mainly from NII, therefore the longer it takes for the loan disbursement, the less the NII. By operating in silos, the urgency and drive are lost as a loan passes through each functional area, eventually becoming just another file in the in-tray.

• **Lead-times:** closely related to ownership – where there is no direction or no distinction is made between profitability of loans, the lead-times between the activities in the loan application process are not minimised (giving appropriate loans priority).

• **Incentives:** it is difficult to incentivise the performance of each function fairly, since each one performs vastly different work. While the relationship manager might be incentivised to write a certain amount of business, the administration staff might be incentivised to ensure that the process from loan approval to disbursement takes no more than a certain period of time.

• **Reporting lines:** the structure is tall and wide, with the allocation of responsibilities and accountability cascaded down to the lowest level. In accordance with Bank policy, this structure is characterised by slow decision making, requiring successive levels of authority to become informed and involved before decisions are made.
4.5 TEAM STRUCTURE

4.5.1 Purpose

The objective of creating independent teams is to create a sense of ownership of the entire loan application process. The structure is flat where major accountability and responsibilities are delegated to a team leader, thereby facilitating fast and efficient decision making.

Exhibit 4.2 Team structure

4.5.2 Advantages

- **Incentive**: there is a natural tendency for teams that operate within the same geographical area and market to compete against one another. Given their new
business targets, teams are not only incentivised (monetary reward) to exceed them, but also to procure business faster, more efficiently and more profitably than the other teams within the region.

- **Ownership**: each loan "belongs" to the team and team members are incentivised to attain certain objectives or outputs for their own specific portfolios. Irrespective of the function performed during the loan application process, team members have a direct interest in ensuring that their activities are performed effectively and efficiently.

- **Multi-skilled**: the reliance between team members (functions) is exaggerated as the teams are typically small in size. Team members must be in a position to take responsibility for the process when other members are on leave or are ill. This requires each team member to become at least marginally effective in all the other functions, thereby providing additional value to the Bank and developing possible alternative career prospects.

- **Reporting lines**: decision making is fast and effective as most operational responsibilities are bestowed on the team leader. Teams are not encumbered with bureaucratic and sometimes labour-intensive correspondence to gain approval for operational situations or opportunities.

### 4.5.3 Disadvantages

- **Control**: the team leader is responsible for adherence to the policies and procedures of the Bank, which requires, from a management perspective, an in-depth knowledge of these policies and procedures, as well as functional expertise. Since teams are generally small (6 to 12 members), the functional strength of the individuals across teams can vary quite considerably (resource spread), resulting in a lack of experience and knowledge depth. This can conceivably result in a lack of control and adherence to policy through inexperience on the part of the functional member and/or the team leader.

- **Succession planning**: the flat structure of the teams (the team leader is the reporting line for all members within the team) does not lend itself to career growth within functional lines. There is virtually no opportunity for anyone
besides the team leader to develop management experience, which impacts negatively on succession planning and career advancement.

- **Knowledge transfer**: since teams operate independently from one another, and as there is natural competition between them, the opportunity to confer and share experiences between teams is limited. At a functional level this can be very detrimental to the growth of individual team members, as they are isolated from the broader experiences of their counterparts. From an organisation perspective the ramifications could be even more detrimental if methods (e.g. regular workshops) are not employed to encourage knowledge transfer and the sharing of experiences.
4.6 SPECIALIST STRUCTURE

4.6.1 Purpose

This structure is similar to and incorporates the functional structure. Its objective is to provide the Bank with dedicated resources for every specialist function, thereby encouraging best-practice methodologies. In the exhibit below the structured finance and bad debt (managed assets) functions have been removed from the regional line function and placed under specific management structures.

Exhibit 4.3 Specialist structure

4.6.2 Advantages

This structure endeavours to incorporate the advantages of both the functional and team structures. This is accomplished by the flattening of reporting lines where business opportunities exist or risk areas are prevalent.

- **Expertise:** as with the functional structure, the utilisation and development of staff expertise is maximised, providing the Bank with highly skilled resources focused on areas of specialisation.
• **Reporting lines**: where speed of service delivery (structured finance) or decision making (bad debt management) is crucial, the structure provides flattened reporting lines to accommodate these mission-critical requirements.

• **Segmentation**: each specialist head has a portfolio of loans specifically designated to him/her, thereby segmenting the book naturally by specialist area. This allows easy analysis of the portfolio for profitability performance and delivery of operational outputs.

**4.6.3 Disadvantages**

• **Knowledge transfer**: as each of these specialist areas operates largely independently from the others, the expertise and knowledge of these areas tend to remain isolated in pockets of excellence.

• **Team spirit**: the culture of the division is separatist and possibly elitist, and the ethos of friendly co-operation and camaraderie between specialist groups must be managed and encouraged continuously.

• **Incentives**: in some of the specialist areas, the measurement of operational outputs is difficult, e.g. on what objective basis can the MAD team be scored for the management of bad debt (loans are only received when they are already bad). Therefore the quantum of incentives or rewards is based on subjective reasoning, which can lead to conflict or dissatisfaction.
5 PROPERTY FINANCE INFORMATION SYSTEMS

5.1 INTRODUCTION

"A system is a model of the real world and the real world is constantly changing." 
(Source unknown) This statement is particularly relevant to the property finance industry in South Africa. Unfortunately, there is some discrepancy between the desire to subscribe to its intention and the implementation of its consequences.

The purpose of this chapter is to identify and define the system functionality required to manage the business of property finance effectively and efficiently. The chapter does not detail the intricacies of information systems development, but rather endeavours to explain the information systems principles that support the business of property finance.

The following traditional information systems are required to support a business relevant to property finance:

- **Transaction processing systems**: deliver the daily operation controls and processing activities of the business (e.g. cheque, journal and receipt processing)
- **Management information systems**: deliver the structured information required by management to control the business (e.g. income statement, budget vs actual performance indicators)
- **Decision support systems**: deliver the modelling capability required when considering different strategic options (e.g. centralised vs decentralised administration)

These systems are essential for the proper management of a property finance business; the lack of any one of them leaves management with an information deficit that increases management risk. Stair & Reynolds (1999:29) concur "If you are to have a solid understanding of how organisations operate, it is imperative that you understand the role of information systems within these organisations".
5.2 DESIGN FUNDAMENTALS

Integral to the success of providing an information system that supports the entire operation of property finance, is understanding the foundation on which the system is built. This foundation should be stable, yet flexible enough to provide the ongoing enhancement necessary to keep the business abreast (or ahead) of market requirements. While stability and flexibility appear to be contrary terms, good system design can bring these two opposing requirements together.

5.2.1 Stability

Designing the system foundation around the core entities in the property finance business can attain stability. The fundamentals of this business have remained relatively constant over time and should therefore be reflected in the system.

- **Client**: without a Client (any legal entity), there is no market, demand or business; the Client is constant.
- **Account**: the debt parameters (e.g. rate, term, amount and repayment profile) are prerequisites to provide standard accounting functions.
- **Property**: attributes of property provide the associated risk (e.g. type, location, and value).
- **Security**: the legal instrument that creates enforceable obligations (e.g. loan agreement, bonds and cession of shares).

The above entities are the backbone of property finance and will not change materially over time. The current trend in the corporate world is to continually re-invent a business, which results in re-engineering, restructuring and right-sizing. The result of this is that functions and processes are continually changing to meet the new requirements of both the business and the market.
Utilising functions or processes to define the platform is thus inherently flawed; they should rather overlay the platform and be controlled by, inter alia, parameter-driven workflow-type programs. This allows the user to define the processes and functions required in the business, rather than the business being dictated to by the system.

It is infinitely more expensive to change a database and associated programs than to design a system to be as user driven as possible. Structural changes are likely to be cost prohibitive and therefore stifle the natural growth of a business. This is supported by Erlank (1997:100) who confirms that “the effort to re-engineer the business process of a badly designed computer system is enormous”.

5.2.2 Integration

Integration is the ability to connect the data related to the four entities discussed above together in a seamless manner that provides holistic information created from data captured into the system through defined processes, policies and procedures.

**Information**: provides the business with the ability to assess the status of its operational, management and strategic objectives and make informed decisions at those levels.

**Data**: the underlying entities (fields such as client name) that must be available for information to be created. An account number has no information value until such time as it is combined with a client name and an account balance to provide information to the user.

**Process**: the way in which data is collected, processed and presented as information. To process a cheque disbursement within the system, the client and account details first have to be captured before such a transaction can be correctly allocated.

**Policies**: the rules by which data is collected, processed and presented as information. These policies are reflected in both the system and procedures of the business. A policy might reflect that an account that has an LTV of above 80% should be risk-rated “high risk”. This rule would be imbedded in the system in the form of an algorithm that automatically updates the applicable field.

**Procedures**: the manual interventions or the assistance required by the system to capture and process data. These procedures can also be external to the system, yet still affect it indirectly. The litigation procedure, for example, includes interaction with the country’s legal system; however, the progress of the litigation through the legal system might be reflected within the property finance system.
Integrating the above attributes into the system provides the user with all the information required to process any transaction. The data required is prompted by the system, the process and rules of manipulating the data is explained, the procedures place and explain the transaction in the context of the business, and the output is generated in the form of information.

The electronic integration of the above is of paramount importance to ensure that, at any point in the business process, users can easily, with a click of the mouse button, pull up any one of the attributes to explain the rules, process and procedures relating to their queries.

Below is a simple example of a client detail capture screen:

Exhibit 5.1 Information integration
In the above example, the user is unsure how to proceed with the capturing of the Client's name. By pressing the help button, the system automatically determines the field in question and accesses the Intranet, where the explanations of the attributes are found.

This seamless user interface promotes easy, effective and efficient data processing. The rules that are built into the system ensure that the degree of data capture error is dramatically reduced.

5.2.3 Flexibility

Flexibility is the ability to adapt and change in a short space of time to meet a particular business need. This flexibility is created by overlaying the structure (which is stable) with user-defined processes, which are driven through parameters that tell the system what, how, and when to do something.

Exhibit 5.2 Flexibility model
A typical example is that of workflow, where changes to a particular process are made through programs that allow the user to create new activities and schedule them as they deem necessary. It is the user's responsibility to tie the activities together logically in such a way that they represent the process requirement. The system merely executes them as instructed.

Inflexibility occurs when the process is defined at database level, i.e. database structures (data fields, keys and records) are created for specific processes rather than generically designed to cater for any process.

Flexibility can be extended to allow the user to define

- rules within the system (amount must be greater than zero)
- screen layout (how they want to see the data items on each screen – position, colour preferences)
- access restrictions (access to screens is driven by staff number)
- report distribution (who receives which report and when)

This flexibility is essential to support business operations without constant reference to the Information Technology (IT) department and the resulting computer programming costs and delays. The correct design will dramatically reduce reliance on IT for providing enhancements, and place the business in a position to react quickly to changing requirements.

### 5.2.4 Accessibility

The accessibility of the information system also arises out of the ability to view the information from any point the business requires. The core entities defined above should have their own access points to the database, from where there should be an integrated structure allowing connection points between the entities (client, account, property and security).
The following model demonstrates this:

**Client:** from the Client, the accounts linked to the Client, the properties linked to each account, and the security (bonds) linked to each property should be easily accessible.

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Exhibit 5.3  Accessibility model 1

Consider an account that is in arrears. The information required to determine the risk associated with the account covers all entities. The questions that must be answered are:

- Who is the Client and what is his/her relationship with the Bank?
- What other accounts are associated with this Client? (loan exposure)
- Where is the property and what are its characteristics? (quality of property or lease)
- What is the Bank’s security? (mortgage bond capacity to cover the loan amount)

Having an integrated system allows these questions to be answered fully and immediately, without referral to manual files. When the system is designed in this
way the arrears report will generally also print the related property, security and client
detail. Systems without this capability result in arduous and time-consuming searches
that carry concurrent cost overheads.

Providing access to and connectivity (integration) between the different entities
ensures that the entire database is accessible for the extraction of information.

Exhibit 5.4  Accessibility model 2

The client name is by far the most commonly used reference by both staff and the
Client. To ensure easy access to information stored within the system, the primary and
most frequently used query is therefore the client enquiry. The correct client is
established via an alpha lookup facility that provides immediate links to all the client-
related information within the system.

By way of an example, the client "Jones APC" is in arrears and the credit clerk is
required to establish the current LTV. By inserting the client’s name into the client
enquiry, the system automatically provides the clerk with all the links established for
the client selected.
Exhibit 5.5 Accessibility model 3

By selecting the property details option, the clerk is then presented with property, valuation and title deed options. Selecting the valuation option, the system then displays the valuation details loaded for that particular property. Similarly, a clerk checking the current balance for a Client enters the Client’s name and selects the ledger details. In this way the system provides for an integrated view of the entire information system. The actual entered alpha characters were “Jones AP”; the rest was accomplished by “point and click” functionality.

The majority of banks in the property finance industry are not only unable to provide this information online, but also require the user to utilise “screen codes” to bring up each screen. The user then has to write down the relative reference numbers (e.g. account number) and enter them again as each screen is accessed.

In summary, a system designed for accessibility provides for the fast retrieval of relevant information from the Bank’s systems. It increases productivity, effectiveness and improves service levels to clients.
5.3 TRANSACTION PROCESSING SYSTEMS

5.3.1 Client

5.3.1.1 Client search

As discussed in the section on accessibility above, the Client, or more accurately the Client's name, is the most effective method of accessing information relating to a loan. With most organisations, however, the first question one is asked is usually "What is the account number?"

Numeric reference numbers drive our information world and our capacity to remember each number (bar keeping a record of them on our person) is limited to those we utilise on a daily basis. Personal telephone numbers and current bank account numbers generally come to mind easily, but as to the rest one's only reference clue is one's name.

This has now been recognised world-wide. In the early days of the Internet, access to sites was only achieved through the use of a unique numeric Internet address. Although this has not changed, the unique numeric Internet address is now coupled directly to a name, such as www.microsoft.com, to facilitate access. This provides the user with a meaningful reference and the ability to search the Internet using company or organisation names as the search criteria.

This is the same principle utilised in property finance. The client name provides the link to all the related data within the system through the client search facility.

5.3.1.2 Client details

The purpose of the client details facility is to provide the Bank with specific information regarding the Client's name, identification number, contact details (address, telephonic and email) and unique client number.
The client number provides the cross-reference to the account details, which in turn provide the reference points to the property and security details. It is therefore imperative that the client details are only captured once (providing a unique client number) irrespective of the number of accounts the Client has with the Bank.

If the client details are ever duplicated (by implication with separate client numbers) the consolidated view is fragmented, resulting in numerous opportunities for error. These include:

- **Multiple updates**: should the Client's address change, for example, each client detail record would have to be identified and changed.
- **Duplication**: if each occurrence of the client details is duplicated, the chance of inconsistency between the records is increased.
- **Data capture error**: the chance of errors in the data capture procedure increases with the number of records that must be updated and maintained.
- **Limited information**: the system provides the user with the information linked to a single occurrence of the Client. Multiple enquires would have to be performed (on each occurrence of the Client) and the information would have to be consolidated manually to obtain a complete view.

In order to ensure that client details are not duplicated, the user must first perform a client search and check that no record currently exists for that entity. An existing entry would merely require the client information to be verified and updated if necessary.

**5.3.1.3 Client relationship**

The strength of the relationship between the Client and the Bank is largely dependent on the benefit the Client perceives in that relationship. Obviously, the interest rate charged to the Client must be market related, but any additional value the Client can extract from the relationship will also assist in differentiating between banks.
One of the ways of adding value to client relationships is the maintenance of client information and the active utilisation of that information. The information can be broadly categorised as:

- personal
- business
- hobbies
- sport
- cultural
- general

Utilising a query tool (software program) and accessing these categories, the relationship manager can provide the Client with opportunities to further certain interests and thereby strengthen the loyalty of the Client toward the Bank.

In this way the Bank can invite selected clients to sporting events such as rugby or cricket matches, involve clients in golf days or provide tickets to an opera. The Client is accompanied by the relationship manager, which encourages the development of the relationship and forges a bond that the Client will not break lightly.

Clients interested in interest rate derivatives can be identified and sent weekly treasury newsletters, which in turn might lead to further business opportunities. This concept has been extended in the retail sector, where supermarkets are now analysing the buying patterns of consumers, which enables them to target specific groups in their advertising campaigns. For instance, instead of blanketing the entire consumer base with flyers about their barbecue specials for the week, a supermarket chain will rather target a consumer who purchases sausages, meat and fire wood every Friday afternoon. As with all systems, the better the maintenance of the information, the more effective and useful the output will be. To make the client relationship module a useful tool, the policies and procedures must be put in place and managed actively. Lack of maintenance can lead to embarrassing and sometimes disastrous consequences. Imagine the impact on a relationship where a Client is sent a congratulatory wedding anniversary card, having recently divorced or lost a spouse.
5.3.2 Account

5.3.2.1 Application details

The application details provide the foundation for the parameters of the loan, which the system uses to process the output requirements of the Bank. The account number is generated at this point and automatically cross-referenced to the client number, thereby creating the first link between the Client and the account details.

It is important to note that an account may have many applications associated with it, provided that the existing account terms and conditions are the same or that they are amended to reflect the new terms and conditions.

To illustrate this point, a Client may initially be granted finance to purchase a particular property (application 1). As time passes the Client decides to extend the property and applies for and is granted further finance (application 2). A second account is not required, provided the same terms and conditions apply to both applications. Should an account be opened for each application, both the Client and the Bank will have to manage and administer multiple accounts for a nil return on the additional overhead.

The initial application information captured includes loan amount, interest rate, interest period, loan period, type of property, location of property, desktop valuation and relationship manager.

The sooner this information is captured into the system, the sooner management can determine the possible impact the business will have on profitability, staff performance, resource and cash flow requirements. Another reason for speeding up the capture of information is that there have been instances where a Client’s application has been rejected in one branch, but approved in another owing to the lack of local market knowledge. The early capture of the application details and reason for rejection would have alerted the granting branch to the possibility of an unidentified risk and averted the loss control situations that arose. In these instances, the Bank had
a policy to load the loan onto the system only once it had been approved, effective resource allocation being sited as the reason. The resultant write-offs highlighted the folly of this decision.

These details change as the application moves through the process, and as negotiations progress the current information is further updated to reflect the latest situation, e.g. granted date, granting authority, reason for rejection and loan agreement date. The application details thus provide the Bank with the latest information on the status of any application as well as the salient details of the loan terms.

5.3.2.2 General details

The general details are account specific and not application specific. There is only one occurrence of account (general details) while there could be many occurrences of the application details. These details facilitate the segmentation, categorisation and analysis of the loan for both statutory and Bank requirements.

The Reserve Bank requires regular reports from all financial institutions as specified in the Deposit Taking Institutions Act of 1990. In order for these reports to be generated from the system, the required data fields must be maintained by the Bank.

The Bank also utilises these data fields and others to obtain meaningful management information. The types of reports generated from this information are detailed in the section on management information systems below.

The types of information or data stored under general details include risk category, loan expiry date, South African Reserve Bank code (refers to the various business sectors, such as retail, farming, commerce, etc.), review date (banks regularly review accounts within the portfolio), statement frequency, repayment notice period and branch name.
The general details facility also has status indicators to highlight particular activities or warnings. These include items such as account under litigation, bond under cancellation and account closed.

5.3.2.3 Electronic funds transfer details

The receipting of clients' cheques is resource intensive and time consuming – the Client must make out the cheque, post it to the Bank, the Bank must receipt the cheque to the Client's account and then deposit the cheque into the Bank’s current account.

The automated and electronic functionality is available to provide both the Client and the Bank with an effective and efficient method of payment and receipting. These facilities are available through:

- automated clearing bureau (ACB)
- debit order mandates (DOM)
- electronic fund transfer systems (EFTS)

One of the major problems experienced with the manual process described above is that of direct deposits, where the Client does not post the cheque to the Bank but deposits it directly into the Bank’s account. This process can lead to unallocated deposits if the Bank is unable to identify which account should be credited from the deposit details. Unmatched deposits occur if a personal cheque is deposited for the credit of a Client, who happens to be a company or a CC, and the paid amount is not equal to the due amount. The deposit is thus made to the incorrect bank account.

Clearly, the provision of an electronic transfer facility adds value to both the Client and the Bank and should be included in the property finance systems. It improves the service level and reduces the cost to the Client, while increasing efficiency within the loan administration area.
5.3.2.4 Repayment profile details

Recording the interest rate, interest period, instalment and capital redemption details on the system is critical to the correct system management of a Client’s repayment obligations.

The system utilises these data fields to:

- accurately calculate and record interest debits to the Client’s ledger
- record the difference between due and paid amounts to accurately reflect arrears or payments in advance of the required repayment obligation
- automatically recalculate instalment amounts on accounts that are linked to the prime rate or fluctuating interest rate derivatives
- determine projected inflows to assist in Treasury cash management
- determine margins achieved at both the account and loan portfolio levels utilised for performance assessment and budgeting

A historical view must also be maintained to provide evidence in case a dispute ever arises around past transactions to the Client’s ledger. The Bank must be able to justify how transactions are calculated and why the transactions were passed, which reasoning should be traced back to the loan agreement.

5.3.2.5 Projected disbursement details

The purpose of recording future disbursements is to provide Treasury with a view of the future cash flow requirements, which enables them to proactively select the best instrument and duration thereof to fund loans. In addition, the projected disbursements provide the Bank with a time-orientated schedule of future loan portfolio growth.

The Bank commits itself to the Client’s funding requirements when the loan agreement is signed. Lead-times to disbursement are a function of the Bank’s efficiency and the ability of the Client, and of service providers such as the conveyancing attorneys, to meet the pre-disbursement conditions imposed in the loan agreement.
The assessment of the lead-time to disbursement is subjective and each loan’s disbursement timing is estimated based on the particular circumstances applicable to that loan. A building loan will require a staggered disbursement profile based on the building draw-down schedule submitted to the Bank, while a simple property investment loan can be based on the historical timing of the registration process.

The management of projected disbursement is an ongoing affair rather than a once-off estimate. As and when new information that impacts on the estimated lead-time comes to light, the system should be updated to reflect the best estimate. As the process draws closer to registration, the certainty level of the disbursement dates normally increases.

The projected disbursements also provide a control mechanism to ensure that only those amounts approved and projected are available for disbursement. In the case of a building loan that is approved on a cost-to-complete basis (the Bank only releases those funds in excess of what it will cost to complete the building), the administrator has a clear indication of remaining funds available for disbursement, which can be compared to the cost-to-complete amount.

5.3.2.6 *Letters of undertaking*

A letter of undertaking (guarantee) is a promise to pay a third party an amount of money, which creates an obligation on the Bank. The promise can be unconditional, but more often than not it is conditional on one or more of the following: the transfer of property, cancellation of existing bonds and registration of a new bond in favour of the Bank.

In terms of the Deposit Taking Institutions Act the issuing of a letter of undertaking creates an exposure to the Bank and should therefore be included in regulatory reporting returns to the Reserve Bank.
A letter of undertaking can be issued to a number of third parties:

- **Conveyancing attorneys**: promising to pay the purchase price (loan amount) of the property
- **Commercial bank**: where the Client requires bridging finance from his/her Bank until such time as the loan is disbursed
- **Building contractors**: where the Bank promises to pay the contract amount on a cost-to-complete basis

The system should deliver a solution that provides for the effective management of these exposures by providing:

- a register of guarantees issued
- the correct amounts outstanding per guarantee and at portfolio level
- a mechanism to highlight guarantees presented and not physically returned
- the ability to generate guarantees from the data within the system
- the reports required by the Reserve Bank

The lack of such a facility results in time consuming manual schedules, reconciliation and the inherent risks of paying against a guarantee without receiving the physical document.

### 5.3.2.7 Documents in transit

All security documentation (title deeds, mortgage bonds, suretyships, etc.) are kept in a fire-proof safe as stipulated in the Bank’s risk policies. It is essential to retain these original documents as the burden of proof of the agreement between the Bank and the Client. However, it is sometimes necessary for attorneys to physically have possession of these documents for conveyancing or litigation matters.

This facility enables the system to track each and every security document that is removed from the Bank’s safe and dispatched to a third party. It ensures that the
whereabouts of the documents are known at any point in time, and that they can be located and retrieved if necessary.

It further provides for:

- the production of reminder letters to third parties to return the documents in their possession
- audit backup to reconcile the system with the “document out” tags in the manual security files
- the reason for the documents being dispatched to a third party
- the archiving of references for accounts that have been closed, as security documents are retained by the Bank (loan repaid, but mortgage bond not cancelled as the client might require funding in the future)

The movement of security documents, particularly in the high-volume environment of home loans, is extensive and the provision and utilisation of this system contributes to the effective management of this administration function.

5.3.2.8 Ledger transactions

The ledger is the record of debit and credit transactions to the Client’s accounts, providing daily and monthly capital and interest balances. These transactions are generated through the following facilities:

- **Receipting input**: these credit transactions can take the form of interest, instalment or capital repayments and are manually input into the system, typically where no electronic fund transfer agreement exists between the Client and the Bank.
- **Cheque disbursement input**: these manual debit transactions result from any disbursement of funds to the Client or third party payments on behalf of the Client.
• **Journal input:** these are manual debit and credit transactions, usually to correct invalid entries within the ledger or, by way of agreement, to transfer interest balances into capital.

• **System:** these transactions are generated automatically and the amount and nature of the transaction (journal, cheque disbursement or receipt) is calculated utilising the policies (rules) built into the system. These include interest debits, EFTS transactions (receipting), and reversal of unpaid EFTS transactions (journal).

Interest is calculated on daily balances (see the section on repayment profiles above) and normally debited on a monthly basis or as dictated by the interest period. Where interest is serviced separately from capital repayment obligations, it is debited to the interest column; alternatively it is debited to the capital column, thereby capitalising the interest.

Account statements are generated from the ledger and sent to clients at predetermined periods. Where repayment takes the form of a monthly instalment (fixed amount unless altered by an interest rate change) statements are normally generated and sent out every six months. However, where interest is serviced separately from capital (as in the case of a building loan where the capital amount increases through monthly draw-downs), monthly statements are generated to provide the Client with the interest due and the make-up thereof.

5.3.2.9 **Arrears details**

The loan agreement stipulates the repayment obligations of the Client, which are recorded in the repayment profile details (see above). The arrears module provides a periodic (per the interest period) record of all amounts due and the amounts paid (recorded in the ledger above) within the same period. This creates a periodically segmented historic record of the Client’s actual payments against due amounts.

The algorithm used to determine the number of months in arrears applies all paid amounts to the oldest outstanding amounts first; however, the payment is reflected in the month that it is received. The following example reflects this principle:
### Exhibit 5.6  Arrears example 1

In the above table the Client is obligated to pay monthly R100 instalments, which have not been honoured for three months. The Client then responds partially to the Bank’s letter of demand and pays one instalment of R100, to which the algorithm responds in the following manner.

<table>
<thead>
<tr>
<th>Month</th>
<th>Due</th>
<th>Paid</th>
<th>Short Payment</th>
<th>Aged Arrears</th>
<th>Month in Arrears</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>300</td>
<td>0</td>
<td><strong>300</strong></td>
<td><strong>300</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Exhibit 5.7  Arrears example 2

This time-segmented record provides the Bank with the ability to categorise the portfolio arrears into hard- and soft-core arrears accounts. Soft-core accounts are generally up to three months in arrears, and the Bank usually deals with late payments by way of letters of demand and direct telephonic contact. Those accounts greater than three months in arrears are hard core and are handed over to the Bank’s attorneys to start the litigation process of recovering the loan amount.

This online facility provides up-to-the-minute arrears information, enabling the Bank to see what has not been paid (instalment, interest or capital), how much is outstanding (amount) and for how long. It is critical to the Bank that the arrears are accurate, reflecting exactly the record of payments, as any litigation would result in close scrutiny of the loan agreement and the arrears evidence presented.
5.3.3 Property

Property is the underlying asset and security for most property finance transactions. The performance of the property largely dictates the ability of the Client to repay the loan, and the performance of the property portfolio largely determines the profitability of the property finance division. It is therefore essential for the Bank to fully understand the dynamics of these assets at both the account and portfolio levels.

This understanding is partially dependent on the Bank's ability to segment the property portfolio in the following manner:

**Area:** this includes suburb, town and province. Each area has its own micro economic environment (developing suburb, business types, public support and spending/earning potential) that is influenced by the macro economic drivers of the country. The value extracted from such segmentation allows the Bank to identify popularity areas (growth points and high economic activity) through the arrears trends and market activity. Low-risk areas can similarly be identified and supported.

**Property type:** this includes commercial, industrial, and residential property and extends to use, such as motor showrooms, shops and offices, and size. New technologies, such as the emergence of Internet commerce, provide opportunities and threats to the property industry. This segmentation allows the Bank to identify those properties that are used as motor showrooms and obtain an idea of the exposure created by the sale of motor cars through the Internet.

To enable the Bank to segment the property portfolio in this manner, each and every property must be recorded accurately within the system. In addition to understanding the segmentation of the property portfolio, the Bank requires easy access to the property details to determine specific property attributes without having to refer to manual files for the valuation.
The lack of property information and the ability to view it from different perspectives severely restrict the Bank's ability to manage the risks associated with property finance proactively.

5.3.3.1 Property search

The primary purpose of the property search function is to provide the Bank with the ability to identify specific properties or groups of properties meeting certain criteria.

Typical search criteria are one or more of the following:

- erf number and township
- street number, street name and township
- owner's name
- property type and township

The scope of the search is narrowed by the amount of information provided to the system. For instance, entering the erf number only will return all the properties within the portfolio with that erf number, which is not very useful. However, by including the township, a specific property is displayed.

This facility is very useful and can be utilised to:

- identify possible comparable properties in a particular area
- identify all properties in outlying towns, which can be reviewed by a valuer before visiting the area, thus making the trip far more productive
- identify properties bonded to the Bank in a specific street where civil unrest or a major fire has occurred
- extract a segment of the property portfolio based on the property type and area

The search functionality provided by this facility is limited only by the amount of information the Bank is prepared to capture into the system and by providing the applicable search criteria.
5.3.3.2 Property and title deed details

The property and title deed details are essentially extracted from the valuation and the title deed, and provide a summarised view of the factual information and the valuer’s commentary.

The principle of only capturing client details into the system once and the reasons for doing so also apply to property. Any duplication of a property will also result in the distortion of any segmentation output relating to property.

Once the property information is captured into the system, it is linked to an account number, and to the number of each subsequent account created that utilises the same property as security. This allows the system to provide accessibility to the same property information, irrespective of which account the enquiry is made from. Likewise, an enquiry into the property will enable the system to display all the accounts associated with that property.

Property information is used in daily activities such as:

- property searches (segmentation and identification)
- client summary reports (properties used as security for the loan)
- property reviews reports (properties in a particular area that must be inspected)
- arrears reports (value, LTV, property type, location and valuation date)
- conveyancing (title deed numbers and dates)

The property and title deed information is a cornerstone of understanding the business of property finance. The capturing and maintenance of this information provides the Bank with meaningful, useful and effective methods of managing the Bank’s risks and exposures.
5.3.4 Security

The capture of all loan-related security information is important, as it completes the Bank’s internal information requirements and provides the last segment of the holistic view required to manage the operations of property finance.

**Mortgage bond details:** the mortgage bond is the primary security used by banks to recover debt in the case of a Client defaulting on loan obligations. Each mortgage bond must be linked to the property it is associated with, which in turn is linked to the corresponding account (debt) and Client. This enables the Bank to quickly access the relevant bond details associated with the loan to determine risk exposures, answer audit queries and support conveyancing activities.

**Insurance details:** the purpose of this module is to enable the Bank to ensure that all mortgaged properties are adequately and continually insured. (A disaster that destroys the income-producing potential of an uninsured property renders the mortgage bond associated with that property ineffectual, as the value has been reduced or removed). The system assists in recording insurance information, scheduling and producing insurance broker confirmation letters (confirmation that insurance is in place or has been renewed) and ensuring that the insured amount adequately covers the replacement cost of the buildings.

**Surety and suretyship details:** Sureties and associated suretyships provide the Bank with secondary security. This module provides the facility to record this security together with the extent (amount) of the security and the connection or relationship between surety obligations. A suretyship may have multiple sureties, whereby each surety could have joint liabilities (each surety could be held liable for the total suretyship amount) or separate liabilities (each surety could be liable for a specific amount only). The system provides the mechanism to record these nuances, giving the Bank online access to complete and relevant surety information.

**Pledge and cession details:** this module records the exact nature of security being pledged or ceded to the Bank (shares, insurance policies).
The complete and accurate capture of security information linked to each account is essential to the Bank, as it provides detailed security information on each loan within the portfolio. The Bank’s exposure is therefore easily determinable, which helps to support the decision-making process.

5.3.5 Workflow

A workflow system is an electronic method of co-ordinating, controlling and directing the resources required to complete a particular business process. Every process can have interrelations with people, systems, documents and policies (control statements) that can be managed through an automated workflow system.

Over the last ten years technological advances in networking, imaging and document-management systems, office automation and process management have enhanced the effectiveness of workflow systems, which provide the catalyst to managing these advances in a co-ordinated and cohesive manner.

The processes within property finance are well suited to workflow system. The following attributes can be demonstrated using the loan application process as an example, specifically the valuation activity:

- **Defined:** the process is defined in that all activities are documented from application to disbursement.
- **Predictable:** the sequence is predictable because of the process definition, which states that the valuation must be completed after the application is captured and before the credit assessment activity.
- **Policy driven:** The credit policy (rule) might state that the Bank will only accept applications where the LTV is less than 80%. That being the case, the workflow system would direct the process back to the relationship manager for further security.
- **Role orientated:** each activity is the responsibility of a role specialist such as the valuer. The workflow system might, depending on the rules within the system,
schedule the valuation to be completed by a particular valuer or add it to a pool of outstanding valuations that will be assigned to a valuer by the valuations manager through the workflow system. The information that is required by the valuer to perform the valuation could already be resident within the system, should the relationship Manager, during the application activity, have captured it (policy driven).

- **Event executed:** Once the valuation is captured into the system, this event executes the next activity (credit assessment) and notifies the credit analyst of a pending work activity. Where the workflow system includes the use of imaging, the Client’s financial statements might already have been digitised (scanned) and included with the work activity.

The correct implementation of a workflow system provides the control, timing and information requirements to each role player in the process that enable the activity to be completed correctly. It also provides for exception and error handling through recovery processes or feedback loops and the visibility of each loan in the process to authorised users.

The benefits of workflow are not limited to process and resource management but also extend to the extraction of management information regarding efficiencies such as lead-time analysis from application to disbursement, loan approval success rates and the volume of new business emanating from the regions.

Banks not utilising workflow systems are disadvantaged as they are unable to determine, in real time, the impact of current and historic processes on their business. Other than compiling manual reports and schedules (cost and time implications) they cannot determine where bottlenecks are occurring or the impact of process efficiency improvements. In short, they are left with guesswork, intuition and experience instead of empirical, measurable evidence to substantiate process improvements.
5.3.6 Automated document processing

Automated document processing comprises the use of electronic document templates that contain standard wording, or the wording can be generated from parameter-driven user options, that extracts data from the Bank’s core lending system to populate variable fields within the document (e.g. client name).

Automated document processing is not the use of templates that are populated by user input; automation is only added when data is extracted (not typed) from an existing source such as a database. The use of a template only requires information to be manually captured into the document, which can lead to transposing errors and does lead to increased overhead costs and data duplication.

The document exhibits highlighted in chapter 3 (application processes) are good examples of automated document processing. The display below depicts the principle of extraction and automatic population as used in those exhibits.

![Diagram of automated document processing]

This facility can be utilised in all forms of documentation produced within the property finance environment, from the loan agreement to a suretyship. The success of this type of document production is dependent on the quality and quantity of data that is stored within the Bank’s systems. The lack of extractable data will require user input and so degrade the benefits inherent in this type of system, which are:
- **Standardisation**: each document template is created as a master copy from which all subsequent creations are generated. This standard wording and format reduces the risks of fraud and clause exclusion, and increases operation efficiencies through familiarity with the location of information within a document.

- **Change management**: any changes to existing document templates only have to be made to the master copy which, when implemented, is automatically used in all subsequent document generations.

- **Unique data source**: the variable information within a document is retrieved from a single data source, which eliminates duplication of storage and capture.

- **Ease of use**: since the production of a document is automated it does not require specialist skills to create a document, and thus this previously arduous task is removed from the administration workload.

- **Speed of production**: the documents are produced in real time without the inherent time delays experienced in a typing pool.

- **Control**: access to the system can be restricted to trained and qualified users.

Clearly, this facility not only improves internal efficiencies and processes, but also improves service levels to clients through faster turnaround times and familiarity with the Bank's documentation (particularly in the case of clients that do repeat business).
5.4 MANAGEMENT INFORMATION SYSTEMS

5.4.1 Management information systems in context

Information is at the heart of any organisation or business and is essential in the managerial functions of planning, organising, leading and controlling. Without meaningful information, a business would soon cease to function effectively and ultimately collapse, as the managerial decision-making process has no factual foundation.

Organisations have three main levels of management that are segmented by the type of decisions that have to be made within the business environment. These are the operational, tactical and strategic management levels. At each level there is a different focus and therefore different kinds of information are required for decision making. These managerial levels can be defined as follows:

- **Operational management**: operates at a supervisory level
- **Tactical management**: operates at middle-management level
- **Strategic management**: operates at executive or general management level

The table below provides the characteristics associated with the different levels of management information:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Operational</th>
<th>Tactical</th>
<th>Strategic planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Regular, repetitive</td>
<td>Mostly regular</td>
<td>Often ad hoc, infrequent</td>
</tr>
<tr>
<td>Time period covered</td>
<td>The past, historic</td>
<td>Comparative</td>
<td>Predictive of the future</td>
</tr>
<tr>
<td>Level of detail</td>
<td>Very detailed</td>
<td>Summaries of data</td>
<td>Summaries of data</td>
</tr>
</tbody>
</table>
The typical management information required in property finance will be discussed below using these characteristics as the framework.

5.4.2 Operational management information

Operational management (supervisory level) requires a structured decision-making process, usually based on policies and rules that govern operational processes and supported by information that is historic, regular, accurate, detailed and current. For example, if an account has gone into arrears, the credit supervisor must decide, based on policy and the information available, whether to send a letter of demand or to hand the loan over to the Bank’s attorneys for legal action.

The medium used is traditionally paper-based, which provides the Bank with a permanent record of information. The following table provides an example of the reports used in the operations of property finance, which can be broadly categorised into control, service and system updates.

<table>
<thead>
<tr>
<th>Report name</th>
<th>Purpose</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans in excess of approved amount</td>
<td>To identify loans which have, as a result of unpaid interest, exceeded the loan amount</td>
<td>Weekly</td>
</tr>
<tr>
<td>Outstanding guarantees</td>
<td>To ensure the all guarantees are carefully scrutinised and managed</td>
<td>Monthly</td>
</tr>
<tr>
<td>Service</td>
<td>Description</td>
<td>Frequency</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Arrears</td>
<td>To manage the non-payment of interest and capital obligations</td>
<td>7th and 23rd of each month</td>
</tr>
<tr>
<td>Manual adjustments to arrears</td>
<td>To report on all manual adjustments, by staff, on system-generated arrears</td>
<td>Monthly</td>
</tr>
<tr>
<td>Fixed-rate loans</td>
<td>To ensure that the Client is timeously advised of prime-linked interest rate when the fixed rate expires</td>
<td>Monthly</td>
</tr>
<tr>
<td>Documents in transit</td>
<td>To ensure that the whereabouts of security documents such as title deeds are known (e.g. sent to attorneys for a conveyancing matter)</td>
<td>Monthly</td>
</tr>
<tr>
<td>Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statements</td>
<td>To provide the Client with a historical record of payments and interest debits to the loan account</td>
<td>Monthly or biannually</td>
</tr>
<tr>
<td>Audit certificates</td>
<td>To provide the Client’s auditors with a certificate detailing security details and interest charged for a particular period</td>
<td>On request</td>
</tr>
<tr>
<td>Instalment notification</td>
<td>To inform the Client of any change to instalments amounts due (normally as a result of an interest rate change)</td>
<td>As required</td>
</tr>
<tr>
<td>Credit balances</td>
<td>To repay clients who have paid in excess of their obligations</td>
<td>Monthly</td>
</tr>
<tr>
<td>System updates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFTS</td>
<td>To update the Client’s ledgers with electronic money transfers such as ACB</td>
<td>Daily, monthly</td>
</tr>
</tbody>
</table>
EFTS reversals | To reverse transactions to the Client's ledgers where the Bank has rejected money transfers | Daily
---|---|---
Interest debits | To calculate and debit the Client's ledgers with interest due | Monthly
Post-dated vouchers | To update the Client's ledgers with post-dated vouchers now due for posting | Daily
Interest rate change | To calculate the Client's new instalment and record it within the system when the prime rate changes | As required
Arrears | To calculate and record due and paid amounts | Daily

**Exhibit 5.9 Operation information requirements and timing**

The latest trend by some institutions is to provide these paper-based reports through their internal Intranet, i.e. electronically. This method of report distribution has a number of benefits that include:

- **Costs**: the reduction of printing, paper, collation and distribution costs
- **Timing**: the information is available, nationally, almost immediately
- **Relevance**: the information is current and not tainted by the time (due to updates) it normally takes between production and delivery
- **Storage**: electronic storage and retrieval of information is far more effective and efficient than maintaining a manual filing system

Whatever the medium used to provide this information, it is critical to ensure that the operations of the Bank are judiciously and meticulously carried out. Operational information is largely derived from the transaction processing system. This necessitates that correct information be accurate and relevant and made available to
line management and supervisors timeously in order for them to maintain the integrity of both the system and operations of the Bank.

### 5.4.3 Tactical management information

Tactical management (middle management) operates and supports the business at a functional level such as marketing and valuation, rather than being involved at the process execution level found in operational management. The information requirements at this level are aimed at performance, monitoring and controlling and are delivered by the management information system by summarising and aggregating transactional data.

This ensures the effective management or tactical positioning of functions from both an internal and external (market and regulatory) perspective. Examples of this information would be new business generated by the Relationship manager, valuations performed per month or interest rate margin achieved by product type.

The table below provides further examples of the type of reports used in property finance at the tactical level:

<table>
<thead>
<tr>
<th>Report name</th>
<th>Purpose</th>
<th>Production frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans granted</td>
<td>To assess portfolio growth and income potential, detailing information such as size of loan, interest margin and risk category</td>
<td>Monthly</td>
</tr>
<tr>
<td>Loans instructed</td>
<td>To provide Treasury with a clear indication of disbursement size and timing thereof</td>
<td>Weekly</td>
</tr>
<tr>
<td>Funding</td>
<td>To determine actual interest margin at loan and portfolio</td>
<td>Monthly</td>
</tr>
<tr>
<td>level</td>
<td>Committed funds</td>
<td>To provide Treasury and management with detail regarding loans registered but not yet taken up</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>New business</td>
<td>To judge the effectiveness of relationship managers in achieving their sales targets</td>
<td></td>
</tr>
<tr>
<td>Income statement</td>
<td>To assess the performance of the business against budgeted projections</td>
<td></td>
</tr>
<tr>
<td><em><em>Regulatory (DTI</em>)</em>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>To indicate the maturity profile of the portfolio, segmented into short, medium and long term</td>
<td></td>
</tr>
<tr>
<td>Capital adequacy</td>
<td>To indicate the capital adequacy of the Bank per the portfolio size and segment</td>
<td></td>
</tr>
<tr>
<td>Interest rate risk</td>
<td>To indicate the interest rate profile of the portfolio that is segmented by fixed and variable rate loans</td>
<td></td>
</tr>
<tr>
<td>Credit risk</td>
<td>To indicate the arrears profile of the Bank’s portfolio segmented into time frames</td>
<td></td>
</tr>
</tbody>
</table>

* Reserve Bank reporting requirements from deposit-taking institutions

Exhibit 5.10  Performance and legal information requirements
5.4.4 Strategic management information

Strategic management (executive or general management) are the long-term planners of the Bank and their focus is therefore future orientated. The information requirement is generally externally orientated, focusing on delivering summarised detail on economic, competitor, world-best practices and emerging regulations and trends in technology and product-delivery channels. The information requirements at this level are therefore unstructured, unpredictable and usually non-repetitive.

Clearly, this does not lend itself to support from traditional systems development, which generally requires totally different circumstances (structured processes, predictable and standard algorithms, repetitive in nature).

This does not mean that information technology cannot play a role in supporting the information requirements of property finance strategic management. Each Bank should have a functionary who is able to pool diverse sources of information and model the scenarios proposed on the parameters submitted by management.

This includes the use of decision-support models that are task specific and ad hoc in nature, which are produced to provide predictions on different scenarios. These models provide "what if"-type functionality that allows the model parameters to be changed, thereby generating a different result. This gives management a multi-dimensional perspective and allows them to predict the possible outcome of proposed initiatives.

An example of this is the Collective Investment Schemes Act (see the section on participation bonds in chapter 6) that might come into being in the near future. Management must decide whether to provide this product to the market and initiate the necessary planning and goal setting in order to position the Bank effectively.

To do this they need to predict and understand the effect this action will have on the company. There is no model to do this and therefore it must be created, at short notice, by factoring in the effects of cost, resource and growth predictions. This
facility or functionary is expensive and the tangible benefits will only be recognised in the longer term, making cost justification difficult. Nevertheless, however intangible the benefits may be, management cannot rely on intuition and guesswork in scenario-planning exercises. The use of models utilising reasonable assumptions, calculations and projections provides a far greater sense of comfort regarding decisions that will affect the future of the company.
5.5 DECISION SUPPORT SYSTEMS

5.5.1 Geographical information systems (GIS)

Geographical information systems are used for the storage, retrieval, mapping and analysis of geographical or spatial data. They provide a valuable tool for the integration and display of diverse sources of information that are linked via map coordinates (longitude and latitude) and associated data keys. The sources of information used in property finance include topographic maps, scanned or digitised pictorial and photographic references, deeds offices, local authorities, street maps, population statistics and internal bank information.

These sources of information are layered into the GIS software database, providing the user with an aerial view of property-related information that is available from a national, regional, suburb and individual property perspective.

In the example below, the dot represents a residential property that has been found by the system based on an input street address parameter (my home address). The information displayed is sourced from the deeds office (updated into the GIS monthly). Likewise, information from the local authority (e.g. zoning), other deeds office information (bonds) and a photograph of the property are also available at the push of a button. This provides the Bank as well as its clients with a very useful tool in assessing risk, valuations, and negotiations with sellers.
Exhibit 5.11 Example of output from a GIS

This view can be further enhanced by providing statistical information such as:

- **Market share**: this provides the Bank with a complete view of its market share in relationship to all other banks, depicting location, number and bond amounts.

- **Property transfers**: this enables the Bank to determine the activity level of properties being bought and sold. It provides an indication of prosperity or stagnation within an area.

- **Arrears**: this is internally mapped bank-specific information, providing prima facie evidence of market support for properties in that particular area. Clearly, the higher the arrears, the stronger the case not to pursue new business emanating from the area.

- **LTV**: the loan-to-value view highlights the Bank’s exposure, providing an indication of the risk, by property, within an area.

- **Relationship managers**: marketing staff often have to visit outlying areas or towns, and this view provides relationship managers with a clear map of where, who and how many clients they have and can therefore potentially visit to make the most of an otherwise unproductive long trip.
The exhibit below provides the user with a market share view of the Cape Town CBD:

Exhibit 5.12 Enhanced GIS output depicting market share

The use of GIS is limited only to the useful information the Bank is prepared to load into the system. This type of system is powerful but costly and requires regular updates to ensure that the information is reliable, relevant and available. However, once committed to the use of this tool, it provides management with a different view of information that can be extremely helpful in the decision-making process.
5.5.2 Risk categorisation

In an effort to categorise the risks associated with the Bank's loan portfolio, each loan is risk-rated. The method of categorisation varies from institution to institution, yet the objective of this exercise is the same and is discussed fully in the chapter on risk (chapter 7).

The following model provides the Bank with a common methodology to assist in determining the risk category of each loan. Its purpose is to provide a standard rating mechanism for each risk segment (borrower's profile, sustainability of income, loan-to-value, building type, location and quality).

**RISK CATEGORISATION**

**BORROWER:**

<table>
<thead>
<tr>
<th>BORROWER'S PROFILE</th>
<th>SUSTAINABILITY OF INCOME</th>
<th>LTV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undoubted</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Low risk</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Acceptable</td>
<td>2 or 3</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Marginal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>High risk</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Score</td>
<td>4</td>
<td>Score</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk</td>
<td>Low risk</td>
</tr>
<tr>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Marginal</td>
<td>Marginal</td>
</tr>
<tr>
<td>High risk</td>
<td>High risk</td>
</tr>
<tr>
<td>Score</td>
<td>Score</td>
</tr>
</tbody>
</table>

**QUALITY OF BUILDING**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>BORROWER</th>
<th>SUSTAINABILITY</th>
<th>LTV %</th>
<th>TYPE</th>
<th>LOCATION</th>
<th>QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw score</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Weighting</td>
<td>15</td>
<td>25</td>
<td>15</td>
<td>10</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Score</td>
<td>60</td>
<td>75</td>
<td>60</td>
<td>30</td>
<td>75</td>
<td>30</td>
</tr>
</tbody>
</table>

Total score 330
Rating B

**Exhibit 5.13 Risk categorisation model**

While each risk segment still requires subjective reasoning to determine each score, the guidelines provide uniformity and structure in which to make each decision. The model then utilises the input score and weighting applied by the Bank to each risk segment to determine the rating total, which in turn equates to a risk category.
5.5.3 Decision support models

There is a wide variety of decision-support models used in property finance. Those listed below are standard in this business and most commonly used:

**Loan profitability:** the market largely determines the pricing (interest rate) charged to the Client. Competition between banks is high and clients “shop around” for the best interest rate. However, the correct method of determining the pricing should be risk related, i.e. price for risk.

Each loan is risk-rated or categorised (see above) and banks determine the minimum interest rate acceptable for each category of loan. This is achieved through the utilisation of the loan profitability model, which calculates the returns the Bank can expect from each loan. The term of the loan, interest rate, funding rate, fees, general provisioning requirements, cost of capital and expenses are used to calculate the return on assets, return on equity and internal rate of return for each loan.

These hurdle ratios must be met or exceeded for the loan to contribute positively to the overall performance objectives of the property finance division. The market does have a direct influence on determining these ratios, and if these hurdle ratios and rates are set too high, the Bank prices itself out of the market. The model provides for a documented, standard and consistent method of determining the profitability of each loan and thereby supports the price decision-making process.

**Portfolio maturity profile:** the model allows the Bank to understand the timing and extent of the portfolio repayment. Each loan has an amortisation schedule that provides an expected capital repayment profile over the term of the loan. Utilising this profile, the entire portfolio’s capital repayment profile can be projected along with the expected interest income, giving the Bank a strong indication of inflows that will be generated from the current portfolio.

These inflows are segmented into monthly and yearly time buckets, clearly highlighting areas of concern (major repayments, sharp drop-off in the portfolio size)
thereby allowing management to proactively provide correct measures to reduce future performance problems. The model further provides for the input of extraordinary repayments (early repayment of debt) based on historical or known facts, thereby enhancing the model's ability to provide realistic predictions.

This model is particularly helpful in commercial and industrial property finance, where the mixture of loan terms varies considerably from short-term funding of constructions (two to three years) to the longer term investment-type loans (10–20 years). This is not conducive to a smooth maturity curve, but rather one that is characteristically saw-shaped, resulting in a haphazard interest income profile. Management is then able to budget and set performance targets based on reliable predications to reduce the effects of an unstable income profile.

**Budgeting:** the most commonly used model across all businesses. This facility allows management to model the future performance of the organisation or division based on input income and cost parameters.

From a property finance perspective, the output of the portfolio maturity model is used together with new business and margin projections (by risk category) to budget for interest income, keeping in mind that the risk category-segmented portfolio produces a different income stream for each risk category (see loan profitability model above).

This risk category segmentation of the current and predicted future portfolio allows the model, based on input percentage parameters (by risk category), to calculate general provisioning for the portfolio. The fees earned by the Bank are largely from new business through the levying of administration and valuation fees, which are calculated from the new business predictions input into the model.

Operation expenses are generally the same as for most business, with the exception of professional fees that are required to pay for the services of attorneys (opinions, litigation and conveyancing matters). The model, utilising historical, head count and inflationary parameters, generates the remainder of the expenses.
The model provides substantiated predictions, thereby assisting management in setting realistic performance targets for a predetermined future (e.g. biannually or annually).
5.6 OBSERVATIONS AND CONCLUSION

Of the major South African banks, only a small minority can claim to have a fully functional and integrated information system to support the business of property finance. Most have a spread of “hand-me-downs” that use Houdini-like methods to squeeze limited functionality out of old legacy systems, which were originally designed to support the businesses of home loans and current accounts.

The consequence of this lack of strategic foresight and capital investment is a global technical capability that is supported by archaic information systems, resulting in the inability of the business to effectively and efficiently “model the real world”. New products and innovations are often stifled by the incapacity of the bank’s systems to support them or the costs associated with system enhancement.

Clearly, those banks positioned to adapt to a constantly changing market have attained a significant strategic advantage that emerges from a world-class support service, rather than the more visual and popular product innovation source.

Strategic planning is an attempt by management to position business for the desired future of the company. Information systems provide the support required to implement any actions planned by management and should therefore be an integral part of the strategic planning process. Planning around the inadequacies of support systems will at best provide the company with a one-dimensional approach; at worst the company will be unable to deliver the market requirements.
6 PROPERTY FINANCE PRODUCTS

6.1 INTRODUCTION

The spread of client funding requirements ranges from "owner occupiers", who typically prefer simple funding structures, to "corporate" clients, who require sophisticated funding structures to limit their tax liabilities or funding costs.

It is these requirements that create the market in which property finance operates. Banking competitors are forced to satisfy the needs of the market, particularly that segment that is aligned to their strategic risk requirements. There is no sustainable competitive edge in this industry with regard to products; while certain structures may be the flavour of the month, they are soon copied and become common place.

Those banks able to continually provide the market with new and innovative funding mechanisms enjoy the resultant positive market perception and are the first port of call for new projects. However, this comes with a cost because, as market leaders, they also inherit the structure risks and research and development costs.

Each bank holds a lending book (funded properties) that produces an income stream. To ensure a relatively smooth cash flow, banks must provide for a spread of products, which guarantees both fee and margin income. A single product will produce an erratic income stream when the Bank experiences major repayments or an unexpected negative turn in the economic cycle occurs.

The Bank’s product range is therefore driven by strategy, the needs of the market and the ability of its personnel.

This product range can be categorised into four broad areas, which are discussed in detail later in this chapter:
**Standard products:** these facilities can be termed "off-the-shelf" products that are common to most financial institutions and easily understood and used by the majority of a Bank’s client base.

**Structured debt:** the use of interest rates and interest rate derivatives to maximise the yield potential of property investments and to hedge against gearing risks. These interest rate instruments are usually "add-ons" to the standard product range that provide clients with additional gearing functionality in structuring their debt.

**Structured finance:** this form of finance is used to minimise the tax burden of the Client through income-shielding mechanisms.

**Structured funding:** the Bank’s use of alternative sources of funding to support its loan portfolio.

To understand these products, it is important to gain insight into the fundamentals of how time, money and interest rates are interrelated, and the impact they have on one another.
6.1.1 The time value of money

The time value of money, also known as the "theory of compound interest", is fundamental to understanding the profitable utilisation of money. There are several factors that influence the time value of money and they should be considered carefully when making any investment decision.

Opportunity cost: the cost associated with the loss of utilising funds in the generation of income. Any amount paid could alternatively have been used in the generation of profit (e.g. trading) or as an investment; therefore the opportunity cost equals the yield of that investment or the profit foregone.

Inflation: the diminishing purchasing power of money. Simply put, an inflation rate of 10% per annum results in the current purchasing power of R10 being reduced to R9 in a year's time. In this scenario, investing R10 at an interest rate of 10% p.a. creates R1 of interest, resulting in a total of R11. However, the effect of inflation (@ 10% p.a.) reduces the purchasing power to R9.90 and, by adding the tax dimension on the R1 interest received, leaves the investor in a worse position a year later.

Risk: there is the risk that the money invested will not be repaid. This must be factored into the investment decision process. One only has to recall the tragic consequences faced by pensioners when the Masterbond Participation Bond Scheme collapsed in the early 1990s. Clearly, the higher the risk of not being repaid, the higher the return an investor should seek on the invested amount.

The following terminology has to be understood in order to comprehend the concept of time value of money:

Capital: wealth (which can be converted into money) available for employment in the production of further wealth.
**Interest**: the amount of money received, usually quoted as a percentage of the capital lent or invested (**interest rate**). “Interest is therefore the remuneration or price paid for borrowed money or the use of capital” (Maritz, 1983:156).

**Term of investment or loan**: the period of time for which money is invested or borrowed. The normal term of a home loan is 20 years; however, the **interest period** is usually monthly, and interest is calculated on the daily balance and debited (capitalised) monthly.

**Interest period**: the timing of interest payments, which usually take place monthly, quarterly, half yearly or annually. These interest payments are usually paid at the end of each period (paid in arrears), but can be paid at the beginning of each period (paid in advance). There are opportunity cost implications regarding the payment in arrears or in advance:

*Interest paid in arrears*: in this case the investor has to wait for the contract period to expire before receiving the interest payment, and this incurs opportunity cost. The debtor, on the other hand, enjoys the use of the money for the contract period and incurs a reduced opportunity cost.

*Interest paid in advance*: in this case the interest payable to an investor is immediately available for use and as such the opportunity cost is reduced. From a debtor’s point of view, interest paid in advance results in an opportunity cost as the money paid to service the interest obligation is no longer available for productive use.

**Compounding interest**: the periodic conversion of interest to capital. This means that as and when interest payments are made, they are not paid out to the investor but rather added to the amount invested, thereby immediately increasing the capital amount and the interest payable the next time interest is calculated. From a debtor’s perspective this is termed **capitalisation of interest**, whereby the interest calculated is added to the outstanding capital (or loan amount).
Nominal interest rate: the rate quoted as the annual interest rate. By way of an example, R100 earning a nominal interest rate of 12% payable annually in arrears would result in the investor having R112 at the end of a year.

R100 * 12% plus the original R100 investment = R112.

However, when the interest obligations are payable monthly, quarterly or biannually, the compounding effect of interest on capital changes the effective interest rate.

Effective interest rate: owing to the compounding effect of adding the monthly, quarterly or biannual interest to the capital, the effective interest rate is higher than the nominal interest rate. Using the above example where R100 is invested at a nominal interest rate of 12%, compounded periodically in arrears, the following results:

<table>
<thead>
<tr>
<th>Nominal Interest Rate 12%</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Opening Capital</td>
<td>Monthly Interest</td>
<td>Opening Capital</td>
</tr>
<tr>
<td>1</td>
<td>100.00</td>
<td>1.00</td>
<td>100.00</td>
</tr>
<tr>
<td>2</td>
<td>101.00</td>
<td>1.01</td>
<td>100.00</td>
</tr>
<tr>
<td>3</td>
<td>102.01</td>
<td>1.02</td>
<td>100.00</td>
</tr>
<tr>
<td>4</td>
<td>103.03</td>
<td>1.03</td>
<td>103.00</td>
</tr>
<tr>
<td>5</td>
<td>104.06</td>
<td>1.04</td>
<td>103.00</td>
</tr>
<tr>
<td>6</td>
<td>105.10</td>
<td>1.05</td>
<td>103.00</td>
</tr>
<tr>
<td>7</td>
<td>106.15</td>
<td>1.06</td>
<td>106.09</td>
</tr>
<tr>
<td>8</td>
<td>107.21</td>
<td>1.07</td>
<td>106.09</td>
</tr>
<tr>
<td>9</td>
<td>108.29</td>
<td>1.08</td>
<td>106.09</td>
</tr>
<tr>
<td>10</td>
<td>109.37</td>
<td>1.09</td>
<td>109.27</td>
</tr>
<tr>
<td>11</td>
<td>110.46</td>
<td>1.10</td>
<td>109.27</td>
</tr>
<tr>
<td>12</td>
<td>111.57</td>
<td>1.12</td>
<td>109.27</td>
</tr>
<tr>
<td></td>
<td>112.68</td>
<td>1.12</td>
<td>112.55</td>
</tr>
</tbody>
</table>

| Effective Rate | 12.68 | 12.55 | 12.36 |

Exhibit 6.1 Nominal vs effective rates
As can be seen from the above example, there is quite clearly a significant distinction between nominal and effective rates. The interest period is also a significant factor; all things being equal, the shorter the interest period, the higher the effective rate through the compounding effect of capitalised interest.
6.1.2 Gearing

Gearing is integral to the business of property finance. Without it there would be no business. Gearing is the ratio of debt capital to equity capital, that is the ratio of money borrowed to the amount of the Client’s own money invested in the property.

Gearing works well where the inflationary growth (rental escalations) is higher than the cost of the gearing. This debt leverage effect is one of the ways the property investor increases wealth. Utilising debt to increase the return on investment is not without inherent risks, however.

**Income risk:** one of the primary risk factors in property investment is that of tenant stability and a concurrent steady cash flow. This cash flow, in a geared situation, is used in full or part to repay the debt. Any shortfall occurring would require the property investor to subsidise, out of own funds, the debt repayment.

For example: two investors acquire similar properties for R5 million, both generating gross rentals of R1 million. Investor A uses R4 million debt whereas Investor B uses own equity (no gearing).

In a fully tenanted situation, Investor A (column 1) receives a higher yield than Investor B (column 2) does. However, should one tenant default on a R250 000 lease obligation as a result of liquidation, income risk becomes a reality and Investor A receives a negative yield, whereas Investor B still receives a positive yield.
### Exhibit 6.2 Gearing level comparisons

Property finance institutions are well aware of the risks associated with gearing and the level of gearing that drives the magnitude of the risks inherent in a loan. Clearly, the higher the gearing in a property, the higher the risks associated with the loan and therefore the higher the funding costs (interest rate) to the Client.

Another positive aspect of utilising gearing is that there is a reduction in tax liability, as interest is serviced out of pre-tax income. Using the above example, Investor B will pay far more tax than Investor A, but will have the comfort of a far more stable return profile.

<table>
<thead>
<tr>
<th></th>
<th>INVESTOR A</th>
<th></th>
<th></th>
<th>INVESTOR B</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>PGI</td>
<td>1000000</td>
<td>1000000</td>
<td></td>
<td>1000000</td>
<td>1000000</td>
<td></td>
</tr>
<tr>
<td>Less Vacancies</td>
<td>0</td>
<td>250000</td>
<td></td>
<td>0</td>
<td>250000</td>
<td></td>
</tr>
<tr>
<td>EGI</td>
<td>1000000</td>
<td>750000</td>
<td></td>
<td>1000000</td>
<td>750000</td>
<td></td>
</tr>
<tr>
<td>Less Expenses</td>
<td>200000</td>
<td>200000</td>
<td></td>
<td>200000</td>
<td>200000</td>
<td></td>
</tr>
<tr>
<td>NOI</td>
<td>800000</td>
<td>550000</td>
<td></td>
<td>800000</td>
<td>550000</td>
<td></td>
</tr>
<tr>
<td>Less Interest</td>
<td>600000</td>
<td>600000</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Net Profit</td>
<td>200000</td>
<td>-50000</td>
<td></td>
<td>800000</td>
<td>550000</td>
<td></td>
</tr>
<tr>
<td>Yield on Investment</td>
<td>20%</td>
<td>-5%</td>
<td></td>
<td>16%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Interest Rate</td>
<td>15%</td>
<td>15%</td>
<td></td>
<td>15%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Bond</td>
<td>4000000</td>
<td>4000000</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Purchase Price</td>
<td>5000000</td>
<td>5000000</td>
<td></td>
<td>5000000</td>
<td>5000000</td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>1000000</td>
<td>1000000</td>
<td></td>
<td>5000000</td>
<td>5000000</td>
<td></td>
</tr>
</tbody>
</table>
6.2 STANDARD PRODUCTS

These facilities can be termed "off-the-shelf" products that are common to most financial institutions and easily understood and used by the majority of a Bank's client base.

6.2.1 Amortised loans

This is the most common form of loan repayment. Its purpose is to repay both capital and interest over a specified period of time, by way of a regular, fixed instalment. The benefit of this product is that both the Bank and the Client can rely on a fixed repayment profile, which reduces administration costs significantly.

Historically, banks provided a standard 20-year repayment option. However, owing to the volatility of the tenant market in the last five years, the location and lease terms are major factors to be considered in determining the term of a loan.

Short leases in an area that is predicted to be a growth node for a period of 10 years should receive favourable consideration in matching the term of the loan. Conversely, a quality tenant with a long lease in a mature area should receive the same consideration. In both scenarios, the Bank would be comfortable that both properties represent stable or increasing income profiles, which would have a positive influence on the serviceability of the loan repayment obligation.

The following exhibit provides a schedule depicting the amortisation of a loan over a period of 10 years. For ease of reference interest is charged and instalments are due annually in arrears.
### Loan Amount: 4,000,000
### Period of Loan: 10 Years
### Interest Rate: 15%
### Payments: 1 per year

<table>
<thead>
<tr>
<th>Year</th>
<th>Opening Balance</th>
<th>Interest Charged</th>
<th>Instalment Paid</th>
<th>Capital Portion</th>
<th>Closing Balance</th>
<th>Net Rental</th>
<th>Deficit or Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>4,000,000</td>
<td>600,000</td>
<td>-797,008</td>
<td>-197,008</td>
<td>3,802,992</td>
<td>700,000</td>
<td>-97,008</td>
</tr>
<tr>
<td>Year 2</td>
<td>3,802,992</td>
<td>570,449</td>
<td>-797,008</td>
<td>-226,559</td>
<td>3,576,432</td>
<td>756,000</td>
<td>-41,008</td>
</tr>
<tr>
<td>Year 3</td>
<td>3,576,432</td>
<td>536,465</td>
<td>-797,008</td>
<td>-260,543</td>
<td>3,315,889</td>
<td>816,480</td>
<td>19,472</td>
</tr>
<tr>
<td>Year 4</td>
<td>3,315,889</td>
<td>497,383</td>
<td>-797,008</td>
<td>-299,625</td>
<td>3,016,264</td>
<td>881,798</td>
<td>84,790</td>
</tr>
<tr>
<td>Year 5</td>
<td>3,016,264</td>
<td>452,440</td>
<td>-797,008</td>
<td>-344,569</td>
<td>2,671,695</td>
<td>952,342</td>
<td>155,334</td>
</tr>
<tr>
<td>Year 6</td>
<td>2,671,695</td>
<td>400,754</td>
<td>-797,008</td>
<td>-396,254</td>
<td>2,275,441</td>
<td>1,028,530</td>
<td>231,521</td>
</tr>
<tr>
<td>Year 7</td>
<td>2,275,441</td>
<td>341,316</td>
<td>-797,008</td>
<td>-455,692</td>
<td>1,819,749</td>
<td>1,110,812</td>
<td>313,804</td>
</tr>
<tr>
<td>Year 8</td>
<td>1,819,749</td>
<td>272,962</td>
<td>-797,008</td>
<td>-524,046</td>
<td>1,295,703</td>
<td>1,199,677</td>
<td>402,669</td>
</tr>
<tr>
<td>Year 9</td>
<td>1,295,703</td>
<td>194,356</td>
<td>-797,008</td>
<td>-602,653</td>
<td>693,051</td>
<td>1,295,651</td>
<td>498,643</td>
</tr>
<tr>
<td>Year 10</td>
<td>693,051</td>
<td>103,958</td>
<td>-797,008</td>
<td>-693,051</td>
<td>0</td>
<td>1,399,303</td>
<td>602,295</td>
</tr>
</tbody>
</table>

#### Exhibit 6.3 Ability of rentals to meet loan repayment obligations

One of the major concerns of banks is the volatility of interest rates, particularly in South Africa, where rate movements or fluctuations can exceed 5% annually. Since the instalment is calculated at a point in time, the Bank will test the repayment profile using a higher interest rate, usually 2%, against the cash flow generated by the property. Any shortfall will be assessed in the light of the Client’s other income-generating capabilities. Expanding on the above example, using a test interest rate of 17%, the following exhibit illustrates the effect on the amortisation schedule:
<table>
<thead>
<tr>
<th>Opening Balance</th>
<th>Interest Charged</th>
<th>Instalment Paid</th>
<th>Capital Portion</th>
<th>Closing Balance</th>
<th>Net Rentals</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>4 000 000</td>
<td>680 000</td>
<td>-858 626</td>
<td>-178 626</td>
<td>3 821 374</td>
<td>700 000</td>
</tr>
<tr>
<td>Year 2</td>
<td>3 821 374</td>
<td>649 634</td>
<td>-858 626</td>
<td>-208 993</td>
<td>3 612 381</td>
<td>756 000</td>
</tr>
<tr>
<td>Year 3</td>
<td>3 612 381</td>
<td>614 105</td>
<td>-858 626</td>
<td>-244 522</td>
<td>3 367 859</td>
<td>816 480</td>
</tr>
<tr>
<td>Year 4</td>
<td>3 367 859</td>
<td>572 535</td>
<td>-858 626</td>
<td>-286 090</td>
<td>3 081 769</td>
<td>881 798</td>
</tr>
<tr>
<td>Year 5</td>
<td>3 081 769</td>
<td>523 901</td>
<td>-858 626</td>
<td>-334 726</td>
<td>2 747 043</td>
<td>952 342</td>
</tr>
<tr>
<td>Year 6</td>
<td>2 747 043</td>
<td>466 997</td>
<td>-858 626</td>
<td>-394 629</td>
<td>2 355 414</td>
<td>1 028 530</td>
</tr>
<tr>
<td>Year 7</td>
<td>2 355 414</td>
<td>400 420</td>
<td>-858 626</td>
<td>-458 206</td>
<td>1 897 208</td>
<td>1 110 812</td>
</tr>
<tr>
<td>Year 8</td>
<td>1 897 208</td>
<td>322 525</td>
<td>-858 626</td>
<td>-536 101</td>
<td>1 361 107</td>
<td>1 199 677</td>
</tr>
<tr>
<td>Year 9</td>
<td>1 361 107</td>
<td>231 388</td>
<td>-858 626</td>
<td>-627 238</td>
<td>733 869</td>
<td>1 295 651</td>
</tr>
<tr>
<td>Year 10</td>
<td>733 869</td>
<td>124 758</td>
<td>-858 626</td>
<td>-733 869</td>
<td>0</td>
<td>1 399 303</td>
</tr>
</tbody>
</table>

Exhibit 6.4 Ability of rentals to meet loan repayment obligations: interest rate stressed

In the above example, the Bank will be extremely concerned in years 1, 2 and 3, when there will be a shortfall in the property cash flow to service the loan. Should the Bank take a positive view of the Client’s ability to service the shortfall, the loan will receive close scrutiny during this period.

The interest rate volatility can be removed by fixing the interest rate for the period of the loan. This will be discussed further on in the chapter.
6.2.2 Development loans

Property developers hold the middle of the market in terms of sophistication. Their funding requirements are usually short term in nature, as they need cash flow support during the development and at the final sale of the property. Such products supplied by banks are resource hungry, and the cost is usually covered through fees or equity holdings.

The Bank requirement is to ensure that the units in the development are pre-sold to a level that will eliminate the debt. Only once these units have been sold (and deposits received in trust), will the Bank start disbursing development funds.

As a matter of principle, banks require property developers to utilise their own funds first, before the banks’ funds are disbursed. This means that the Client is committed to the project. Usually this equity is partly taken up by professional fees to get the project off the ground.

Although this is not always the case, the Client generally puts equity in first and takes out profit last. Banks do not squeeze the Client too tightly, though, and usually allow the Client to draw a salary (e.g. project management fee) for the duration of the project.

Since such developments are generally short in nature, the Bank cannot make significant profit on the margin income, so it relies on administration and release fees (release of security such as completed and sold units) to cover both the resource-intensive nature of developments and the development risk.

6.2.3 Bullet payments – interest only

The purpose of this product is to provide the less sophisticated Client with the ability to minimise his/her tax liability by maintaining the level of the interest paid
throughout the life of the loan. Where capital is repaid on the loan, the interest paid will diminish accordingly, which is what this product attempts to avoid.

The capital balance of the loan is maintained throughout the life of the loan and is repaid in one lump sum or bullet payment. While providing the Client with a tax shelter, it leaves the Bank exposed to the possibility that the Client will not have the funds to repay the loan at the end of the term.

This risk is usually covered by the creation of a sinking fund (a fund accumulated and invested to repay long-term debt) with parameters that ensure that the debt is repaid at the end of the loan term. This investment is then ceded to the Bank, which will liquidate it on expiry date, repay the loan and pay the remaining proceeds back to the Client.

6.2.4 Stepped interest rate loan

This product facilitates a situation where the initial income stream from a property is unable to service the interest payments on the amount required to purchase a property. This problem is overcome by providing the Client with a stepped interest rate that matches the increasing net income stream of the property (through rental escalations).

The Bank accepts a lower profit on the loan in the first few years in return for an above-market return in later years. The Client is able to purchase a property that requires no additional equity contribution to service the debt and delivers a bond-free property at the end of the loan term.

On the face of it this seems straightforward, but the time value of money has to be factored in. Two models should be run to determine the present value of the discounted interest payments of both a normal amortised loan (at the current market interest rate) and the stepped interest rate loan. Clearly, the Bank will only accept a stepped interest rate profile that delivers a higher present value of the interest payment stream than a standard amortised loan.
This product is only offered to clients who have an established track record with the Bank, where the property is deemed to be low risk (see chapter 7) and the lease and tenant profile suggest a reliable income stream.
6.3 STRUCTURED DEBT

6.3.1 Introduction

Structured debt is a more sophisticated method of finance whereby interest rate instruments and derivatives are used to:

- hedge against the risks associated with gearing
- maximise the return on the property investment

The underlying assumption of using structured debt is that properties carry quality lease profiles that deliver a reasonably certain cash flow or income stream. Contractual agreements govern the use of these instruments and derivatives, which necessitates a reasonable certainty of repayment. The average property investor does not have direct access to these tools and the Bank acts as the conduit (obviously taking a cut) to them.

The Bank is exposed to the risk of failure by the Client to meet the contractual obligations associated with the transaction, as well as those risks associated directly with the property. It is therefore imperative that the Bank be totally convinced of the ability of the Client to repay the debt. Backing out of these transactions is quite understandably a messy and costly process.
6.3.2 Interest rate instruments

6.3.2.1 The repo rate

The repo rate is the interest rate banks pay the Reserve Bank for the cash they borrow to fund their cash liquidity shortfall. The banks use government stock as collateral and it is this exchange of government stock for cash that is called the repurchase agreement or repo. This statement is confirmed by Fourie, Falkena & Kok (1999:320) who provide the following description of the repo rate. "This is an alternative system of accommodating shortfalls in banking liquidity at the borrowing window of the Bank by means of repurchase agreements relating to various securities which are tendered by the banks to the Reserve Bank on a daily or intraday basis for the purposes of acquiring liquidity".

The repo was introduced in March 1998 in an attempt to confer transparency on the Reserve Bank's role in monetary policy, inflation control and the determination of interest rates on a daily basis.

The repo rate is determined through the following process:

Exhibit 6.5 Repo rate model
1. An information management system that is linked to all commercial banks feeds information on market liquidity requirements through to the Reserve Bank.

2. The Reserve Bank publishes an estimate of the market needs at 09h00 GMT and signals the amount of cash available for tender.

3. The banks bid for their requirements by 10h15 GMT.

4. The Reserve Bank publishes the results and the repo rate for the day.

The repo rate can be largely market determined through supply and demand where the Reserve Bank can adopt a neutral stance by providing for the liquidity needs of the banks. However, by making more cash available than required by the banks, the Reserve Bank signals its intention to reduce interest rates. Conversely, by providing less cash than required by the banks, it signals its intention for interest rates to rise.

The most common form of funding utilised by clients is the prime linked interest rate, which is largely determined by the repo rate. The prime rate is so popular because of its simplicity and high awareness characteristics.

The term “prime rate” has become almost generic as the major banks in South Africa peg it at almost identical levels. This rate drives mortgage, home loan, as well as commercial and current account overdraft rates. While the Reserve Bank maintains interest rates at a high level, other financial market instruments are available to reduce the interest burden. These are discussed in the following sections.

6.3.2.2 Banker's acceptances (BAs)

A banker’s acceptance is a bill of exchange drawn on and accepted by a Bank. It is a quality instrument that is commonly used. A secondary market exists in which it can easily be traded.

This instrument can be defined as follows:
• an unconditional order addressed by a company (the drawer requiring temporary finance) to a Bank (the drawee) signed by the company (the drawer)
• requiring the Bank to whom it is addressed (which then signs it and becomes the acceptor)
• to pay at a fixed or determinable future time a certain sum in money to, or to the order of, the company.

BAs are short-term in nature and extend over a period of 90 days. This means that the property investor utilising this instrument has a fixed rate for the duration of the 90-day period. On the positive side, the property investor has a fixed interest profile for the period; however, should the prime rate fall, the remaining period of the BA will still have to expire before the benefits of a lower prime rate can be enjoyed.

It is not good practice to fund long-term debt utilising short-term financial instruments. However, banks are compelled to provide their better clients (e.g. property investors) with this mechanism as the competition between banks for quality business is high.

Generally, the BA discount rate leads the prime rate in its reflection of market conditions. With any speculative decision timing is everything and could result in large profit or loss situations. The following graph illustrates the movement of the prime rate in relation to the BA discount rate.

![Graph showing trends of BA and prime rates](image)

**Exhibit 6.6 Trends of BA and prime rates**
Example

A property investor (Client) has entered into a loan agreement with a Bank whereby he pays prime minus 1. The Bank has a cost of funds of prime minus 3, and thus makes a margin of 2% on the debt. The Client considers the BA discount rate as an option to fund his loan. Using the above graph as reference, particularly the volatile interest rate period of 1998, the Client enters into a BA-funded agreement on 10 May 1998 (lowest BA discount rate for 1998 at 12.85% NACQ, prime rate at 18.25% NACM).

<table>
<thead>
<tr>
<th>Prime-linked loan</th>
<th>BA funded loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of funds</td>
<td>15.25%(NACM)</td>
</tr>
<tr>
<td>Plus Bank margin</td>
<td>2.00%</td>
</tr>
<tr>
<td>Plus stamp duty</td>
<td></td>
</tr>
<tr>
<td>Rate to Client</td>
<td>17.25%(NACM)</td>
</tr>
</tbody>
</table>

Illustrating the timing factor, the prime rate increased over the next three months to peak at 25.5%. Since the Client locked in at 15.5% for 90 days, massive savings were enjoyed on his gearing costs and the impact of the prime rate increase was removed from his cash flow for that period of time. The Bank at the same time retained its margin and enjoyed the reduced risk of non-payment of the Client’s obligations.

The latter half of 1998 was a turbulent time for both banks and property investors. Rumours abounded that the prime rate might increase to 30% plus and the scramble was on to minimise both the banks’ exposure and gearing costs.

Property investors who decided to ride out the dramatic rise in the prime rate, believing that it was short term in nature, were rewarded in October 1998 when the prime rate turned and dropped steadily back to better than previous levels in July 1999. Those property investors who panicked or decided to peg their gearing costs at
the peak of the BA discount rate had to wait out an unpleasant 90 days to enjoy the benefits of the lower prime rate.

6.3.2.3 Negotiable certificates of deposit (NCDs)

A negotiable certificate of deposit is a fixed deposit that has been made to the Bank. This deposit is a negotiable asset, which is tradable in the secondary market. The issuer pays the amount of the deposit plus the interest on the deposit to the holder of the certificate on maturity date.

The NCD contains the following information:

- the issuer (bank)
- amount of the deposit
- value of certificate on maturity date
- issue date
- maturity date
- rate of interest

The period of the NCD may be as long as five years but also less than one year. The interest payment on a NCD can take place annually or six-monthly in arrears.

This instrument is most commonly used by banks to provide a fixed rate to a Client. The Bank issues the NCD to the market and investors take up the offer, paying the amount of the deposit. This amount is then offered to the Client at the investor's rate plus the Bank's margin (Bank's profit) for a fixed period of time (until maturity date).

This gives the Client the satisfaction of knowing exactly what his debt repayment obligations will be for a fixed period of time and the peace of mind that the volatility of prime rate movements will not affect him during this period.
Exhibit 6.7  NCD vs prime rate trend

Example

Using a similar example to the one illustrated under the section on the BA instrument, a property investor has entered into a loan agreement with a Bank whereby he pays prime minus 1. The Bank has a cost of funds of prime minus 3, thus making a margin of 2% on the debt. The Client is of the view that prime is going to increase and that the best option would be to fix his gearing cost for a period of 12 months.

The Bank agrees to fix the Client’s rate utilising the 12-month NCD on 10 May 1998 (lowest NCD rate for 1998 at 13.4% NACA, prime rate at 18.25% NACM).

<table>
<thead>
<tr>
<th>Prime-linked loan</th>
<th>NCD funded loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of funds</td>
<td>15.25%(NACM)</td>
</tr>
<tr>
<td>Plus Bank margin</td>
<td>2.00%</td>
</tr>
<tr>
<td>Plus stamp duty</td>
<td></td>
</tr>
<tr>
<td>Rate to Client</td>
<td>17.25%(NACM)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this example, the property investor has done very well to hedge against the gearing risk and was completely unaffected by the rise in the prime rate for a period of 12 months. There are situations where the Client is risk averse and happy to pay a fixed
rate as the property cash flow is strong enough to support its gearing obligation, even though there is a strong likelihood of the prime rate dropping below the fixed rate.

### 6.3.2.4 Interest rate swaps

An interest rate swap is an agreement between two counter-parties to swap interest rate obligations for a fixed future period of time based on a notional capital amount. The most common form of an interest rate swap is when a series of payments, calculated by applying a fixed interest rate to the notional amount, is exchanged for another series of payments calculated using a prime-linked rate.

Clearly, the counter-parties have to have opposing views on the direction of interest rate movements. The party wishing to swap the fixed rate must be of the opinion that the prime-linked rate will drop below that of the fixed rate. Conversely, the party wishing to swap the prime-linked rate holds the view that the prime rate will increase and that the swap will be advantageous.

The key parameters of an interest rate swap agreement are:

- the interest rates that are being swapped (fixed for prime linked)
- the notional principal amount (there is no exchange of debt; an amount is agreed to on which the interest rate obligations will be calculated)
- the period in which the swap will be operational
- the frequency of interest payments
In the above model two parties agree to swap their interest obligations to their respective banks. The banks have no part in this transaction and the respective obligations to the banks are unaffected by this agreement. On settlement date, of which there could be a number (e.g. monthly for the duration), the interest paid or received is simply the net difference between the two interest obligations.

In practice, clients usually utilise their banks as their interest rate exchange partner. The Bank arranges, through its Treasury department, to swap the Client’s interest rate obligation. This can take multiple forms, such as swapping fixed for prime-linked, fixed for BA and visa versa.

The advantages of an interest rate swap are:

- to obtain a lower cost of funding
- to hedge against interest rate exposure
- to provide for speculative positions on interest rate movements
The above provides an indication of how interest rate swaps can be used. There are many variations, however, and they are limited only by the availability of a willing counter-party.
6.3.2.5 Interest rate options

**Swaption** is an option to enter into an interest rate swap in the future. The purpose of such an option is to hedge against future interest rate volatility. There are two types of options: a payer swaption and a receiver swaption. In both cases the holder has the right, not an obligation, to enter into an interest rate swap. In the former case the holder pays the fixed rate and in the latter case, the holder receives the fixed rate.

A **cap** is an option to borrow a specified amount, at a specific rate, for a specified future period of time. It gives the buyer the right, not the obligation, to exercise this option at any time during the specified period of time. Clearly, in a falling interest rate market, the option would not be exercised and the premium paid foregone for the comfort of the hedge during that period.

A **collar** has two interest rates, a ceiling rate (maximum rate) and a floor rate (minimum rate) that limits interest rate exposure to a range between these two interest rates for a specified future period of time. Since the floor rate can only restrict the benefits of a falling interest rate market, where possible, the floor rate is sold to offset the price of the collar (zero cost collar).

**Forward rate agreement** (FRA) is an agreement whereby a borrower and an investor agree to fix an interest rate for a specified period, beginning at a specified date in the future. There is no obligation to physically borrow the specified amount, as the agreement is separate from any actual loan.

FRAs have a duration of three months (the same as BA rates) and are quoted three, six and nine months in advance. Settlement is made at the start date of the FRA by comparing the SAFEX three-month bank bill future (which is the average BA rate of the five major banks after stripping out the highest and lowest rates) and the FRA. Depending on the movement of the BA rate, either the investor or the borrower then settles the difference.
The standard FRAs are:

- **3*6 FRA**: a fixed rate for three months, starting in three months.
- **6*9 FRA**: a fixed rate for three months, starting in six months.
- **9*12 FRA**: A fixed rate for three months, starting in nine months.

This is a short-term funding mechanism; however, it still provides the Client with a hedging technique to remove interest rate risk. For example, a Client may wish to fix the interest rate for nine months, being of the view that interest rates will decline in the longer term, but wishing to remove the risk of an increase in short-term interest rates.

As discussed in the BA section, the Client can reduce his/her prime-linked interest rate cost by utilising a BA, say at 16.2% plus stamps and the Bank margin, giving a net borrowing cost of 18.4%. However, that leaves a further six months of uncertainty, which are covered by entering into two FRA agreements of 3*6 and 6*9 at 15.2% and 14.9% respectively (see below).

At the end of the first three months and start date of the 3*6 FRA, the BA rate has reduced to 15% and settlement is made by way of a payment of 0.2%. However, at the new BA rate the net borrowing cost remains the same (18.4%), thus achieving the Client’s objective of fixing his/her interest rate. This occurs likewise in month six, when the BA has increased to 17% but is offset by the receipt of 2.1%, resulting in a net borrowing cost of 18.4% once again.

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
<th>Month 4</th>
<th>Month 5</th>
<th>Month 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA Rate</td>
<td>16.20%</td>
<td>15.00%</td>
<td>15.00%</td>
<td>17.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stamps</td>
<td>0.00%</td>
<td>0.20%</td>
<td>0.20%</td>
<td>0.20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Margin</td>
<td>2.00%</td>
<td>2.00%</td>
<td>2.00%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRA Settlement</td>
<td>0.00%</td>
<td>0.20%</td>
<td>-2.10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Borrowing Cost</td>
<td>18.40%</td>
<td>18.43%</td>
<td>18.40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Month 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3*6 FRA</td>
<td>15.20%</td>
</tr>
<tr>
<td>6*9 FRA</td>
<td>14.90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BA Rate</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15.20%</td>
</tr>
<tr>
<td></td>
<td>0.20%</td>
</tr>
</tbody>
</table>

**Exhibit 6.9** BA and FRA example
6.4 STRUCTURED FINANCE

6.4.1 Introduction

Tax is the driving force behind structured finance or, more accurately, the utilisation of legal structures to minimise the tax burden of the Client through income-shielding mechanisms. Tax legislation relating to fixed property is limited and therefore the opportunity to structure loans is also limited.

The primary concern to banks when considering structured finance is the reliability of the cash flow generated from the property. Typically, single corporate tenanted buildings with long leases are the profile banks would consider appropriate to structure. The strength of the lease (cash flow) is of paramount importance; the location, quality and saleability of the building are of secondary interest.

Prudent banking demands that the property's characteristics and the creditworthiness of the Client be fully analysed as a fallback measure. However, it is the strength of the lease (cash flow) that provides the necessary comfort to the Bank.

There are three fundamental objectives, one or all of which could be achieved through the correct structure:

- **Tax shielding of rental income**: capital repayment of debt is made out of after-tax income; through the structure this capital repayment is converted to interest payment, which is pre-tax deductible.
- **Moving the property off the balance sheet**: the removal of long-term liabilities associated with the purchase of a property from the balance sheet, providing the benefits of property ownership and a balance sheet structure that enhances the share rating of the company.
- **Utilisation of Bank's tax base**: the tax base is the profit base from which the Bank will pay its dues to the Receiver of Revenue. However, by including the
property’s negative cash flow (usually up until year four or five), the Bank’s tax base, and therefore its tax payable, is reduced and the Client benefits through a reduction in interest rate.

To maximise the benefit of structured finance, the distinction between the entities, source of income (tax implications) and the Income Tax Act, No 58 of 1962 must be understood.

6.4.2 Property trader vs property investor and income tax

The structures that are used to minimise tax must adhere to fundamental principles of the Income Tax Act. Confusion surrounding the source of income could lead to the structure being questioned by the Receiver of Revenue, and possibly an unforeseen tax liability.

There are two fundamental distinctions relating to income with regard to property:

**Income (revenue):** the income produced from a capital asset

**Income (capital):** the income-producing asset itself

The purpose of the property business defines the type of income generated and therefore the tax liabilities associated with each type of income. This categorises property-associated businesses into property traders and property investors, where generally the former is short-term and the latter long-term in nature.

**Property trader:** this business is undertaken through the buying and selling of properties with the intention of deriving a capital profit. A typical example of this business is the renovation of flats (thereby adding value), sectionalising and selling the units (flats). Another example is the purchase of land, rezoning it to its highest and best use potential (thereby adding value) and selling it to a developer.
Since the source of income (capital) is derived from the sale of a property, the purchase price and cost of improvements are deducted as an operating expense before the tax liability is calculated.

**Property investor:** the intention of this business is the acquisition of property to provide, through rentals and the escalations thereof, income in the form of revenue. An example of this is the acquisition of industrial or residential units, which are held with the intention of deriving long-term revenue income.

Since the income is generated from the asset and not the sale of the asset, the operating expenses (allowable deductions and expenses incurred in the normal course of business) of the property would be tax deductible. However, the purchase price of the property would not be an allowable expense as in the case of the property trader.

Further considerations are:

**Depreciation:** depreciation allowances are calculated by the Receiver of Revenue for all categories of buildings except manufacturing properties, which can be fully depreciated.

**Interest expenses:** both property traders and investors are able to deduct interest expenses from their taxable income.

**Taxable income** is therefore calculated as follows:

**Gross Income**

Less Exempt income (e.g. sale of property by investor)

Less Operating expenses

Less Depreciation (manufacturing properties)

Less Interest expenses

Equals Taxable income
In terms of Section 82, of the Income Tax Act it rests upon the property trader or investor to prove that any amount claimed is of a capital nature. There are many examples where the matter has been put to the courts to decide the nature of a specific income amount. The intention of the property owner and the way in which the property is dealt with are important, as these are the determinants of capital and revenue.

6.4.3 Lease discounting

Lease discounting is a method of extracting the future value of a known income stream (rentals) for current utilisation in the acquisition of properties. It is not restricted to the realm of structured finance and can be utilised in conventional lending; however, it serves as the fundamental foundation of all structured finance transactions.

The principle of equivalence is important when determining the loan amount from a certain income stream. This principle dictates that two (or more) amounts must be discounted (or accumulated) to the same date in order for reasonable comparison to take place. Strictly speaking, the discounted income stream is not compared to the loan amount, rather, the loan amount is derived from the present value of the discounted income stream, thus making both values identical (present value of rentals and loan amount).

The loan is then structured on the same or a similar basis as the lease; lease term equal to loan term, discount rate equal to interest rate, rental period equal to the interest period and the instalment is calculated on these parameters.

As will be described in more detail later in this section, the initial rentals are not sufficient to cover the instalment amount, which results in the shortfall being capitalised in the first few years. However, through the rental escalations, this shortfall is removed in later years and the loan is repaid within the loan term.
The exhibit below highlights these fundamentals:

<table>
<thead>
<tr>
<th>Lease Details</th>
<th>Loan Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental</td>
<td>Loan Amount</td>
</tr>
<tr>
<td>10 000 000</td>
<td>10 000 000</td>
</tr>
<tr>
<td>Rentals in ADV IARR</td>
<td>Instalment</td>
</tr>
<tr>
<td>paid every 1 month(s)</td>
<td>No of instal pa 12</td>
</tr>
<tr>
<td>Escalation</td>
<td>which is every 1 month(s)</td>
</tr>
<tr>
<td>10.00% per anum</td>
<td>Interest Rate</td>
</tr>
<tr>
<td>20.00% per anum</td>
<td>20.00% per anum</td>
</tr>
<tr>
<td>Lease Term</td>
<td>Loan Term</td>
</tr>
<tr>
<td>10 years</td>
<td>10 years</td>
</tr>
</tbody>
</table>

Exhibit 6.10 Discounting rental income to determine the loan amount

In practice, the Bank will first discount the lease in order to determine the loan amount available for the structure. The key determinants of this model are the following:

**Lease**: it must be fully repairing (the tenant is responsible for the operating expenses of the building). This gives the Bank the comfort of knowing that the Client will not have to “find” additional funds to maintain the building. While some banks do not insist on blue chip tenants, the better the tenant, the more comfortable the Bank will be with the risks.

**Rentals**: the rentals, coupled with escalations and the discount rate, determine the loan amount by finding the present value of the lease (rental) cash flow.

**Escalations**: the escalation of the rentals provides the growth in the cash flow, which in turn, over time, eliminates the shortfall created by the initial rentals not covering the interest obligations. This shortfall is capitalised, which causes the amount of the loan to peak at much higher than the discounted lease. This also demonstrates the
Bank preference for quality tenants, as there are no guarantees that the Client will be able to find a substitute tenant at the agreed rentals should the current tenant default.

**Discount rate**: this rate is usually determined by the Bank by adding its margin onto its own funding cost (cost of funds). In this case a funding cost of 18% plus a margin of 2% results in a discount rate of 20%. The higher the discount rate, the lower the present value of the lease. It is therefore detrimental to the Client to enter into a lease discount structure during a high interest rate cycle, as the resultant value (obtainable loan) that can be extracted from the lease is reduced.

**Lease term**: the longer the period of the lease, the higher the total present value of that lease. However, note that the escalation in rentals is more than offset by time and the discount rate, which incrementally decrease the present value of the lease with each year.

<table>
<thead>
<tr>
<th>Month</th>
<th>Loan Balance</th>
<th>Interest</th>
<th>Monthly Rental</th>
<th>Annual Rental PV</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>10 306 781</td>
<td>171 780</td>
<td>141 025</td>
<td>115 652</td>
</tr>
<tr>
<td>24</td>
<td>10 542 899</td>
<td>175 715</td>
<td>155 127</td>
<td>104 328</td>
</tr>
<tr>
<td>36</td>
<td>10 628 309</td>
<td>177 138</td>
<td>170 640</td>
<td>94 113</td>
</tr>
<tr>
<td>48</td>
<td>10 509 696</td>
<td>175 162</td>
<td>187 704</td>
<td>84 899</td>
</tr>
<tr>
<td>60</td>
<td>10 120 025</td>
<td>168 667</td>
<td>206 474</td>
<td>76 586</td>
</tr>
<tr>
<td>72</td>
<td>9 375 322</td>
<td>156 255</td>
<td>227 122</td>
<td>69 088</td>
</tr>
<tr>
<td>84</td>
<td>8 170 743</td>
<td>136 179</td>
<td>249 834</td>
<td>62 323</td>
</tr>
<tr>
<td>96</td>
<td>6 375 747</td>
<td>106 262</td>
<td>274 817</td>
<td>56 221</td>
</tr>
<tr>
<td>108</td>
<td>3 828 186</td>
<td>63 803</td>
<td>302 299</td>
<td>50 717</td>
</tr>
<tr>
<td>120</td>
<td>327 078</td>
<td>5 451</td>
<td>332 529</td>
<td>45 751</td>
</tr>
<tr>
<td>0</td>
<td>10 000 000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Exhibit 6.11 Loan repayment through discounted rentals**

**Lease (rental) discount risk**

From the above table the importance of a strong, quality lease is highlighted. The Bank will consider a loan-to-value (LTV) in excess of 100%, provided that the tenant is a recognised, well established and preferably a listed company. Assuming a property value of R10 million, the LTV only drops below 100% in year six. This is a
result of the initial rentals not covering the interest obligation, the shortfall of which is capitalised.

This emphasises the point of the risk assessment being focused on the tenant rather than the building, since any default in years one to five would put the Bank at considerable risk of writing off the losses that could arise. This is not very popular with the shareholders of the Bank.
6.4.4 Compulsory convertible loan (CCL)

The purpose of the CCL is to shield income from tax and to maximise the return of the property through legitimate legal structures. This structure relies on the following income tax principles:

Interest is deductible from gross income before the tax obligation is calculated. The cost of an asset can be deducted as an operating expense when viewed from a property trader’s perspective.

The CCL structure

Exhibit 6.12 Compulsory convertible loan model

The entities involved in this transaction are:

- the property investment company
- the shareholders of the property investment company
- the financial trading company
- the financial institution
Say, for example, that the shareholders of a property investment company require R10 million to purchase a property for sale at a price of R12 million. R2 million will be provided by the shareholders as their equity contribution. A financial institution is approached to provide the finance for the transaction in a tax-efficient manner (Problem 1).

The financial institution identifies an independent financial trading company to advance (loan) the property investment company a R12 million, interest-only loan for 10 years. (Problem 2: where does the financial trading company obtain the R12 million?)

It is important to note that the interest rate charged on the loan must equal the instalment amount (interest and capital) that would have been calculated had the loan amortised over the same period. This is to ensure that the interest payment made by the property investment company is fully tax deductible as opposed to only the interest payment of a normal amortised loan (Problem 1 solved).

The financial trading company treats the loan as a normal operating expense and deducts it from its income for tax purposes (e.g. administration costs).

In terms of its loan obligation, the property investment company issues post-dated cheques to the financial trading company equal to its fixed interest payment obligations, i.e. the instalment amount due on a normal amortised loan over a period of 10 years.

However, the agreement between the property investment company and the financial trading company is that this payment represents interest only, which in turns means that the debt of R12 million will still be payable at the end of the 10-year period (Problem 3).
**Problem 2:** in order to obtain R12 million, the financial trading company discounts the post-dated cheques with the financial institution for R10 million. This leaves an amount of R2 million unaccounted for (see problem 4).

**Problem 3:** since the loan is interest only, how does the property investment company pay off the loan? It does not – the financial trading company agrees to use the interest payment proceeds to purchase ordinary shares in the property investment company. However, this will leave the financial trading company owning the majority of shares in the property investment company at the end of the loan term (Problem 4).

**Problem 4:** how do the shareholders of the property investment company regain control of their company? The shareholders of the property investment company utilise the funds earmarked for their equity contribution (R2 million) to purchase the above shares from the financial trading company immediately, for future delivery (after the 10-year period).

In summary:

- The financial institution receives its interest and capital through the post-dated cheques.
- The financial trading company is able to reduce its tax burden through operation costs associated with the loan.
- The property investment company is able to reduce its tax obligations.
- The shareholders of the property investment company retain control of their company.
- The seller receives the required price for the property.

Thus the loan is converted to shareholding and the objective of reducing the tax burden to the property investment company is achieved.
6.4.5 Utilising the Bank’s tax base

The purpose of utilising the Bank’s tax base is to provide the Client with a lower gearing cost. The Bank’s tax base can only be utilised where it has excessive profits and it is willing to offset these profits by the negative cash flow (loss) generated by the Client’s property. Where a Bank does not have a sufficient tax base available, it is not uncommon for the Bank to approach other financial institutions and utilise their tax base.

The benefit to the Bank is that its tax liability is reduced, and the benefit achieved is shared with the Client. The actual structures utilised by the banks are kept highly confidential as they provide a significant competitive advantage. However, the theory is demonstrated below:

Exhibit 6.13 Reduced funding costs through the utilisation of Bank’s tax base

The first step in the process is the creation of a conventional loan with a fixed rate for the duration of the loan period.
The Bank then structures the loan and legal entities in such a manner that the debt can be offset against the Bank’s tax base. The resulting benefit to the Client can be as much as 5 to 6% on the pre-tax interest rate. This provides an immediate cash flow benefit to the structure described above.

The benefits are then further ramped by applying a standard compulsory convertible loan (described earlier in this section) on top of this structure. The benefits of this structure (CCL) further reduce the post-tax interest rate.

6.4.6 Income tax risk

There is a significant risk that the Receiver of Revenue could in the future attack these structures and, bearing in mind the long-term nature of these loans, the resultant income tax liability could be substantial.

Banks are not prepared to accept this risk and therefore it is passed on to the Client, which fact is highlighted in the loan documentation. This also emphasises the point that structured finance risk has more to do with the Client than the actual physical property. Should the Receiver of Revenue set aside these structures, the financial standing of the Client will determine his/her ability to service any tax liability that could arise.

Clients utilising this form of finance do not always take the entire interest rate benefit to service the interest obligations. Rather, they utilise a portion of the cash flow benefit to create a sinking fund that could be used to settle the arising income tax obligation, should the structure be set aside.
6.5 STRUCTURED FUNDING

6.5.1 INTRODUCTION

Structured funding is the Bank's use of alternative sources of funding to support its loan portfolio. Traditional forms of funding include the use of the Bank's capital, deposits and money market instruments. The sources of this kind of funding are at risk, as lending by its very nature is risky, and inevitably losses do occur.

The regulatory authorities have, through various acts such as the Deposit Taking Institutions Act and the Banks Act, attempted to reduce the risk of financial institutions collapsing as a result of bad lending and liquidity problems, among other things.

The regulatory requirements have inherent cost implications (such as capital adequacy and compliance). These, coupled with balance sheet performance indicators (such as ROA and ROE), are motivating forces to remove the mortgage-backed assets (mortgage loans) and their associated risk connotations from the Bank's balance sheet.

However, mortgage finance is profitable and therefore remains a good business. To have the best of both worlds (lose the risk and retain the benefits), banks sell the mortgage-backed assets, but contract to administer them, for a fee, on the purchasers' behalf.

This section deals with two structures to achieve the above:
• securitisation
• participation mortgage bond schemes
6.5.2 SECURITISATION

6.5.2.1 Introduction

The meaning of securitisation can be described as “the creation of marketable security based on cash flows of an entity” (Kothari, 1999:4).

This definition is rather broad; however, Kothari goes on to quote the USA Office of Comptroller of Currency. “Asset securitisation is the structured process whereby interests in loans and other receivables are packaged, underwritten, and sold in the form of ‘asset-backed’ securities. From the perspective of credit originators, this market enables them to transfer some of the risks of ownership to parties more willing or able to manage them. By doing so, originators can access the funding markets at debt ratings higher than their overall corporate ratings, which generally gives them access to broader funding sources at more favourable rates. By removing the assets and supporting debt from their balance sheets, they are able to save some of the costs of on-balance-sheet financing and manage potential asset-liability mismatches and credit concentrations.”

The investor confusion between debt and corporate ratings is concerning and is highlighted by Van Den Berg (2000:11) who contends that “South Africa does not lack quality ratings, the problem being investors not having as yet grasped the intrinsic techniques in properly analysing the segregation of assets and income flows from the company that owns them.”

A corporate rating is an evaluation of the overall company’s creditworthiness, demonstrating its credit strength and credit quality to the market and business partners.

Debt ratings are ratings that go beyond the overall corporate creditworthiness of the borrower to analyse specifically the protection inherent in the debt portfolio through mortgage bonds, collateral and other repayment protection mechanisms.
Since a portion of the debt and associated risk of non-payment is removed from the organisation when a portfolio of loans is securitised, the debt rating could be higher than the corporate rating.

Securitisation in South Africa, or more correctly mortgage-backed securitisation, is still in its infancy. The first securitisation occurred in 1989, when the United Building Society securitised R250 million of its mortgages (Sotta, 2000). Since then only a handful have been implemented successfully. The SA Home Loans Company utilises securitisation as its method of funding mortgages in direct competition with South African Banks. This method of funding was pioneered by Fannie Mae in the USA, which was established in 1968 and now finances in excess of 1 trillion dollars of home mortgages and holds some 10% of the mortgage market.

It has to be said that the USA government guaranteed Fannie Mae’s business, which is not the case with SA Home Loans. Nevertheless, they have already captured R1 billion of the home loans market and all indications are that this business has huge growth potential.

6.5.2.2 The entities involved in securitisation

The entities involved in a securitisation transaction can be extensive, so in order to briefly illustrate the theory, only the core entities are highlighted:

- **Originator**: the Bank selling the mortgages (assets) to the special purpose vehicle (SPV)
- **Special purpose vehicle**: an entity created for the specific purpose of owning the assets and the funding thereof
- **Administrator**: the entity that will administer the loans; usually the SPV contracts the originator, for a fee, to provide this function
- **Investors**: the purchasers of the mortgaged-backed securities issued by the SPV
- **Rating agency**: the entity responsible for rating the risks associated with the portfolio of loans sold to the SPV
6.5.2.3 The process of securitisation

1. The originator (Bank), in the normal course of business, accumulates a loan portfolio that is funded and reflected on the Bank’s balance sheet. The servicing of the debt by the clients in that portfolio provides the Bank with cash flow to service its funding obligations.

2. A selected portfolio of high-quality loans is then sold to the SPV that is formed for the specific purpose of providing the funding for that portfolio.

3. The originator is then contracted to continue to administer the loans on behalf of the SPV.

4. The SPV then issues tradable securities to the value of the sale price of the loan portfolio. The return on the securities is linked directly to the performance of the loan portfolio, with no recourse to the Originator.

5. The quality of the loans is risk-rated by a recognised rating agency such as Standard and Poors. It is this rating that provides investors with the confidence to purchase the securities, the proceeds of which are used to pay the originator.

6. The yield offered to the investors is the same as the funding cost the Bank incurred on the loan portfolio. Since the loan portfolio is delivering a cash flow in
excess of the securities yield, the SPV agrees to pay the originator any surpluses that may arise. Therefore, the originator is now in the same position in terms of margin received on the loan portfolio and the relationship it has with its client base. The asset and risks associated with the loan portfolio no longer reside with the originator, but with the investor through the SPV.

7. The cash flow generated from the loan portfolio is now diverted to the SPV from the originator and is used to repay the investors.

6.5.2.4 Benefits

Van Den Berg & Van Schalkwyk (1998:39) summarises the benefits of securitisation in the following manner “Securitisation reduces funding costs, replaces traditional interest income with fee income and generates fresh cash for new and changing investment and lending strategies.”

However there are more benefits to be gained from securitisation:

- **Return on capital**: the capital requirements stipulated in the Deposit Taking Institution Act fall away, as the assets are effectively moved off the balance sheet. Since there is a reduction of capital required, there is an increase in the return on capital.
- **Return on assets**: the asset base of the Bank is reduced, yet the income is retained through the fee earned for administrating the loan portfolio.
- **Reduction in risk exposure**: the risk exposure of the loan portfolio no longer rests with the Bank, but is moved to the investor through the SPV.
- **Restructuring of loan portfolio**: the portion of the Bank’s loan portfolio that is securitised can be selected in such a manner as to change the structure of the Bank’s remaining portfolio with regard to maturity profile, geographical spread and funding obligations.
6.5.2.5 Attributes of the securitised portfolio

All cash flow-generating assets can be securitised; however, in selecting a portfolio of assets for securitisation, the following characteristics are recommended:

- **Cash flow**: the asset must produce, at predetermined dates or periods, amounts derived by reference to market or predetermined rates.

- **Security**: mortgage-backed securities can be realised by the SPV should the Client default, thus providing some comfort to the investor that the liquidated property can contribute significantly to the protection of the capital invested.

- **Risk spread**: the loan portfolio should be of such a nature that it provides for both geographical spread and a spread of loan sizes. This protects the investor should a particular area experience a downturn in its local economy, in which case only a small minority of mortgages might be affected. Likewise, the portfolio should not be made up of a few large loans where a single default could cause a major loss of investment capital.

- **Homogeneity**: the loan documentation should be standardised as far as possible. The loan or product type should be similar in order for the assets to be considered a single portfolio. A mixed portfolio of mortgage-backed and car loans would not be acceptable to the investor, or easily administered.

- **Capacity**: there should be no clauses in the loans that prohibit the securitisation operation, for example a clause in the bond document prohibiting the current mortgagee being replaced by another.

- **Independence from the originator**: the ongoing performance of the asset must be insured without reference to the originator. This means that should the originator no longer exist (e.g. in the case of liquidation), the asset will continue to perform. An example of this would be a reference to the interest rate in the loan agreement, linking both the rate and the originator together (Nedcor’s prime rate). This creates difficulties as the interest applicable to the loan is now in question, as is the yield on the asset.
6.5.2.6 Securitisation and South African legislation

The specific legislation relating to securitisation in South Africa is limited and, in an effort to provide some direction and legal framework for this product, the following appeared (amended to provide clarity) in Government Notice 153 (Government Gazette 13723) of 3 January 1992:

1. Definitions

a) A **Securitisation Scheme** is a scheme whereby a **DTI** (Deposit Taking Institution) transfers to a **SPV**, by virtue of a sale, such of its assets as consist of a claim sounding in money.

b) A **Special Purpose Vehicle** (SPV) means a company incorporated or trust created society for the purpose of the implementation of a securitised scheme.

c) **Associated Company** in relation to the DTI means a subsidiary or fellow subsidiary and includes associated company as defined by the SA Institute of Chartered Accountants.

d) **Underlying Transaction** means the transaction by which the asset is transferred from the DTI to the SPV in terms of the Securitisation scheme.

Requirements

For an activity not to fall within the meaning of “the business of a deposit-taking institution” it must comply with the following:

2) The acceptance by an SPV, of money from the **General Public** against the issue of written acknowledgements of debt for the purpose of obtaining funds to pay for the asset transferred to it by the DTI in terms of a Securitisation scheme, provided-

   a) No liabilities other than liabilities directly or indirectly to the implementation of the Securitisation scheme are incurred by the SPV.

   b) All conditions in paragraphs 3 & 4 below are complied with.

3) The conditions of the SPV are:

   a) To commence the securitisation scheme, the DTI and SPV will conclude an agreement whereby the SPV shall acquire from the DTI a portfolio of assets, which will serve as backing for the written acknowledgement of debt to be issued by the SPV.

   b) The issuing of written acknowledgement of debt by the SPV for the purpose of funding itself, shall be affected in accordance with the applicable provisions of any notice under the DTI Act 1990 (Act 92 of 1990).

   c) In the case of payment made in terms of an underlying transaction, the amount received shall be utilised by the SPV for the redemption of acknowledgement of debt or for the acquisition of further assets as defined in (b) above or in 4(f).

   d) Neither the DTI nor any of its associated companies may-
i) In the case of a SPV which is a company, acquire or hold any shares in such SPV or

ii) In the case of a SPV which is either a company or trust, directly or indirectly hold any beneficial interest in OR is beneficiary of OR directly or indirectly exercise any control over OR manage such SPV.

e) No members of the board of directors and no trustee of the SPV may be a member of the board of directors or be a trustee of the DTI or any of its associated companies.

f) The name of the SPV cannot imply any relation to the DTI or its associated company.

g) Excess profit in the SPV shall be applied as follows:

i) While the securitisation scheme is in progress, excess profit will be retained by the SPV as contingency reserve for the protection of investors.

ii) In the event of the scheme winding up, the distribution of excess profits will be detailed in the prospectus of the SPV.

h) Neither the DTI or its associated companies shall-

i) Bear recurring expenses in respect of the scheme.

ii) Provide temporary finance to the SPV to cover cash shortfalls arising from the late payment of debtors OR non-performance of debtors

iii) Bear any loan arising from any risk referred to by the DTI Act, or

iv) Underwrite or guarantee in any manner, the issue of the acknowledgement of debt by the SPV.

i) The SPV will appoint an auditor to-

i) Satisfy himself that the provisions of this schedule have been complied with; and

ii) Furnish a statement to that effect which is to be included in the SPV prospectus.

4) The conditions of asset transfer are as follows-

a) The transfer must divest the DTI of all rights and obligations and all risks associated with the assets being transferred.

b) No transfer may be effected which will breach any terms of the underlying transaction, i.e. the original loan agreement between DTI and debtor.

c) The SPV will have no right of recourse against the DTI or its associated companies with respect to any losses incurred with regard to the transferred asset; the DTI may at its discretion replace any asset (not a non-performing asset) in the securitised scheme with an equivalent asset.

d) Any amendments to the underlying transaction terms and conditions will apply to the SPV and not the DTI.

e) The DTI, if administering the assets, or any associated company may only transfer cash actually received from the debtor to the SPV.

f) While the scheme is in operation, assets may only be transferred to the scheme to maintain the capital value of the scheme.

g) Securitised assets do not have to be of a homogeneous nature, but the original ratio shall be maintained.

5) If any of the conditions above are not complied with, then the assets must again be reflected in the DTI balance sheet and the DTI Act will apply.
The South African securitisation market holds great potential, as has been demonstrated in most First World countries that have had proactive support from their governments. This statement is emphasised by Roche (1995:8), who states: “Securitisation for property would, if successfully designed and implemented and if it then gained widespread approval and use, revolutionise both the property and investment worlds”.

The reasons for the limited success of implementing such structures in South Africa are complexity (lack of supportive and direct legislation), lack of secondary mortgage market (which must be developed), acceptance by the banking industry as a whole of the benefits of securitisation and the restrictive legislation.

The United States of America and the United Kingdom legislation appears to be far less prescriptive in assets achieving off-balance sheet status (one of the major benefits of securitisation). Peasnell & Yaansah (1988:14) explains “A company issues the mortgage-backed securities itself using interest and principal payments to pay interest and principal to the holders of the mortgage-backed securities. Frequently the securities are issued on a non-recourse basis: the holders may look only to the cash flow from the mortgages. American companies have sought to treat this as arrangement as an in-substance defeasance justifying the removal of the mortgage assets and debt from the balance sheet”.

Clearly this is contrary to the South African legislation that requires complete separation of the asset from the originating company and that the mortgage-backed securities are issued from the Special Purpose Vehicle not by the originating company.

However, this investment vehicle is gaining support and, with suitable legislation development (which appears to be forthcoming), should prove to be an exciting and alternative form of funding and investment. While the South African market is relatively small, Clauretie and Sirmans (1996:221–222) reflect that in the United
States of America, conventional mortgages funded through securitisation increased from $19.5 billion in 1981 to $1.5 trillion in 1993.

This is highlighted to support the assertion that, given market acceptability, this product has a great deal of potential; furthermore, with the involvement of government underwriting such as that given in the Untied States of America, this product could be extended into the lower income market. This will provide previously disadvantaged citizens with the opportunity own their own homes and at the same time provide a meaningful investment vehicle.
6.5.3 PARTICIPATION MORTGAGE BOND SCHEMES

6.5.3.1 Introduction

A participation bond can be defined as "a first mortgage bond for generally not less than R100 000 registered over immovable property, which is financed by the amalgamation of relatively small amounts of capital handed in by investors to a scheme manager, who in turn collates such funds so as to meet the needs of a particular borrower" Kain (1998:1).

The concept originated over 50 years ago when trust companies provided a facility whereby they would link prospective borrowers with investors and administer the resulting loan on the investors’ behalf. This required a mortgage bond to be registered in favour of the trust company (mortgagee), which then allocated participant interests in the bond to investors.

This proved highly successful until two trust companies were liquidated (East London Board of Executors and later the South African Board of Executors), which resulted in the courts providing two opposite rulings. In the first case, it was ruled that the participation bonds were not an asset of the trust company, but belonged to the participants, i.e. they were the de facto mortgagees. In the second case, the courts ruled that the mortgage bonds were in fact assets of the trust and that the investors lose their preferential status.

The Association of Trust Companies drafted the Participation Bonds Act in 1964 to prevent this from happening again and destroying a potentially lucrative business. The Act was passed by Parliament and came into existence on 1 May 1965. It protected the participants and defined the conditions under which such bonds could be granted and administered. The original Act underwent many enhancements and is now consolidated under the Participation Bonds Act 55 of 1981.
6.5.3.2 The entities involved in a participation bond

Nominee company: In terms of the Participation Bonds Act of 1981 such a bond must be described as a participation bond and has to be registered in the name of a nominee company. The nominee company has as its sole object the holding of participation bonds in trust, as nominee for or representative of the participants, in each particular bond that is registered in its name. The nominee company cannot incur liabilities. All the nominee company's expenses have to be borne by the scheme manager (the management company).

Management company: This entity is responsible for the management of the participation bond scheme. This includes judicious loan administration, investor administration and accounting, and for this service the manager receives an administration fee.

Participants: The investors in the participation bond scheme. The typical investor profile is in the main pensioners, widows or widowers, pension funds and charitable institutions that seek high yet secure returns.

The borrower (mortgagor): participation bonds granted to a borrower are normally granted on the basis that the bond is fixed for a period of five years, and the capital is thereafter redeemable in annual or half-yearly instalments over a further 20-year period. The redemption requirements do, however, vary between participation bond companies.

The Association of Participation Bond Managers: this Association forms the representative body for the product. Its purpose is to provide a common voice in dealings with regulatory bodies, such as the Financial Services Board and, within the constraints of the Act, self-regulate the associated participation bond managers.
6.5.3.3 *Interest rate and fee dynamics*

The participation bond manager determines the interest rates applicable to both the participant (investor rate) and borrower (debtor rate). The difference between the two rates is the administration fee, which is the major source of the participation bond manager’s income.

**Debtor rate:** The rate charged to the borrower is determined by the manager, who takes into consideration the current prime overdraft rate when considering a rate change, as this rate is the benchmark rate for most mortgage lending. The major banks are in direct competition with participation bond schemes, and some banks even have their own schemes. Since the timing and extent of any rate change is directly controlled by the manager, in a declining rate cycle a reduction in rate can be delayed or, conversely, in a rising rate cycle the rate change can be expedited. In this way the manager can extract maximum income from the scheme. However, overindulgence in this type of creativity can lead to loss of market share and credibility.

**Investor rate:** This rate is also determined by the manager, who insures that it remains above the risk-free rates available in the market in order to attract sufficient investments to fund the loan portfolio. Where the manager is short of investor funds, the management company itself “invests” as a participant. These “own” investments are termed *office holdings*. In some instances where the manager can procure cheaper funding through its own channels, it is indeed more profitable to do so.

**Administration fee:** this fee is the difference between the debtor and investor rate and until 1995 it was fixed at 7.5% of the debtor rate. However, participation bond schemes found it increasingly difficult to make a profit, given inflationary pressure on costs since the inception of the Participation Bonds Act. This, coupled with a falling interest rate cycle, forced the Participation Bond Association to approach the Financial Services Board to have the administration fee deregulated. This was duly approved on condition that the existing investors agreed to the change. However, human nature being what it is, the result was that the managers had to manage two
schemes, a regulated and a deregulated scheme, to cater for the split in investor response.

### 6.5.3.4 Participation bond process

![Diagram of Participation mortgage bond scheme model](image)

**Exhibit 6.15** Participation mortgage bond scheme model

1) **Loan application**: the process starts with an application for finance that, when approved, provides the investment opportunity.

2) **Registration**: the management company then registers the bond in favour of the nominee company (mortgagee), thereby creating investment *stock*.

3) **Investment application**: through normal advertising channels the manager attracts investment applications for participation bonds.

4) **Loan disbursed**: the investments received are then paid out to the borrower in terms of the registered participation bond.

5) **Allocation**: the investors whose funds have been disbursed to the borrower are then allocated to that bond and are informed accordingly through a participation notice.
6) **Interest payment**: The borrower pays his/her interest obligations (and capital where due) to the management company, which deducts the administration fee and VAT.

7) **Interest received**: The investor then receives the net interest (after the above deductions). Where capital is repaid, the investor's participation is either reduced or the entire investment is repaid to the investor.

### 6.5.3.5 Observations

The participation bond product provides a regulated framework that facilitates mortgage lending. It is regulated by its own legislation and by common law and is free from the constraints of the Deposit Taking Institutions Act that are applicable to commercial banks.

The opportunities that arise from this product are:

- **Capital adequacy**: in terms of the Deposit Taking Institutions Act commercial mortgage lending attracts a capital requirement of 8% of the outstanding loan amount. Conversion of the Bank's normal mortgage book to this product would free up this capital for more productive use.

- **Matched funding**: since the first five years of the mortgage are usually interest-only payments and the investment in a participation bond is also fixed for the first five years, the vagaries of mismatched funding rates and terms are eliminated.

- **Interest rate**: while the interest rates applicable to both the investor and debtor are largely dictated by market forces, the manager controls the timing and level. This provides some latitude for maximising the administration fee through either delaying or accelerating interest rate changes.

- **Investors**: the Bank could utilise the captured investor base to advertise and attract further investments into its suite of investment and banking products. Since the investor profile is already known, segmentation of the investor base is possible to target potential clients for other investments or services.

The problems associated with the product are:
• **Loan-to-value:** the Act limits the loan size to sixty-six and two-thirds of the value of the property. From the Bank's perspective this limits the potential of attracting new business, as the norm in the commercial mortgage business is between 70 and 80% of the value of the property.

• **Investment:** the investors may be invested in a number of bonds; however, each investment is specific to a bond. Should the debtor be liquidated, the major protection the investor enjoys is the LTV. However, since the valuation is made at a point in time, the thirty-three and one-third additional value in the property can be eroded over time, leaving the investor with a possible capital loss.

The Collective Investment Schemes Control Bill is currently being drafted in an effort to bring all investment schemes under a single Act. This includes investments in securities, properties, foreign investments and participation bonds. Its primary intention is to:

• control and regulate the establishment of collective investment schemes
• provide the supervision of the administration of collective investment schemes
• provide for incidental matters

The Association of Participation Bond Managers is currently extensively involved in discussions with the Financial Services Board, other collective investment scheme associations and its members. These discussions are primarily aimed at ensuring that the resultant Bill is balanced, practical and fairly governs the industries affected.
6.6 CHAPTER SUMMARY

This chapter described the broad product range offered by banks to the property market. These products accommodate basic investor needs such as a once-off property purchase to house a business, but also extend to the sophisticated requirements of the serious property investor and trader.

To understand the dynamics surrounding interest rates, this chapter introduced the concept of the time value of money, as well as the effects of gearing on property investments. These fundamentals were utilised throughout the chapter and provided the foundation for discussions surrounding interest rate instruments, derivatives and discounting.

The basic product range was discussed under the Standard Products section, which deals with “off-the-shelf” products that are presented by all property finance institutions.

Structuring the debt through the utilisation of interest rate instruments and derivatives can enhance the standard product set. These facilities can assist the Client in reducing interest obligations as well as provide hedging mechanisms against the volatility of interest rate fluctuations.

The utilisation of legal structures to reduce the tax liability through income-shielding mechanisms was discussed under the Structured Finance section. The concept of lease discounting was discussed in detail. Lease discounting provides cash flow to support the structures utilised in shielding the income and moving the property off the balance sheet.

The concept of using the Bank’s tax base in conjunction with an initial negative cash flow generated by a property investment was introduced. This involves reducing the Bank’s tax liability and provides reciprocal benefit to both the Client and the Bank.
Under the Structured Funding section, the Bank's alternative sources of funding were examined. The use of non-traditional sources of funding, such as securitisation and participation bonds, provides banks with methods of reducing both their costs and risk profiles while retaining the benefits inherent in the business of property finance.
7 THE MANAGEMENT OF PROPERTY FINANCE RISK

7.1 INTRODUCTION

"Risk management is a managerial function aimed at protecting the organisation, its people, assets, and profits, against the consequences (adverse) of pure risk, more particularly aimed at reducing the severity and variability of losses" (Valsamakis 1992:14).

AIREA (1987: 606) further segments risk into risk: “the probability that foreseen events will not occur” and uncertainty: “the probability that unforeseen events will occur”. Risk and uncertainty are two related concepts that make it possible to conduct the business of property finance, as it is the level of control that an institution exercises over these two areas that will determine its profitability.

This view is supported by Ruegg and Marshall (1990:203), who describe risk analysis as “the body of theory and practice formulated to assist decision makers in assessing their risk exposure and risk attitudes and so improve their expertise in securing the most beneficial project in terms of individual requirements”. In property finance terms this can be translated into “securing the most beneficial loan conditions in terms of the Bank’s policies”.

Losses (available security does not completely liquidate the loan) are inevitable and are accepted as part of the business of property finance. Efforts to reduce the severity and variability of the losses are a continuous management function requiring constant monitoring, developing and refining of policies, procedures, skills and knowledge.

The risks associated with property appraisal, development and investment are well documented and are an integral part of the Bank’s assessment of a loan application. The purpose of this chapter is to focus on the property finance risk areas documented in feasibility studies and valuation reports, as well as risk areas not dealt with in these studies and reports.
7.2 GENERIC RISK

7.2.1 Introduction

This section provides an overview of the generic areas of risk that apply to most macro lending institutions. The purpose is to document them in general detail in order to understand property finance risk elements within the broader risk context.

The focus will fall on both the micro (loan) and macro (non-loan-specific) levels that ultimately form the framework within which property finance operates.

7.2.2 The seven C's of credit

It is important to note that traditional credit analysis is still an integral part of the credit assessment process in property finance. These areas of credit analysis have been covered extensively in many textbooks; the purpose of this section is merely to provide an overview of this subject in the light of property finance risk.

The seven C's of credit are applied to individuals (clients) and, where the legal entity is not an individual, to those managing the relevant company or corporation in the following manner:

- **Character:** an analysis of the Client’s qualities, which include morality, honesty, integrity, responsibility and trustworthiness, and which can be supported by positions of trust being held, stability of residence, employment and standing within the business community.

- **Capacity:** the ability to meet the loan repayment obligations. This requires an analysis of the Client’s income-generating attributes such as qualifications, experience, health, age and stability of employment.

- **Capital:** the net worth of the Client, which is calculated by taking into account all assets (e.g. surrender value of polices, properties and pension funds) and offsetting any liabilities. This determines the net asset value of the Client, which is compared to the amount of the loan to establish its capacity to liquidate the debt.
• **Conditions**: those present in the macro environment where the Client has little influence. These include economic, social and political factors that may impact negatively on the industry the Client participates in, for example: severe import tax levied on textiles could dramatically affect the profitability of the clothing industry.

• **Collateral**: a tangible asset used as additional security to strengthen a perceived weakness in the credit rating of the Client, such as lack of capital or credit history.

• **Credit history**: the historical payment of past loan obligations. This can be verified through trade references, accessing the credit bureau system and requesting bank reports from the Client’s bankers.

• **Common sense**: the basis of reasonableness on which the decision is made, once all the factors that emerged from the previous six C’s have been considered.

In later sections of this chapter it will become clear that the seven C’s of credit overlap with the way in which property finance risk is assessed, although in the latter case the focus is predominantly on property risk attributes.

### 7.2.3 Interest rate risk

Changes in interest rates can impact severely on financial institutions’ profits. Interest rate risk arises when an institution’s interest cash flows have mismatched re-pricing dates (the re-pricing dates of funding and lending rates). This will be illustrated in the table below.

In a property finance context, an institution’s treasury department utilises various financial instruments in the money and bond markets to fund its lending portfolios. The institution’s net interest income (margin) is then generated by providing funds to its portfolios at the funding rate plus a percentage (the lending rate), which is the reward (profit) for the risk taken on each loan.

It is this margin that can be reduced or, in extreme cases, become negative when the funding rate and lending rate maturity dates are mismatched. The following exhibit provides a simplistic example of the impact of materialised interest rate risk:
<table>
<thead>
<tr>
<th>Portfolio Amount</th>
<th>Funding Rate</th>
<th>Days to Maturity</th>
<th>Lending Rate</th>
<th>Days to Maturity</th>
<th>Margin</th>
<th>NII* for 30 days</th>
<th>Net Effect on NII</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 000 000 000</td>
<td>10.00%</td>
<td>30</td>
<td>13.00%</td>
<td>60</td>
<td>3.00%</td>
<td>2 465 753</td>
<td></td>
</tr>
<tr>
<td>Funding Re-prices after 30 days</td>
<td>1 000 000 000</td>
<td>10.25%</td>
<td>60</td>
<td>13.00%</td>
<td>30</td>
<td>2 260 274</td>
<td>-205 479</td>
</tr>
<tr>
<td>Lending Re-prices after 30 days</td>
<td>1 000 000 000</td>
<td>10.25%</td>
<td>30</td>
<td>12.75%</td>
<td>60</td>
<td>2 054 795</td>
<td>-410 959</td>
</tr>
</tbody>
</table>

**Exhibit 7.1 Interest rate risk**

(* NII – Net Interest Income)

Exhibit 7.1 reflects a worst case scenario where both the funding and lending rates move against the Bank at the time of re-pricing. In this example, on a portfolio of one billion, the Bank has suffered a reduction in NII of more than four hundred thousand over a period of 60 days. Had the re-pricing dates of both the funding and lending been matched, the treasury would have been able to maintain or better the margin.

In a reducing interest rate environment, the above example would have improved the Bank’s NII. Therefore the extent of the risk is a function of the extent and direction of interest rate changes, and of the size of the portfolio in a mismatched position.

Clearly the least risky position to take is to match maturity periods. However, to maximise profits, the rule of thumb is to go long (fix funding costs for an extended period) in a rising interest rate market and go short in a falling interest rate market. Clearly, by holding the funding cost down while the lending rate rises, the Bank has the potential to make excessive profits; conversely, by re-pricing the funding cost frequently and for short periods in a falling interest rate environment, the impact on the margin will be minimised.

This section has provided a very basic view of the treasury function that supports the business of property finance. It should be evident, however, that even if the property finance division were to suffer no losses through bad debt, it could still very easily become unprofitable through mismatched re-pricing.

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At the loan level, interest rate risk is associated with the Client's cost of servicing the repayment obligation. In a rising interest rate market, the Client is subjected to additional repayment requirements (higher instalments) that could reduce or eliminate any positive cash flow from the property investment. This will be discussed further in section 7.3.2.2.

7.2.4 Political or country risk

Political risk arises from the action or lack of action by governments that change the environment in which businesses operate. It therefore relates to the stability of the current macro and micro economic, social and environmental norms applicable to a particular country. The higher the bias for change, the higher the risk that any changes will adversely affect the norms under which the risks were assessed in the first instance.

While the word "government" normally refers to the governing body of a particular country, it is used more loosely here to refer to:

- international governments (the European Union)
- national governments (USA, Uganda)
- local governments (regional and town councils) or
- any institution or body able to legislate changes to existing rules and regulations

These bodies are able to influence the way in which business operates by implementing or eliminating:

- taxes
- exchange controls
- trade restrictions
- trade tariffs
- nationalisation policies

All of the above factors, or even any one of them individually, could have a severe impact on institutions that operate internationally. Other factors that could impact on
these institutions are social and political unrest, which are not limited to Third World countries only and can affect even the most developed democratic countries.

Social and political unrest, if sustained and unresolved, incapacitate normal business operations and ultimately the economy in a particular region or even country can suffer a meltdown, rendering most legitimate business a non-viable investment.

From a property finance perspective it would appear that where political risk is high, investment in a country’s infrastructure through the provision of funding would not be a wise business decision. However, in cases where the risk can be reliably and substantially removed from a financial institution, business is being done in areas characterised by high political risk.

Where companies of high financial standing believe they are able to operate and are willing to accept the risks inherent in a country, financial institutions would endeavour to secure loan obligation from assets or securities outside the influence of the identified country.

This can be achieved through, inter alia, the use of head lease agreements, collateral bonds and cession of shares, the underlying assumption being that in the event of default, the financial institution would reliably be able to recover the debt.

This can be illustrated by means of a hypothetical scenario where a major cigarette company has invested in a tobacco farm in Zimbabwe, which is invaded by Rhodesian war veterans. While the funds advanced were for the purpose of purchasing the farm, there is little or no reliance on the farm itself. Rather, the loan would have been secured through the encumbrance of assets that were realisable (probably in the country where the loan originated). Any recovery of loss would thus be reasonably certain.

In essence, therefore, structuring techniques can negate political risk to a large extent, provided that acceptable security is realisable.
7.2.5 Other macro risks

The following risks are highlighted to demonstrate the framework within which the business of property finance operates. These risks (as well as those set out above) are inherent in all forms of business and are covered either directly or indirectly under section 7.3.

**Business risk:** the risks associated with the ability of a business to continue to generate sufficient operating income. These risks are related to the market acceptance of products, services and quality, which is reflected in sales and contracts. In a property context this relates to a broad range of factors that include the physical, locational and functional attributes of a property, which influence its income-generating potential (lettability and saleability).

**Management risk:** the income-generating potential of a property can be enhanced or degraded, depending on the ability of the property manager. Poor management decisions can limit or reduce the income generated by a property (e.g. specialising the building to meet current tenant requirements, which provides only short-term income benefits).

**Liquidity risk:** property is not a liquid asset (easily and quickly tradeable). Liquidating an asset, which generally occurs in times of financial hardship or as a result of divestment strategies, requires considerable time (marketing and conveyancing). To reduce this time lag, the Client may consider discounting the price to attract the necessary purchaser. This can have an adverse effect on the Bank’s security.

**Environmental risk:** property is immovable and is therefore subject to various environmental factors. Initially, the property might be well located. However, over time, new influences could be brought to bear, such as the rezoning of adjacent land or the disposal of chemical and waste disposal nearby or, on a more positive note, the construction of new roads that will upgrade the linkage network. These environmental
risks are largely uncontrollable, yet could have significant ramifications for the profitability of a property investment.

**Financial and contractual risk** is discussed in detail in section 7.3.2.2.

In conclusion, from a property finance perspective, the Bank must understand these macro risks as they relate to a proposed property, as well as the effect they might have on its income-generating potential. A property that produces a handsome return in the short term could be reduced to a non-viable investment by the stroke of a legislative hand.

Banks that operate in the property finance business must be “hands on”. They must have resources (valuers, relationship managers, granting authorities) with extensive knowledge and experience of the attributes that constitute the above risks, within their geographical areas.
7.3 ELEMENTS OF PROPERTY FINANCE RISK

7.3.1 Introduction

The lending of money against the security of property requires a sound understanding of the risks associated with property and the impact these have on the value of a property. The value inherent in a property can change dramatically over time with the realisation of any one of these risks, which will impact on the core property value drivers.

The financing of a property usually spans a number of years, even decades, which places risk assessment firmly in role of predicting the future. McMaham (1976:240), emphasises the need for sensible lending even in good times “When interest rates are lower, reflecting an expanded supply of money, institutions are under pressure to get the money out as rapidly as possible. It is during these periods that marginal loans are made which often come back to haunt the institution”.

This type of error in judgement can only be as a result of the lack of appreciation for the fundamental risks associated with the business of property finance. Property finance is generally long-term in nature and each loan should be viewed in this light and not have the economic climate as the driver behind the lending.

The old adage “location, location, location” is a truism, provided that the property meets certain market requirements. These requirements highlight the risks that the Bank must consider in the valuation report.

Lettability: an indication of the attributes that tenants demand from a property, such as area suitability (declining or growth), utility of space (ability to utilise rented area), technical infrastructure (hi-tech or basic) and tenant mix (anchor tenants to attract customers and competitors). Banks are mindful that signed leases are no guarantee of a reliable cash flow, which is generally the primary source of funds to meet the loan repayment obligations. Therefore it is imperative to the Bank and the Property
Investor that there is sufficient tenant demand (for the term of the loan) to find and install a new tenant within a reasonably short space of time should the need arise.

Saleability: an indication of investor demand for a particular property. While lettability is certainly foremost in the minds of investors when considering a property purchase, banks must also consider the probability of a client defaulting on the loan repayment obligations. Therefore the saleability of the property is a matter of concern. While closely linked to lettability, saleability also comprises broader issues such as the maturity of the area, strength of cash flow (length of leases and quality of tenants), life span of the building (obsolescence), and supply and demand for similar investment properties in the area.

Condition: the condition of a building has a direct influence on operational costs and therefore the cash flow potential of the property. Factors such as age, obsolescence and type of construction (e.g. face brick vs. plaster) all contribute to the saleability and lettability of a property.

Basically, where a property displays sustainable and above-average ratings on lettability, saleability and condition, banks should view the lending decision in a positive light. In addition, however, banks will also have to analyse the loan proposal with regard to the following:

- client attributes
- serviceability
- loan to value
- property type
- property location
- property quality

These risk areas will be discussed comprehensively in the next section. They form the basis of loan risk categorisation, which will be detailed later on in this chapter.
7.3.2 Property finance risk areas

These are the risk areas that receive much of the attention in the assessment of property finance risk. Assessments are undertaken in the context of the broader framework of risk discussed in previous sections of this chapter.

7.3.2.1 Client attributes

The assessment of the Client revolves around two main issues, namely net asset value and historical performance:

Net asset value: the determination of the Client's net worth. This entails gaining a balanced and accurate picture of the realisable value of the Client’s assets once all major liabilities have been deducted. This provides the Bank with a strong indication of the reliance that can be placed on the Client’s liquidated assets to make good any price shortfall in a forced sale of the property. In other words, it enables the Bank to gauge the potential of an alternate source of repayment.

To achieve this the Bank must be able to confirm ownership of the assets claimed by the Client. This can be done through Deeds Office searches (properties), analysis of audited income statements and balance sheets (private shares) and confirmation of possession of listed share certificates. A common problem that arises in such analyses is the Client’s confusion regarding actual ownership or control of an asset. An example of this is a father (the Client) who runs a business where family members or a family trust hold the shares. In this case the Client does not own these assets and therefore they cannot be included in the NAV calculation.

Other problems in determining NAV include:

- Cross-guarantees: where the property trading company stands surety for overdraft facilities of another company within the same group. While the property-owning company might be comfortably servicing the loan, it could end up being liquidated due to the non-servicing of the overdraft it has guaranteed.
• **Third-party bonds:** bonds over the same property but in favour of other financial institutions, usually ranking behind the Bank. While the principal bond might be serviced regularly, this may not be the case with the subsequent ranking bond, which could result in liquidation, thus severely reducing the NAV of the property.

• **Listed shares, unit trusts and gold coin:** it is prudent not to place full face value on these assets, as their prices fluctuate on a daily basis. Banks generally apply cover ratios to these types of assets; typically double cover (50% of current value) for blue chip shares and triple cover (33% of current value) for others. While unit trusts and gold coin can receive up to 70% of current value, the cover ratio applied might be depressed depending on the spread and balance of the portfolio.

• ** Tradable assets:** these assets are mobile ("here today, gone tomorrow") and include items such as motor vehicles, jewellery and art collections. Experience has shown that when banks attempt to realise these assets in times of hardship, it is found that they are no longer the property of the Client. For this reason banks will generally apply 10% of the stated asset value to the NAV calculation.

The purpose of calculating the NAV of a Client is to determine the minimum amount the Bank can reasonably expect to recover from the Client should the need arise. This calculation is also used when determining the suitability of a proposed surety, as a suretyship is worthless without a substantial NAV supporting the proposal.

The following exhibit is an example of a typical NAV calculation:
Exhibit 7.2 Calculation of net asset value

The above exhibit clearly demonstrates the difference between the Client’s perceived NAV and the NAV the Bank would rely upon.

**Historical performance**: the track record of the Client in meeting payment obligations provides significant insight into the financial conduct and dependability of the Client. Repeated defaults or judgements against the Client will obviously weigh heavily against the loan being approved, while a single default over a period of 10 or 20 years would have little effect on the decision.

Banks can obtain the information they require in the following way:

*Bank reports*: banks are able to request current account reports from the Client’s bankers. These reports provide details on how the Client has managed his/her current account, overdraft facilities, facility exceeded, cheques and ACB returned unpaid, as well as general comments on the Client.
This enables the Bank to gain insight into the financial transactions passing through the Client's account, the regularity of payments and receipts and the quantum of these movements. Clearly, the more erratic these movements are, the more concern this will cause the Bank, as it indicates reliance on once-off type business. Banks generally prefer an annuity type of business where consistent growth in the volume and value of transactions supports the view of a reliable and established business. While an erratic cash flow might be inherent in the type of business the Client is involved in, erratic repayment of loan obligations means that extensive man-hours and management time will be required to manage the account.

An unfavourable bank report will sway the lending decision heavily in favour of declining the application. The security for the loan might very well cover the loan handsomely, but the projected cost of managing the account would impact negatively on staff performance and therefore on expenses.

Credit references: checking credit references is one of the most basic procedures, yet it can be overlooked as the focus might rather be on the security of a large application. However, if it is established that a Client has been tardy in paying his/her general accounts (e.g. clothing and food store accounts), the logical conclusion would be that those habits would be perpetuated with larger transactions, such as a mortgage loan.

Credit bureau: there are businesses that provide information (e.g. KreditInform) on payment defaults and court judgements, among other things. Technology has advanced to the stage where this information can be obtained through dial-in facilities provided by these organisations, provided one is a subscriber. Any judgements or insolvencies discovered in this way will be detrimental to the viability of the loan application.

Lastly, experienced credit analysts and managers admit that "gut feel" plays a large part in their recommendation. There is no scientific evidence to support their instincts; however, they will testify that when they have ignored this sixth sense, they have come to regret it. This feeling could have to do with the Client, the financials, the property or any other aspect of the loan application and if it does not subside after
further investigation, the manager or analyst in question generally prefers to seek another unbiased view than recommend the loan.

7.3.2.2 Repayment certainty (serviceability)

Serviceability is clearly the paramount issue to be considered when assessing a loan application. A one hundred percent certainty of repayment negates the need for any other analysis, however, this is rarely, if ever, attainable. There are two risks that can have a profound effect on the Client’s ability to meet the loan repayment obligations:

- **financial risk**: the reliability of the projected cash flows as generated by the rental of the property, and
- **contractual risk**: the reliability of the lease agreements signed by the tenants of the property.

While these two risks are closely related, financial risk is concerned with the continued generation of cash flow through income from rentals or sales, or pre-letting in the case of a development loan. This includes an assessment of the financial standing of the tenants or purchasers. In the case of sales, uncertainty is largely negated by pre-selling enough units (with deposits) to repay the debt.

Contractual risk is concerned with the strength of the lease agreement from a legal perspective. It is based on whether the terms and obligations of the tenant are secured in such a manner as to provide stability and sustainability to the cash flow.

**Financial risk**

Tenant mix can be an important component, particularly in retail, of a successful property profile. The tenant’s financial standing or ability to pay the contractual rentals is obviously of great importance. It is therefore essential that the Bank undertake a diligent analysis of all the tenants’ financials, particularly of those considered to be anchor quality or who hold a significant portion of the lettable area.
The Bank’s analysis must determine the financial strength of the tenant to meet the current rentals, to meet future rental escalations and to maintain a profitable profile for the duration of the lease (the normally acceptable period is three to five years).

In the case of default, the Client (landlord) must be able to recover lease obligations, which, even if the lease is contractually sound, would be impossible in the event of financial ruin or weakness on the part of the tenant. In such a case financial pressure will be put on the Client to make good the shortfall in rentals out of own funds in order to service the repayment obligations.

Legal certainty is not necessarily equated to financial security. Therefore the Bank must insist on tenant and lease approval, which benefits the Client as it further reduces the risk associated with the investment. In addition to analysis of tenants’ financials, credit checks must be done through references or through online facilities such as KreditInform, where repayment defaults and past judgements could come to light.

**Contractual risk**

The tenant must be contractually bound by the terms of a written lease that oblige the tenant to take occupation by a certain date, to remain in occupation and to pay rent and make any other payments for the duration of the lease period.

The lease, which is a contract, should clearly specify the contracting parties, their rights and obligations, the period of the contract and remedies available for any breach of the contract. The Bank must ensure that the correct parties sign the lease and that any lease terms and conditions that were imposed by the loan approval authority are included in the lease.

The risk of contractual default is usually greater in new developments than in the case of established properties and tenants. Since new developments require significant pre-letting (proof of demand) before a Bank will consider financing the project, considerable focus must be placed, not only the actual leases, but also on the Client
meeting the construction deadlines to enable tenant occupation as stipulated in the lease agreement.

The Bank should therefore look to one or more of the following:

- Building finishes, facilities and condition must fairly reflect tenant expectation generated by advertising material and broker promises.
- Occupation dates must be realistic and in line with the architect’s and project manager’s estimates.
- The other tenants’ occupation dates to ensure that the benefits of trading in a multi-tenant building materialise.
- The occupancy level should be maintained; clearly no tenant would benefit from a vacant or partially vacant building.

Should any of these conditions or terms not be met, there is a strong likelihood that the tenants could cancel the lease, refuse to pay the rental or pay a reduced rental, all of which will severely impair the ability of the Client to meet the loan obligations.

Serviceability – stress test

Economic cycles by their very nature fluctuate and, concurrent with these cycles, there are fluctuations in interest rates that can erode the ability of projected cash flows of a proposed development or existing building to service loan repayment obligations.

Prevailing interest rates are used to test the ability of the building’s cash flow to meet the repayment required on the loan, in other words, to determine whether the cash flow can meet the calculated instalment. Since most leases make provision for rental escalations, the general trend is to expect an initial small shortfall in year one that will be removed in year two. Year three should see the start of the generation of a meaningful income for the investor.
For the initial shortfall the Bank will look to the investor's own financial standing to assess the probability that the shortfall can be met. However, this must be stress-tested against the possibility of an increase in the prevailing interest rates, which will increase the calculated instalment and place increased pressure on the investor's resources.

To understand the measure of pressure that will be put on the investor's own resources in a rising interest rate cycle, the Bank applies a test interest rate that is usually one or two percent higher than the prevailing interest rate. The net result of the effect of the instalment on the cash flow is then considered in the light of the investor's own resources.

A method of reducing this interest rate risk is the application of a fixed rate to the loan that will eliminate any adverse fluctuations in interest rates for a set period of time, at the end of which cash flow sensitivity to interest rates would be largely reduced. However, investors have their own opinions on the direction of interest rates and it is possible that they may resist the adoption of this method of risk reduction.

In summary, by addressing the financial and contractual risks the rental cash flow can be reasonably covered. This gives the Bank the required comfort that there will be consistent, adequate and continued growth in the cash flow. The risk to this cash flow is that rising interest rates could sufficiently erode it to an extent where the Client cannot meet the loan obligations. This risk is reduced by applying an interest rate to the loan that is excessive to the loan's actual interest rate and then assessing the Client's ability to meet the higher loan repayment obligations.

### 7.3.2.3 Loan to value

The loan-to-value (LTV) is the outstanding loan amount as a percentage of the value of the property bonded to secure the debt. As part of their lending or credit policy, banks normally set a maximum allowable LTV. This limit is usually set between 70% and 80% and can vary between different property types, depending on the risk the Bank associates with the type of property.
There are exceptions, for example high-risk properties such as farms (crop failures, droughts, disease) where the limit can be set as low as 50%. In other cases an LTV of greater than 100% may be acceptable to the Bank if a property is tenanted by a blue-chip company (heavy reliance can be placed on the rentals).

The reason why Banks use this indicator as one of their primary considerations is that it provides an indication of the extent to which the property price can be discounted in case of a forced sale. If a property has a value of R10 million and a LTV of 70%, it can be discounted by up to R3 million and therefore sold relatively easily, normally through a sale in execution (auction).

On the face of it, this seems a reasonable method of ensuring that the debt will be repaid should the Client be unable to meet the loan obligations. However this is not guaranteed and one only has to glance at the financial statements of banks to see the extent of provisioning and bad debt write-offs prevalent in the property finance industry.

The reasons why the prudent application of a LTV policy does not ensure a nil write off are as follows:

**Time:** the period of time elapsed between identifying a potential bad debt and the actual sale in execution can range from three to twelve months and longer depending on circumstances, which could include defended court actions and other stalling tactics by the Client (partial payments and promises). Using the above example, this delay in selling the property erodes the R3 million cushion quite rapidly through unpaid interest that is capitalised every month until the sale. At an interest rate of 15% on R7 million the capitalised interest climbs from R87,000 in month one, increasing the outstanding debt to over R8 million after a year.

**Legal costs:** most Banks include a clause in their loan agreements to the effect that the costs of any legal action will be accrued to the Client’s account. Once the Client has failed to respond favourably to the Bank’s demands, the matter is handed over to the Bank’s attorneys, who start the legal process, which incurs concurrent costs. Should the Client contest the action in court, the attorneys will brief an advocate,
whose services further increase the costs and reduce the difference between the outstanding debt and the value of the property.

The original LTV can be degraded further when the Bank requests a “knock down” valuation, which in essence is the price the Bank can expect in a forced sale. Banks will normally attend the auction and, in an attempt to drive up the sale price, bid up to the “knock down” value. Should the auction not produce a bid greater than this price, the Bank will buy the property in as an asset of the Bank in the hope that it will be able to administer the property and sell it at a later date for a better price.

The “knock down” valuation usually exasperates bank executives who cannot comprehend the difference between the new “knock down” value and the original valuation. The concept of a willing buyer and willing seller at a point in time no longer applies and the valuer has to take into consideration dynamics that are not associated with a market valuation. These include:

**Value:** the value of commercial and industrial property is largely determined by its income-generating potential and it is usually this potential that has been degraded, resulting in the loan not being serviced. The reason for this deterioration in the property’s income stream varies between tenant default, economic downturns, declining areas and bad property management. The valuer has to estimate a discounted rental that will attract tenant demand or the cost of refurbishment, or both, which results in a reduced property value and higher LTV.

**Market:** the market conditions at the time of the original valuation could be vastly different from those under which the valuer performs the “knock down” valuation. In the property finance world this invariably results in a lower value when dealing with problematic loans; however, there have been instances where the value of the property has increased, but this is the exception rather than the rule.

**Reputation:** on the face of it, it might seem strange that a property could gain a reputation for being unprofitable. However, in the case of shopping centres in particular, this is a reality. There are cases where shopping centres have been turned around and become successes, but this does not happen without significant investment.
of time and money. Clearly, once a property has acquired such a reputation, property investors are unlikely to pay the original market valuation and Banks usually concede a considerable price discount in order to sell the property.

While the LTV calculation does have its shortcomings, it is still used as one of the major indicators in assessing the risks associated with a loan application. It is easily understood, universally acceptable and, in a normal environment, provides the Bank with a certain level of comfort.

7.3.2.4 Property type

Each property has its own unique set of characteristics. However, there are certain characteristics that all properties have in common (zoning, use, etc.) and these provide the mechanism to classify each property into a property type.

Each of these property types has its own inherent risks for both the property investor (providing equity) and the banks (providing funding). These risks can be seen as the absence of some or all of the property attributes normally associated with a successful property type. These property attributes should be clearly analysed in the feasibility study (commissioned by the property investor or developer) and valuation report (commissioned by the Bank) in order to provide two independent assessments that should collaborate each other’s findings.

Banks focus on particular property attributes that have in the past contributed significantly to problem loans. This discussion will focus on the common risks associated with various property types, which are debated rigorously during a lending decision process over and above the normal analysis and feasibility study requirements. These risk issues are well documented and form part of any scientifically analysed property investment proposal.

The intention here is therefore not to discuss principles and methods of feasibility studies and valuations, but to highlight those areas from the latter and former that receive additional focus from the banks.
The common classifications and associated risks are as follows:

**Farm (agricultural)** properties are those properties that provide income-generating potential from the natural resources of the land. The potential is usually realised through the introduction of crops, livestock and infrastructure that harness and take advantage of Nature’s assets.

However, Nature is not a willing partner, merely a participant whose involvement is crucial, but largely uncontrollable and incidental. Man’s understanding of Nature and his ability to predict natural phenomena are limited. The unpredictable cycles of flood and famine, drought and disease are areas of risk that can make farming seem like an act of faith rather than a scientific investment.

Nature aside, the farmer also has to deal with normal business principles of supply, demand, marketing, distribution, management, local and global economics. Clearly this business requires specialist knowledge to assess the risks involved, and most Banks will not indulge in this type of lending without significant collateral security.

To highlight the specialised knowledge required in financing farming ventures the following have to be understood in the light of feasibility, profit and risk of adverse effects on projected cash flows:

- **Land:** the extent of land under irrigation, land that can be irrigated and land that is supported only by the annual rainfall.
- **Grazing:** the ability of the farm to support livestock through cultivated or arable lands and the quality of natural flora.
- **Orchards:** the production capabilities (type, quality and maturity of trees), irrigation requirements and predicted demand for the fruit.
- **Machinery:** the availability, suitability and condition of specialised machinery required in the production of income from the farm (tractors, harvesters, irrigation pumps and pipes, etc.).
- **Buildings:** the extent, suitability and condition of the farm buildings to service the needs of farming activities.
• **Soil**: the type, condition and topography of the soil to support the proposed farming activity.

• **Water**: the reliability and quality of water sources available to the farmer, together with the suitability of infrastructure (irrigation system) to transport or reticulate to areas of the farm requiring water.

• **Economically viable units**: the minimum land required to produce a profit to the farmer. This calculation is reliant on many factors, such as type of livestock, regional carrying capacities, number of trees or type of crop.

Each one of these attributes must not only be fully understood, but also be thoroughly investigated in respect of the farm in question. While the Bank can find some comfort in the valuation report, the valuer, for all his/her knowledge and experience, is not an expert and cannot be expected to provide technical input for each one of the attributes.

While it is the valuer’s responsibility to extract the pertinent information from experts and organisations in the field, commercial banks generally prefer to concentrate their resources on commercial and industrial lending opportunities where pertinent information is easily and reliably attainable.

The problem of understanding farming risks is exacerbated by the wide variety and derivatives of crops and livestock, and the fact that certain types are more suited to particular climates, areas and rainfall patterns. However, specialist lenders such as the Land Bank understand farming risks and have the resources, infrastructure and technical networks in place to gain the information required to make an informed lending decisions. This knowledge enables them to provide lending products that facilitate the irregular loan repayment profiles necessitated by the timing of crop or livestock sales.

Traditional commercial banks do not have the benefit of such networks or expertise. This shortcoming is usually hedged through the application of a low LTV lending policy, which provides the Bank with a large margin of error with regard to lending decisions.
Shopping and retail centres: this is a very broad category of property type and the following exhibit, adapted from The National Property Education Committee (1998:158), quoting Ghyoot (1992), provides a useful segmentation of shopping centres and descriptions of their general attributes.

<table>
<thead>
<tr>
<th>Category</th>
<th>Size (GLA)</th>
<th>No of shops</th>
<th>Anchor tenants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local shopping centre</td>
<td>Up to 10 000 m²</td>
<td>1-25</td>
<td>Superette independent or 7-11 type store</td>
</tr>
<tr>
<td>Neighbourhood shopping centre</td>
<td>5 000–15 000 m²</td>
<td>25–50</td>
<td>National grocer</td>
</tr>
<tr>
<td>Community shopping centre</td>
<td>15 000–30 000 m²</td>
<td>50–75</td>
<td>Small department store and national grocer</td>
</tr>
<tr>
<td>Regional shopping centre</td>
<td>30 000 m² plus</td>
<td>75 plus</td>
<td>Two department stores, plus one or more national grocers</td>
</tr>
<tr>
<td>Super regional shopping centre</td>
<td>75 000 m² plus</td>
<td>150 plus</td>
<td>Three or more department stores, plus two or more national grocers</td>
</tr>
</tbody>
</table>

Exhibit 7.3 Shopping centre classification

From the above table it is clear that banks involved with this type of lending can incur exposures from a few million rands to hundreds of million rands. The bigger the shopping centre, the more likely banks are prepared to “share” the lending with their competitors. In this way participating banks enjoy a proportional interest income and are therefore proportionately exposed to the risks.

Where the lending is syndicated amongst competitor banks, the originating bank usually assumes the role of the lead bank, whereby it is responsible for management
of the disbursements, ensuring compliance with all terms and conditions and general administration of the loan. The lead bank is normally compensated for this additional workload either by receiving the service fee or a higher margin.

In addition to the findings of the feasibility study and valuation report, there are certain other factors that the Bank will also take into consideration. Attributes relating to a good shopping centre site are location, access, shape and size, topography, and adjacent land zoning. The Bank must be suitably convinced that these attributes are favourable for the proposed development site.

- **The location** must be of such a nature that it will provide the local community with a convenient shopping facility and experience. Depending on the size of the shopping centre, the primary trade area (from where the majority of customers will arrive) can extend from 10 minutes' (neighbourhood centre) to 25 minutes’ driving time in the case of a regional shopping centre. The feasibility study should provide an extensive analysis of projected customers, taking into consideration competing centres, disposable income analysis and growth patterns.

The delivery of potential customers to the centre is of paramount importance to the success of the shopping centre. The tenants rely on the projections provided by the developer to project their profits and cash flows. The developer/investor, on the other hand, needs the tenant demand to remain high in order to receive escalating rentals. If the projections are wrong it can be catastrophic for all involved. However, it is generally the Bank that carries the majority of the loss and that is responsible for managing the building out of the crisis.

This is a very technical analysis and the Bank should spend significant resources on ensuring that it is done correctly and accurately.

- **Access** must be convenient and easy. This aspect alone can sway potential customers from the use of one shopping centre to another. Traffic jams in and out of the shopping centre, particularly at peak times, can be the undoing of an otherwise good centre. The Bank must therefore ascertain that street/highway
exits leading to the shopping centre and departing routes are well designed and capable of carrying the projected traffic volumes effectively and efficiently.

- **The shape and size** of the site must allow for expansion, visible frontage to passing traffic and sufficient and convenient parking. The generally accepted parking bay requirement is 6 for every 100 m², and 3 m² of land for every 1 m² of retail space. This is an important aspect, as congested parking facilities can frustrate customers to such an extent that they may well find it more convenient to shop elsewhere.

- **Topography** is an important issue, as the design of the shopping centre must adhere to certain generally accepted rules. A level site is the easiest and least costly to develop, as access from the parking area to the shopping centre can be achieved reasonably easily. However, a single-level parking facility linked to a multi-level complex can create thoroughfare traffic problems in the upper levels of the shopping centre (generally, shops in the upper levels do not enjoy the same volume of customer traffic).

Where a multi-level complex is required the generally accepted design is to create parking levels adjacent to each floor of the shopping centre, thereby spreading the customer traffic flow between floors. The introduction of multi-level parking increases construction costs quite drastically; this may, however, be a necessary expense to maximise the potential of the site.

- **The adjacent land zoning** should receive considerable attention when choosing a site. Complementary uses (e.g. residential or office use) can enhance the success of the shopping centre. However, where the adjacent land has been zoned for industrial use, the impact could be negative. The introduction of a waste disposal business adjacent to a well-established and functioning shopping centre, for example, could impact critically on the centre.

Although the above factors are likely to have been considered and analysed in the feasibility study, the Bank should utilise its own resources, such as valuers and
quantity surveyors who have extensive knowledge and experience, to verify the findings and assumptions of the study. Internal verification will enhance the Bank’s ability to make an informed lending decision.

Certain other critical factors that need to be considered are listed below:

- **Anchor tenants** are usually large retailers with significant brand following. The anchor tenant is expected to be the major attraction of the shopping centre, providing the smaller tenants with the benefit of customer traffic passing their doors. In larger shopping centres there might be two or more anchor tenants, which should be strategically placed to maximise the traffic through the centre. Clearly, adjacent competing anchor tenants could polarise customers to one area of the shopping centre, which should be avoided.

As described in a previous section of this chapter, the Bank must ensure that the leases entered into with the anchor and major tenants are covered in terms of financial and contractual risk. The lending decision will depend heavily on the reliability of the cash flow generated by the shopping centre. Neither the Bank nor the Developer would view weak leases with the anchor tenants or the absence of a substantial anchor tenant in a positive light. The magnitude of the investment would certainly not warrant a highly suspect cash flow and therefore the anchor tenant lease should already be in place before the development is started.

- **Tenant mix** is particularly relevant in shopping centres where anchor tenants play an important role in attracting customers to the centre. While a suitable anchor tenant might be in place, a mix of other tenants with similar businesses could create competition problems, resulting in financial hardship for some tenants, who may then default on rental payment.

Tenant placement could also give rise to problems, for example if a butchery is located next to a beauty salon. Clearly, the odours and the sound of band saws cutting meat would disturb the customers of the salon. The drive to sign up tenants must therefore not override sensible logistic requirements.
**Commercial** properties are those properties developed to provide shops and offices to tenants who are engaged in the business of supplying goods and services to the general public with the objective of making a profit. This definition encompasses a wide spectrum of properties. The risk attributes associated with these properties have already been discussed. However, the Bank will also have to address the following concerns in respect of office property investments:

- **Decentralisation**: the exodus of tenants from offices in the CBD (central business district) has been well documented. In extreme cases, this can lead to urban decay. The desperate plight of property investors is particularly apparent in the Johannesburg CBD. Entire office blocks have been left vacant, with the result that owners have had to board up their properties and shut off services (electricity and water) in an attempt to reduce overheads.

In such situations, the Bank’s exposure is extremely large, and it is not uncommon for debt to be written off completely. The Bank might not even consider buying the property in (particularly if there were no purchasers at the sale in execution), given the additional overhead costs of maintaining the building until such time (if ever) the area improves and the property can be sold.

As a result of such large exposures, banks are justifiable hesitant to finance CBD office blocks. The larger metropolitan cities are all, to some extent, suffering the ramifications of decentralisation. Some local councils, in partnership with big business, have fought back with some success by introducing additional law enforcement, removing unauthorised traders from informal trade areas and cleaning up the CBD.

However, banks are not risk takers and will not invest in these areas until such time as demand trends improve to a level where long-term investment viability is evident.
• **Parking:** the traditional CBD office blocks were built many years ago when the public transport system functioned particularly well and motor car transport was a luxury reserved for the wealthy. Historically, office block designs therefore provided for limited parking facilities to cater for executives and well-to-do clients.

As CBDs expanded and the economy grew, more people were able to afford motor cars, resulting in increased demand for parking in areas where there was no room for expansion. Property owners looked to modifying their office blocks to include basement parking and even eliminated office space on the lower floors to accommodate the demand for parking. New developments recognised this need and parking facilities became an integral component of the office block design.

From a property finance perspective, investment in an office block cannot be considered if the block will not have adequate and dedicated parking facilities. Office blocks without on-site parking generally have little tenant demand or specialist demand (e.g. technikon classes), which affects the saleability of the property. Banks will therefore consider a loan application only if a property has parking facilities that are sufficient, sustainable and conveniently situated.

• **Obsolescence:** the age of a building will usually provide an indication of how well it can be adapted to meet modern demands for open plan offices and space efficiency. The older the building, the more likely additional investment will be required to install false floors or ceilings (for network cabling and air-conditioning), remove non-load-bearing walls (to accommodate open-plan requirements and maximise lettable area) and provide modern facades.

Modern buildings provide for these requirements in their design where, for instance, secluded or dedicated office space can be created through dry wall partitioning, which is relatively inexpensive. In this way tenant requirements and associated installation costs are kept to a minimum. With older buildings, however, these requirements would necessitate extensive building works, which would disrupt current tenants.
Industrial properties are those properties constructed to facilitate the processing of raw materials and the manufacture of products. These manufacturing concerns vary from light engineering (furniture) to heavy engineering (shipbuilding), each requiring a specific facility (property) to meet its production requirements.

From a property finance perspective, given a good tenant, lease and projected cash flow, the Bank will look to the attributes of saleability, lettability and building condition to ease its mind in the case of repayment default.

The first concern is the use to which the property can be put. Specialised or single-use industrial buildings (refrigeration) provide a reduced scope of letting opportunity, as they are suitable for a limited range of industrial businesses only. Similarly, large industrial units have a very limited market, catering only for warehousing and large manufacturing enterprises.

Typically, there is only a small segment of the industrial market that may potentially want to lease a building, which gives banks cause for concern with regard to cash flow. Therefore, in the normal course of lending (bar blue chip tenants and leases), the Bank favours general-use industrial buildings that can be reasonably easily adapted to cater for a wide range of industrial tenants. Industrial parks provide multi-tenanted property investments that can ease cash-flow sensitivity to vacancies.

Other concerns regarding industrial properties are:

**Design:** Multi-level industrial properties are generally problematic, as it is difficult to instal plants and distribute materials on the upper levels. Unless a tenant occupies the entire building, finding tenants to occupy the second floor and higher is difficult. The exception is double-volume industrial units with a second-floor office component that services the manufacturing business.

Generally, multi-level industrial properties were originally built to specific business requirements. Over time, many of these business expanded to new premises or closed.
The property owners were then left the innovative task of finding a tenant(s) whose requirements would be met by the building design. However, this is not the type of property banks will readily bond due to the possibility of long-term vacancies.

**Loading facilities:** well-designed industrial parks and buildings must provide for the movement of large container vehicles. This includes parking, turning circles and loading doors that are big enough to cater for such movement. The absence of these fundamental facilities is a common problem and restricts otherwise good industrial premises to small manufacturing concerns.

**Nature of tenant business:** banks normally approve a loan on the original tenant profile. However, as time and the years pass, tenants come and go, leaving the bank exposed to the a variety of businesses undertaken within the bonded industrial property. These businesses could have a severe impact on the income-producing properties of the property; for example, enterprises engaging in the production of hazardous materials (chemicals), waste disposal and leather processing (smell) could make the surrounding tenants uncomfortable to the extent that they will not want to renew their leases. Certainly these types of businesses will not encourage new tenants and, at best the client will have to discount the asking rentals to make the property palatable to potential tenants.

**Proximity to related industries:** there are certain benefits for related industries in close proximity to one, which encourage continued tenure. A typical example is the motor industry, where businesses such as sales, parts, servicing, repairs and panel beating complement each other through the provision of products or services that are not in competition, but provide a collective attraction to the market.

7.3.2.5 **Property location**

AIREA (1987:171) describes the analysis of location as “the time-distance relationships between the site and common origins and destinations”. In essence this is the analysis of access to and departure from the property and greater surrounds.
The purpose of this analysis is to gain an understanding of the convenience factor, i.e. the ability of the transportation networks (streets, highways, railroads and airports) to provide an infrastructure that will complement the property type. In a property finance context, these attributes have a significant impact on lettability and saleability, and therefore on the lending decision.

Residential properties require easy access to bus and railway stations, as convenience makes a property attractive to tenants and purchasers alike. Other positive location attributes are access and proximity to local shopping centres, community centres and schools. While the close proximity to major arterial roads and freeways can be a positive influence (commuting to work), any property directly adjacent is exposed to noise and emission pollution, which is extremely inconvenient and detrimental to the value of the residential property.

Industrial properties require access to transportation routes, railways, airports and, in some instances, harbours, to facilitate the movement of raw materials and the distribution of finished products. The proximity of these location attributes is also critical from a transportation cost point of view. Fuel and haulage costs are integral to the profitability of industrial enterprises, and so the further the transportation required to and from the property, the smaller the tenant market.

Commercial properties generally enjoy the benefits of high-traffic areas as long as the road infrastructure allows for easy access and departure points from the property. The advertising value for tenants (billboards) can be significant, provided that the speed of travel past the site is not excessive. Slow traffic provides the commuters the opportunity to observe their surroundings and repetitive observation of billboards may encourage them to utilise the services or products advertised.

Banks therefore take careful note of location attributes. The valuation report provides significant comment on this aspect and banks place considerable emphasis on it when considering a loan application.
7.3.2.6 Property quality

The quality or condition of a property has a major influence on its value. A property must be able to attract tenants (rental income) or purchasers (sale price), otherwise there is no profit incentive for property investors or traders.

To achieve this the functional layout, design and quality of finishes must be consistent with market expectations. A thorough analysis is required of the quality of materials and workmanship is required. This analysis is performed by the valuer, and can provide valuable insight into the following areas that can affect the property value:

- **Maintenance**: the materials utilised in the construction and finishes of a property can either enhance or degrade its saleability and lettability (e.g., face brick or painted plaster, landscaped gardening or brick paving). The costs associated with the general upkeep of the building and surrounds (wear and tear) cannot be recovered, as they are necessary to maintain the building in a condition that will continue to generate rental income through the retention of tenants. Clearly, there must be a balance between low-maintenance costs and aesthetic appeal.

- **Operational expenses**: this refers to the expenses that are required to operate the building on a daily basis (e.g., rates and taxes, electricity and water, security, maintenance staff). This is similar to maintenance and is a necessary expense to provide the infrastructure and resources required to operate the building.

- **Utility costs**: before construction commences, careful consideration must be given to the utilities that will be provided. A building that incurs additional construction expense, but provides no additional utility (e.g., industrial-strength floor slabs in a commercial complex) has no benefit to a potential tenant, property investor or trader. This additional expense is therefore wasted and will not be recovered; furthermore it will have no beneficial influence on the value of the property.

- **Economy of construction**: there must be a balance between the improvement in the property that the construction creates and the additional rental it generates. It must enhance the desirability of the property to an extent that there is a profitable return through increased rentals or property value. In short, the building must be
constructed with the correct methods and materials to fulfil its intended purpose and market requirements.

- **Insurance**: a beautiful building, finished in expensive materials (e.g. marble tiles and brass fixtures) will attract a high insurance premium. The construction and replacement costs of this kind of building will usually escalate quite dramatically over time, requiring the property owner to increase the insured value of the building accordingly. Unless there is a commensurate increase in rentals over the same period, the profitability will decrease, as will the value of the property and its desirability as an investment.

The valuer plays an important role in identifying these potential problem areas and highlighting them for the granting authorities in the valuation report. They are significant areas of concern that could impact on a bank’s security over the short and longer term.

### 7.3.3 Property insurance

One of the highest risks facing property financiers is the destruction of a bonded, but uninsured/under-insured property by fire or through any other natural disaster. The income generated by the property is lost immediately, resulting in all likelihood in the Client being unable to meet the repayment obligations. The value of the Bank’s security could be reduced to less than the value of the vacant land, as the remains of the building still have to be demolished and removed which any prospective purchaser will discount from the price that they are willing to pay for the property.

It therefore stands to reason that it is in the interests of both the Client and the Bank to ensure that the property is adequately insured. Clearly the Bank has an interest in retaining the security (property) for the loan, and the Client in ensuring that the asset remains in an income-producing state. Thus the cover must encompass not only the replacement (construction) costs of the building, but also the loss of revenue (rentals) incurred as a result of the disaster so that the Client can continue to meet the repayment obligations of the loan.
The Bank should therefore make appropriate insurance a condition of the loan agreement. The cover within the insurance policy must include the following items:

- **Fire and additional perils:** this item covers the Client for fire, theft of equipment (e.g. air conditioners), malicious damage (e.g. broken windows) and impact damage (e.g if a truck reverses through a wall).

- **Gross rentals:** while the building cannot be tenanted as a result of some disaster such as fire, this item covers the Client with regard to loss of rentals. The cover amount is usually supplied by the valuer or from actual tenant information, and is generally valid for a period of 12 months. However, this period could be extended in the case of larger buildings.

- **SASRIA:** this item covers damage resulting from both political and non-political riots and the cover is generally the same as for fire, additional perils and gross rentals. This cover was put into place during the civil unrest and resultant property damage during the apartheid years. It is still valid, however, as the constitution’s guarantee of freedom of expression results in legal demonstrations that can and do cause property damage.

- **Property owner’s liability:** this covers the Client for any damage (property or individual) caused as a result of work or actions performed on the insured property.

Banks can utilise a number of options to ensure that their bonded portfolios are adequately and continually insured:

**Outside brokers:** in this instance the Bank will have to record the insurance details within its systems and contact the insurance brokers on a monthly basis. The Bank will endeavour to obtain the necessary confirmation that the policy has been renewed, that the property is correctly covered as described above and that the Bank’s interests are noted (cession).

This is a time-consuming function and it is not uncommon for brokers to be uncooperative. However, it is in the Bank’s interests to continue with this process to the extent that the Client is contacted with regard to any breach of the terms and
condition of the loan agreement. Should the confirmation remain unattainable, the Bank will insure the property itself (or threaten to) and debit the Client’s account accordingly. This usually prompts the desired response from both the Client and the broker.

**Contracted brokers:** this option is far less of an administrative burden to the Bank, as it is the responsibility of the broker to manage all aspects relating to the insurance of the properties within the loan portfolio. Contracted brokers have the responsibility of protecting the Bank and the Client and in return they have a captive market and enjoy the benefits of exclusive brokerage (commission) fees.

Clearly the Bank must make sure that the credentials of the broker are of such a standard that the Bank will find comfort in the services rendered. The Bank must be certain that the broker will perform the function professionally and that professional indemnity cover is in place should the broker, for whatever reason, fail to maintain the insurance correctly.

**In-house brokers:** this option is similar to that of contracted brokers, except that the Banks utilises its own resources. The administrative burden is once again on the Bank, which means that the brokerage (commission) fees also accrue to the Bank.

Generally, the Bank is in a far better position to understand the insurance risk inherent in its loan portfolio than any outside brokers. There is some debate regarding conditional selling (making it a condition of the loan to utilise the Bank’s broker, which is illegal). However, removing the condition and charging an administrative fee for the effort required to follow up on outside brokers is usually incentive enough for the Client to utilise the Bank’s brokers.

One of the items checked by administrative staff prior to disbursement is the confirmation of an appropriate insurance policy and the cession thereof to the Bank. The cession is important as it ensures that the proceeds of the policy are paid directly to the Bank, which can then decide whether to utilise the funds to rebuild the property or repay the loan.
In addition to the above, the Bank’s should, in the normal course of business, ensure that the policy is renewed on or before its expiry date and that the necessary confirmation of cessions is obtained.

7.3.4 Concluding remarks and observations

This section has covered the key areas of risk associated with property finance and, while not exhaustive, it clearly describes the main elements of risk and how the bank assesses these risks and endeavours to reduce or eliminate them.

The broad face of property (agricultural, commercial, industrial and residential) requires specialist knowledge to adequately assess the risk associated with financing any one of these types of properties.

Banks unfamiliar with property lending and its associated risks restrict their exposure to this type of lending through policy or by imposing conservative terms and conditions on their loan agreements. This increases the margin for error, thereby protecting the banks and shareholders from risks associated with this type of lending.

The next section deals with the categorisation of risk, utilising the elements of property finance risk discussed thus far in this chapter.
7.4 RISK CATEGORISATION

7.4.1 Purpose

Risk categorisation is the allocation of a risk category to each loan, thereby providing a standard understanding of the overall risks associated with each loan. The risk element ratings that drive the risk categorisation result may be different for each loan. However, each categorisation has a benchmark profile that is standard, documented and therefore easily understood.

The purposes of risk categorisation are as follows:

- **Pricing**: all investment decisions require a thorough analysis of the associated risks and returns of an investment. A low-risk property should be commensurate with a reduced return (low interest rate) and a high-risk property should attract a high return (high interest rate) to compensate for the possibility of a loss. Hence the adage “price for risk”, which in property finance translates into a minimum interest margin acceptable to the Bank for each risk category.

- **General provisioning**: in the normal course of business and in compliance with normal accounting practices, the Bank has to build up reserves to offset the cost of possible future losses. The risk categorisation profile of the entire loan portfolio (see “portfolio value” below) provides an effective method of allocating a portion of the Bank’s income to its general reserves. This is usually achieved by holding reserves equal to a percentage of the portfolio in each risk category. Clearly, the Bank would create more reserves for the higher than for the lower risk categories of the loan portfolio.

- **Financial performance**: general provisioning aside, the higher the risk category, the more resources are generally required to administer the loan, resulting in higher costs that reduce profits. These higher administrative costs are associated with management time, repayment collections, the handling of documentation and legal costs.
- **Portfolio value:** the risk categorisation of a loan portfolio can be used to determine the value of a particular loan portfolio or part thereof for the purposes of sale or securitisation. In essence, discounting its income stream or cash flow to present-day values determines the value of a loan portfolio. However, discounting the income stream using an agreed discount rate (see chapter 6) is not enough. The real possibility of write-offs (over and above the general provisions) must be included in the calculation, with due consideration of other factors such as maturity profiles, interest rate projections and general provisioning. This can be achieved by analysing the historical bad debt profile of each risk category segment and applying a similar expense factor to the cash flow.

### 7.4.2 Method of risk categorisation

The method of allocating a general risk category requires the major risk elements associated with property-based lending to be analysed, rated, weighted and summed together to provide an overall score that will equate to a specific risk category. Although this method varies from bank to bank, the following model provides a general insight into its operation and covers the majority of property lending risk areas. The nature of this type of lending is not conducive to the simple, objective credit scoring normally associated with asset-based finance (e.g. motor vehicle finance); rather, it requires a blend of both subjective and objective reasoning.

A model of this nature should include the assessment of the following risk elements:

<table>
<thead>
<tr>
<th>Risk area</th>
<th>Risk rating</th>
<th>Score</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>1 – High risk</td>
<td>4</td>
<td>No track record, financial standing uncertain</td>
</tr>
<tr>
<td></td>
<td>2 – Marginal</td>
<td></td>
<td>No track record, financials acceptable</td>
</tr>
<tr>
<td></td>
<td>3 – Acceptable</td>
<td></td>
<td>Track record, financials acceptable</td>
</tr>
<tr>
<td></td>
<td>4 – Low risk</td>
<td></td>
<td>Track record, financials good</td>
</tr>
<tr>
<td></td>
<td>5 – No risk</td>
<td>60</td>
<td>Blue chip company or exceptional individual wealth</td>
</tr>
<tr>
<td></td>
<td>weight 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repayment</td>
<td>1 – High risk</td>
<td>3</td>
<td>No leases</td>
</tr>
<tr>
<td>certainty</td>
<td>2 – Marginal</td>
<td></td>
<td>Short-term leases, no national tenants</td>
</tr>
<tr>
<td></td>
<td>weight 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk area</td>
<td>Category</td>
<td>Weight (%)</td>
<td>Remarks</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Loan to value</td>
<td>1 - High</td>
<td>25</td>
<td>Non-established area, demand not quantifiable</td>
</tr>
<tr>
<td></td>
<td>2 - Marginal</td>
<td>20</td>
<td>Established area, stagnant growth potential</td>
</tr>
<tr>
<td></td>
<td>3 - Acceptable</td>
<td>75</td>
<td>Established area, demand still evident for foreseeable future</td>
</tr>
<tr>
<td>Property type</td>
<td>1 - High</td>
<td>10</td>
<td>Non-established area, demand not quantifiable</td>
</tr>
<tr>
<td></td>
<td>2 - Marginal</td>
<td>20</td>
<td>Established area, stagnant growth potential</td>
</tr>
<tr>
<td></td>
<td>3 - Acceptable</td>
<td>30</td>
<td>Established area, demand still evident for foreseeable future</td>
</tr>
<tr>
<td>Quality</td>
<td>1 - High</td>
<td>25</td>
<td>Property badly maintained and designed</td>
</tr>
<tr>
<td></td>
<td>2 - Marginal</td>
<td>20</td>
<td>Good design, lacking maintenance and management</td>
</tr>
<tr>
<td></td>
<td>3 - Acceptable</td>
<td>75</td>
<td>Good design, maintenance and management</td>
</tr>
<tr>
<td></td>
<td>4 - Low risk</td>
<td>30</td>
<td>Low-maintenance construction, excellent condition</td>
</tr>
<tr>
<td></td>
<td>5 - No Risk</td>
<td>10</td>
<td>Excellent condition, fully repairing lease with blue chip company</td>
</tr>
</tbody>
</table>

Exhibit 7.4 Risk category allocation table

Once the loan has been scored and a weighted score has been calculated for each risk area (score multiplied by weighting), the total weighted score of all risk areas can be derived. This score is then used to allocate a risk category to the loan:

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Minimum weighted score</th>
<th>Minimum margin (%)</th>
<th>General provision (% of loan amount)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>350</td>
<td>2.00%</td>
<td>0.100%</td>
</tr>
<tr>
<td>B</td>
<td>300</td>
<td>2.50%</td>
<td>0.125%</td>
</tr>
<tr>
<td>C</td>
<td>250</td>
<td>3.00%</td>
<td>0.150%</td>
</tr>
</tbody>
</table>
From the information provided above, scores for a hypothetical loan would result in a risk category of B (weighted score of 305). According to the allocation table, the Bank would only entertain the deal at a minimum interest margin of 2.50% and would have to create a general provision of 0.125% of the loan amount.

In summary, risk categorisation provides the Bank with the ability to view its lending exposure at multiple levels (loan, group and portfolio – see below). It further provides a pricing mechanism for risk, allocating general provisions based on associated risks and declining loans with undesirable risk profiles (weighted score less than 250).

While the method is not foolproof and open to considerable subjective reasoning, it does provide valuable insight into the portfolio’s profile, without which banks would certainly be at a disadvantage.
7.5 GROUP RISK

7.5.1 Purpose

A group refers to the linking of clients, their accounts and security under a single reference number, which enables the Bank to ascertain its total exposure to the group. This further enables the Bank to set the maximum levels of lending that it is prepared to advance to any one group, and identify the possible consequences of an underperforming loan on the rest of the group.

7.5.2 Method

Various criteria are used when deciding to allocate an account to a particular group. The rationale underlying these criteria can be categorised under the following headings:

**Client:** accounts linked to a single client are already grouped through that relationship and the exposure is therefore easy to determine (see chapter 5). However, there are numerous cases where clients have loans in their own names and have come together in a partnership with other entities on a property investment. This creates the need to group the exposure, thus allowing easy understanding of the entire exposure of the relationship, as displayed in the following exhibit:
Exhibit 7.5  Grouped exposures

Surety: a surety has limited means and the Bank is putting itself at risk by accepting a suretyship without understanding the total commitment the surety has already made, and its exposure to that commitment. Therefore, where a surety has signed multiple suretyships across a number of accounts, these too are linked under a single group.

Property: similarly, where a particular property is used as the underlying security across multiple accounts by way of principle, collateral or surety bonds, a group should be created for that relationship. A property used in this way could potentially bring the entire group into a state of stress, for example if a fire were to destroy the building. By grouping the relationships, the Bank is effectively and efficiently able to gauge the impact of such a disaster.

Related entities: there are also instances where entities are related through shareholdings, but unrelated in terms of direct connection with the Bank’s underlying security. This type of grouping has particular reference to the relationship between holding and subsidiary companies, where more than one of these companies has an
exposure with the Bank. By grouping these entities that have exposures to the Bank, the Bank is in a position to assess the possible effect of internal and external events on their accounts.

7.5.3 **Concluding remarks**

The grouping of exposures requires constant management to ensure that the groups correctly reflect related exposures. There are often instances where more than one method of grouping can be used (e.g. by property or surety). In such cases the Bank must select the highest exposure grouping as the one to institute, rather than form multiple groupings that invariably create more confusion than clarity.

A well-managed and regularly reviewed group remains a valuable information tool that will inevitably pay for itself by providing early warning of the possible "fall-out" that occurs when an account goes sour. The "fall-out" has a tendency, over a relatively short space of time, to permeate to all the related accounts, which may be avoided if this tool is in place.
7.6 PORTFOLIO RISK

7.6.1 Introduction

A portfolio of loans is usually secured by diverse property types providing the Bank with a spread of properties that support the broad spectrum of businesses and undertakings. This diversification or restriction in property type exposure to any particular segment reduces the impact or risk associated with a possible economic downturn in any one economic sector.

A portfolio of mortgage loans is the Bank’s entire exposure to this type of lending; the extent of this exposure is limited by policy. The Bank determines the lending parameters such as property types, acceptable areas, and LTV and loan terms that are documented in the Bank’s lending policy.

These lending policies focus on the parameters of each loan. The intent is not only to instil acceptable loan risk profiles, but also to generate a predetermined and diversified risk profile at portfolio level.

7.6.2 Segmentation methods and uses

Etzel, Walker & Standton (1997:158) defines segmentation as “a process of dividing the total market for a good or service into several smaller, internally homogeneous groups”. This section discusses the typical segmentation parameters used by banks to understand their current portfolio risk profile and to assist in taking corrective action and defining new desired profiles.

Property profile: the segmentation by property type requires that the portfolio is split into broad categories of property that include commercial, industrial, residential, agricultural and vacant land, as well as shopping centres. The focus of this
segmentation is on the underlying security that supports the loan portfolio, i.e. the mortgage bonds over the properties.

The information provided by this segmentation alone, while interesting, supplies little productive value unless additional information is added. This added information, e.g. on arrears and interest rate margins, assists in the analysis of the loan portfolio and in defining and maintaining the desired property profile.

The following exhibit is an example of this type of segmentation and highlights the point made by Del Casino (1995:928) “The basic concept behind property type diversification is that returns and risks vary according to the particular industries utilising various types of properties”, which have a direct bearing on the Bank’s profitability and therefore marketing strategy.

<table>
<thead>
<tr>
<th>Category</th>
<th>Portfolio R1000's</th>
<th>% of portfolio</th>
<th>Number of accounts</th>
<th>% of total accounts</th>
<th>Arrears R1000's</th>
<th>% of category portfolio</th>
<th>Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>2,534,000</td>
<td>53</td>
<td>300</td>
<td>29</td>
<td>32,789</td>
<td>1.29</td>
<td>2.85</td>
</tr>
<tr>
<td>Industrial</td>
<td>1,356,000</td>
<td>28</td>
<td>450</td>
<td>43</td>
<td>20,834</td>
<td>1.54</td>
<td>2.99</td>
</tr>
<tr>
<td>Shopping centres</td>
<td>568,000</td>
<td>12</td>
<td>43</td>
<td>4</td>
<td>1,234</td>
<td>0.22</td>
<td>2.54</td>
</tr>
<tr>
<td>Residential</td>
<td>202,000</td>
<td>4</td>
<td>200</td>
<td>19</td>
<td>567</td>
<td>0.28</td>
<td>3.05</td>
</tr>
<tr>
<td>Agricultural</td>
<td>122,000</td>
<td>3</td>
<td>32</td>
<td>3</td>
<td>232</td>
<td>0.19</td>
<td>3.44</td>
</tr>
<tr>
<td>Vacant land</td>
<td>3,000</td>
<td>0</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>0.00</td>
<td>2.35</td>
</tr>
<tr>
<td>Totals</td>
<td>4,785,000</td>
<td>100</td>
<td>1040</td>
<td>100</td>
<td>55,656</td>
<td>1.16</td>
<td>2.91</td>
</tr>
</tbody>
</table>

Exhibit 7.6 Portfolio segmented by property type

To illustrate the advantages of this segmentation table, the Bank can clearly see that one of the most profitable portions of its portfolio is Industrial at a margin of 2.99%; however, it also carries the highest arrears of 1.54%. The Bank could justify this through its tactic of pricing for risk, which this data clearly supports.

While the Industrial category might be the best margin segment of the portfolio, it is the most costly, as it has the highest number of accounts. By implication, more industrial lending is done than any other category of lending, and it thus utilises proportionately more of the property finance staff than any other category of lending. Based on this information (high income, but also high risk and cost) the Bank may
very well revisit its desired lending profile and decide to reduce its new business targets for industrial properties and focus on more profitable segments or categories of property.

A segmentation table can also yield valuable statistical data in addition to its comparative value. By adding a geographical component such as a province or town, the above example could result in a completely different conclusion. For instance, it could show that the majority of arrears for industrial properties are restricted to a single town or suburb that has suffered a major economic setback (e.g. the withdrawal of a motor car manufacturer).

Clearly, this would invalidate the decision to reduce new business targets on industrial properties. The more logical decision would be to reduce the Bank’s exposure in that area, particularly in the industrial segment. This highlights the importance of applying effective management at portfolio level and of having information systems that are capable of producing this kind information.

**Portfolio maturity profile:** this provides the Bank with the repayment (amortisation) profile of the portfolio over time. Each loan has a repayment or expiry date that is derived from the term of the loan. As discussed in chapter 6, a loan may be repaid by way of instalment (regular capital and interest payments) or by way of a bullet capital repayment at the end of the loan term (servicing interest only).

The portfolio’s outstanding balance (the balance of all loans), in conjunction with the portfolio margin, is a function of the Bank’s net interest income. Since the portfolio is made up of many loans, each having different terms and repayment options, the annual capital repayment on the portfolio can fluctuate quite dramatically. A large drop in the portfolio’s total capital outstanding in a particular year has the potential to cause a profit performance crisis through the resultant reduction in interest income.

By utilising this form of segmentation (loan term and repayment method) the Bank can alter its lending strategy to effectively remove this risk. By way of an example, assume that in five years’ time large loans with bullet payments will become due. The
Bank has the option to reduce or eliminate any new short-term lending (loan terms of less than five years). This should, at least, ensure that the problem is not exacerbated.

This type of profile can also be used in determining the value of a portfolio for the purposes of sale to another institution or securitisation. Since the net interest income (interest minus funding costs) is a determinable cash flow, for a period of time, it can be discounted (see chapter 6) to a present day value. Obviously, other factors such as provisioning, bad debt and expense estimates will have to be incorporated in the cash flow estimate to provide a realistic value of the portfolio.

**Risk category profile:** this provides for the segmentation of the portfolio based on the risk category associated with each loan. The following exhibit clearly demonstrates the philosophy of pricing for risk, as can be seen by the rising margin achieved on each risk category segment of the portfolio.

Those banks pricing their loans through market demand and supply forces are likely to find that their risk categorisation profile would not reveal any material trend in the margin and risk category relationship.

<table>
<thead>
<tr>
<th>Risk cat</th>
<th>Capital</th>
<th>Margin</th>
<th>Net interest</th>
<th>No of loans</th>
<th>Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>294 610 071</td>
<td>2.01</td>
<td>5 911 636</td>
<td>80 3 682 626</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>1 683 024 254</td>
<td>2.58</td>
<td>43 361 813</td>
<td>356 4 727 596</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2 630 694 525</td>
<td>2.72</td>
<td>71 486 767</td>
<td>792 3 321 584</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>4 608 328 850</td>
<td>2.62</td>
<td>120 760 216</td>
<td>1 228 3 752 711</td>
<td></td>
</tr>
</tbody>
</table>

**Exhibit 7.7 Portfolio segmentation by risk category**

The risk categorisation profile also reveals that the majority of business is risk-rated as “C”, which the Bank might view as an indication that it is necessary to change lending targets in order to balance the portfolio. Alternatively, it could be viewed that the risk categorisation policy might be too stringent and that further analysis is required to determine whether the policy should be relaxed.
This profile further demonstrates the Bank’s exposure levels in terms of capital and number of accounts. Clearly, under the C-rated loans, there is a proportionately larger number of loans, which means that the risk is spread. The Bank would have had reason to be concerned if the C-rated loans formed the largest capital exposure, but were represented by the lowest number of accounts. This would have indicated that the Bank would be at risk if only a few C-rated loans became problematic.

**Margin profile:** this provides the Bank with an understanding of the spread of income generated by its portfolio. Traditional methods of calculating the portfolio average margin simply portrayed the NII as a percentage of the portfolio. However, this gives little indication as to how the NII is derived. The NII is in fact the sum of the NII generated from each loan within the portfolio and, as can be seen from the exhibit below, negative margin loans can easily be hidden using the traditional method of calculating the average margin on the portfolio.

<table>
<thead>
<tr>
<th>Margin Spread</th>
<th>Capital</th>
<th>Margin</th>
<th>Net interest</th>
<th>No of loans</th>
<th>Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 0.50</td>
<td>30 069 768</td>
<td>-0.89</td>
<td>-268 366</td>
<td>35</td>
<td>859 136</td>
</tr>
<tr>
<td>1.00</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1.50</td>
<td>116 644 142</td>
<td>1.37</td>
<td>1 598 696</td>
<td>6</td>
<td>19 440 690</td>
</tr>
<tr>
<td>2.00</td>
<td>303 773 215</td>
<td>1.86</td>
<td>5 653 546</td>
<td>29</td>
<td>10 474 938</td>
</tr>
<tr>
<td>2.50</td>
<td>1 797 873 637</td>
<td>2.38</td>
<td>42 799 173</td>
<td>285</td>
<td>6 308 329</td>
</tr>
<tr>
<td>3.00</td>
<td>2 143 658 467</td>
<td>2.78</td>
<td>59 668 515</td>
<td>474</td>
<td>4 522 486</td>
</tr>
<tr>
<td>3.50</td>
<td>945 564 494</td>
<td>3.31</td>
<td>31 317 265</td>
<td>495</td>
<td>1 910 231</td>
</tr>
<tr>
<td>&gt; 3.50</td>
<td>209 459 925</td>
<td>4.17</td>
<td>8 736 135</td>
<td>231</td>
<td>906 753</td>
</tr>
<tr>
<td></td>
<td>5 547 043 647</td>
<td>2.70</td>
<td>149 504 963</td>
<td>1 555</td>
<td>3 567 231</td>
</tr>
</tbody>
</table>

**Exhibit 7.8 Portfolio segmentation by margin**

From the above it is clear that the portfolio has 35 loans with margins of less than 0.5%. In total, this segment produces a negative margin of 0.89% on R30 million, i.e. the Bank is making a loss of R268,366. This would be hidden if only the total amounts of capital and NII were viewed. This profile therefore affords the Bank the opportunity to investigate the cause (possibly interest rate risk through mismatched re-pricing dates on fixed-rate loans).
It could be argued that these low or negative margin loans should be picked up in the normal course of business. However, this is not always the case, which is why this type of segmentation is so valuable in demonstrating the impact on the portfolio NII or margin.

**Loan size profile:** this provides the opportunity to assess and understand the operational resource requirements in terms of number of loans and their respective profitability. In general, a loan of R1 million requires the same amount of resources (staff, infrastructure, IT etc.) to administer as a R50 million loan, so the higher the value of the loan, the more profitable it is to the Bank.

<table>
<thead>
<tr>
<th>Loan Size</th>
<th>Capital</th>
<th>Margin</th>
<th>Net Interest</th>
<th>No of Loans</th>
<th>Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 000 000</td>
<td>23 716 407</td>
<td>2.85</td>
<td>676 503</td>
<td>47</td>
<td>504 604</td>
</tr>
<tr>
<td>2 000 000</td>
<td>59 850 584</td>
<td>2.86</td>
<td>1 713 541</td>
<td>70</td>
<td>855 008</td>
</tr>
<tr>
<td>3 000 000</td>
<td>114 774 810</td>
<td>2.82</td>
<td>3 237 264</td>
<td>91</td>
<td>1 261 262</td>
</tr>
<tr>
<td>4 000 000</td>
<td>176 560 005</td>
<td>2.86</td>
<td>5 049 584</td>
<td>108</td>
<td>1 634 815</td>
</tr>
<tr>
<td>5 000 000</td>
<td>253 297 134</td>
<td>2.80</td>
<td>7 080 913</td>
<td>125</td>
<td>2 026 377</td>
</tr>
<tr>
<td>10 000 000</td>
<td>460 014 494</td>
<td>2.72</td>
<td>12 501 115</td>
<td>155</td>
<td>2 967 835</td>
</tr>
<tr>
<td>20 000 000</td>
<td>803 305 344</td>
<td>2.62</td>
<td>21 063 272</td>
<td>179</td>
<td>4 487 739</td>
</tr>
<tr>
<td>&gt; 20 000 000</td>
<td>1 495 655 855</td>
<td>2.57</td>
<td>38 420 074</td>
<td>199</td>
<td>7 515 859</td>
</tr>
<tr>
<td>Totals</td>
<td>3 387 174 633</td>
<td>2.65</td>
<td>89 742 268</td>
<td>974</td>
<td>3 477 592</td>
</tr>
</tbody>
</table>

**Exhibit 7.9 Portfolio segmentation by loan size**

This segmentation shows that the higher the value of the loan, the less the margin attained, which supports the view that competition between banks can affect pricing, irrespective of policy (price for risk). This can be corroborated by combining this segmentation with the risk segmentation, where it might actually be found that the higher the value of the loan, the better the risk category (this is extremely unlikely).

The number of staff administering the loan portfolio is a function of the number of accounts under administration and therefore the Bank might find it useful to view the above information if it is considering restructuring its portfolio. This could involve selling off or securitising a portion of the portfolio, which would justify right-sizing.
the staff and introducing minimum loan values (i.e. finding a niche in the high-value, low-volume business).

**Arrears Profile:** understanding the quantum of arrears is not sufficient to manage the possible bad debt inherent in the portfolio. It is important to further segment the arrears into time-related sections to gain further insight into the trends and profiles relating to each segment.

The normal method of segmenting the arrears is to arrange the arrears into monthly outstanding periods, beginning with the current month and ending with three months and greater. The loans falling into the latter segment are hard-core arrears and would, in all likelihood, have been handed over to the Bank’s attorneys to institute legal proceeding to liquidate the security and repay the debt.

The exhibit below is a typical example of this type of segmentation:

<table>
<thead>
<tr>
<th></th>
<th>Jan-00</th>
<th>Feb-00</th>
<th>Mar-00</th>
<th>Apr-00</th>
<th>May-00</th>
<th>Jun-00</th>
<th>Jul-00</th>
<th>Aug-00</th>
<th>Sep-00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>117,291</td>
<td>120,121</td>
<td>110,120</td>
<td>112,343</td>
<td>115,254</td>
<td>117,111</td>
<td>125,125</td>
<td>122,098</td>
<td>132,000</td>
</tr>
<tr>
<td>1 Month</td>
<td>356,754</td>
<td>333,813</td>
<td>310,753</td>
<td>296,167</td>
<td>287,995</td>
<td>283,574</td>
<td>286,089</td>
<td>286,731</td>
<td>292,412</td>
</tr>
<tr>
<td>2 Months</td>
<td>200,234</td>
<td>107,468</td>
<td>70,838</td>
<td>55,827</td>
<td>49,455</td>
<td>46,856</td>
<td>45,872</td>
<td>45,546</td>
<td>46,093</td>
</tr>
<tr>
<td>3 Months</td>
<td>120,453</td>
<td>107,109</td>
<td>92,771</td>
<td>79,800</td>
<td>68,785</td>
<td>59,694</td>
<td>52,342</td>
<td>46,428</td>
<td>41,752</td>
</tr>
<tr>
<td>&gt; 3 Months</td>
<td>50,453</td>
<td>52,765</td>
<td>51,141</td>
<td>47,442</td>
<td>42,910</td>
<td>38,282</td>
<td>33,961</td>
<td>30,127</td>
<td>26,844</td>
</tr>
</tbody>
</table>

Exhibit 7.10  Portfolio segmentation by aged arrears

On analysing the above graph and table, one might have expected that, from month to month, the current arrears in, for example, January (117,291) would move into one month in February, and that similar movements would occur in the other segments.
However, this is not the case, which highlights the benefits of employing this sort of segmentation and analysis in an attempt to understand the subtle nuances surrounding arrears time sections.

Looking at the one-month segment in isolation provides little information other than the quantum, which could appear rather alarming. However, by adding a history dimension (rolling 12 months) and the other time segments, it becomes apparent that the one-month arrears amount is normal and remains relatively constant.

In the normal course of managing arrears, clients who miss a payment (current) are sent a reminder letter. The majority of clients respond favourably to such letters. Those falling into more serious categories (one or two months) receive more sternly worded communications utilising clauses in the loan agreement such as “attachment of rentals” to convince the clients of the Bank’s intention to secure payment.

As can be seen from the above exhibit, this generally results in positive reaction from clients, who reduce their arrears in the two- and three-month categories. Clients who do not respond positively are handed over to the Bank’s attorneys, who institute the necessary legal action to repay the debt.

This type of segmentation enables the Bank to analyse the arrears trends within its lending portfolio. Such an analysis will quickly highlight abnormalities based on comparative and historic information. Furthermore, this segmentation provides the Bank with the clarity needed to plan effectively for general provisioning and bad debts.
7.7 BAD DEBT (MATERIALISED RISK)

7.7.1 Introduction

Bad debt is one of the greatest threats to banks’ profitability. It generally arises because clients are experiencing financial distress. Ross (1996:808) defines financial distress as “a situation where a firm’s operating cash flows are not sufficient to satisfy current obligations”. This equates directly to a property finance context, where the operating cash flows generated by a building are not sufficient to meet the loan repayment obligations.

In extreme cases, banks can be forced into liquidation by the magnitude of their non-performing assets (the Masterbond debacle comes to mind). The underlying comfort in the risks associated with property finance is that the loan is usually preferentially secured, through a mortgage bond, by a property that has a value greater than that of the debt.

Normal property finance lending parameters (excluding structured finance) dictate that the Loan-To-Value should not exceed a certain percentage (e.g. 75%). A write-off in this case begs the question: how could the 25% in value be eroded to such an extent that the Bank suffers a loss? This immediately raises further questions as to the accuracy of the valuation and the competency of the valuer.

On the face of it, this would seem a logical path of investigation. However, the business of property finance is rarely that simple. This section will examine and demonstrate how quickly an apparently risk-averse form of lending can deteriorate, leaving the Bank with a write-off on a loan that comfortably met all the policy requirements at the time of granting.
7.7.2 Cost of bad debt

Bad debt can be described as an asset (mortgage loan) that has lost its ability to generate a profit (net interest income) for the Bank. In liquidating the asset (selling the property securing the loan) the Bank generates costs that are directly attributable to the asset. It is the magnitude of these costs that will eventually dictate the balance of the profit and loss scale, a recovery of interest reserved, and specific capital provision, or a write-off of these reserves and provisions.

The elements of cost accounting associated with bad debt are as follows:

**Interest reserved:** at a point in time (usually when legal action has been instituted against the Client) specified by the Bank’s policy, a loan is deemed to be non-performing. Prudent accounting principles require that the interest raised (income) against the loan be reserved immediately, i.e. removed from income and placed in a specific account (interest reserved).

This gives the Bank a realistic view of its income and enables it to build up a big enough “kitty” to reduce the magnitude of any write-off on the loan, considering that the loan accrues interest monthly, which increases the outstanding loan amount.

Should the liquidated property not produce sufficient funds to liquidate the debt, this reserve can be utilised to reduce the extent of the shortfall. Conversely, should the liquidated property yield sufficient funds to cover the outstanding debt, the interest reserved can be brought back to income.

**Capital provision:** a capital provision is a reserve that would be considered only if the Bank were of the opinion that the value of the property, in a forced sale, would not cover the outstanding debt, less interest reserved, i.e. it is a capital write-off.

This capital provision is usually made (if necessary) when the Bank has legal certainty, i.e. judgement is obtained to liquidate the debt. The quantum of the capital
provision is the difference between the knock-down valuation (see LTV discussion in previous section) and the outstanding balance, less interest reserved.

One way of viewing the cost of a write-off to the Bank is to calculate how much new business must be written to offset the loss. The following exhibit illustrates this view:

<table>
<thead>
<tr>
<th>Write-off</th>
<th>Margin</th>
<th>NII p.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Loan</td>
<td>2 000 000</td>
<td>3.00%</td>
</tr>
<tr>
<td>New Loan</td>
<td>5 000 000</td>
<td>3.00%</td>
</tr>
<tr>
<td>New Loan</td>
<td>3 000 000</td>
<td>3.00%</td>
</tr>
<tr>
<td>New Loan</td>
<td>4 000 000</td>
<td>3.00%</td>
</tr>
<tr>
<td>New Loan</td>
<td>10 000 000</td>
<td>3.00%</td>
</tr>
<tr>
<td>New Loan</td>
<td>3 000 000</td>
<td>3.00%</td>
</tr>
<tr>
<td>New Loan</td>
<td>2 000 000</td>
<td>3.00%</td>
</tr>
<tr>
<td>New Loan</td>
<td>4 500 000</td>
<td>3.00%</td>
</tr>
</tbody>
</table>

1 005 000

Exhibit 7.11 New business required to offset capital write-off

Disregarding the legal, time and resource costs, eight new loans have to be put onto the books and held for a year to make up the one million rand write-off.

Viewed differently, a five million rand loan would have to be held (ignoring the time value of money) for a period of six-and-a-half years to neutralise the effects of the one million rand write-off.

The effects of multi-million rand write-offs when dealing with billion rand portfolios are of grave concern. To reduce the impact of bad debt the Bank has to employ a number of tactics, one of which is the development of early identification methods to gain some control of possible bad debt situations.

7.7.3 Early identification methods

A Client who cannot meet the loan repayment obligations usually experiences financial difficulty over a period of time. It is rare for a loan to be fully serviced one
month, and not paid at all the next. During months of non-payment the Bank has an opportunity to identify clients experiencing financial stress and proactively take the necessary steps to assist these clients or implement legal action timeously to secure the shortest process time to liquidate the security.

Where the Client is a listed company, the following events may point to possible financial distress:

- dropping share prices
- dividend reductions
- layoffs and restructuring
- executive resignations
- closure of factories or plants

The fact that a company is listed is no guarantee of success. Texaco, an American oil company, went into bankruptcy in 1987 with a liability of $21 billion and, closer to home, the recent liquidation of Leisurenet provided banks with exposures in excess of R100 million.

Clearly, banks cannot afford to be complacent about listed companies when assessing the finance risk of clients or tenanted properties. While this might provide a measure of comfort, it is not a substitute for solid risk analysis.

In the normal operating environment, early identification methods can be classified as procedural, network and market methods.

7.7.3.1 Procedural

The regular processes and procedures of risk management in a Bank provide documented work programmes that are assigned to qualified and responsible staff. The two procedural areas that can provide an early warning of potentially troublesome accounts are the analysis of arrears reports and the conducting of account reviews.
**Arrears reports:** these reports provide a historical, time-segmented track record of payments. An early indication of a problematic account is not the fact the Client is in arrears, but rather an increasing trend of late or partial payments. Most clients will, at one or more points in the life of the loan, miss a payment date. However, these are generally quickly made up and the repayment profile continues to be met. Clients who are struggling generally tend to allocate their inadequate cash flow to the most demanding areas.

Once a trend has been established, the Bank must act to protect its interests. Depending on the situation, it may adopt a number of tactics, from handholding (temporarily reducing the repayment obligation) to attaching the rentals. As the Client may not technically be in arrears at that point in time, the Bank must utilise a tactic that will not be detrimental to its case should the Client be put into liquidation.

**Reviews:** in a calm and stable environment it can be reasonably expected that a property will continue to provide a profitable investment over an extended period of years. However, particularly in South Africa, the environment is dynamic and at times quite volatile. The economy and interest rates can fluctuate quite dramatically, affecting the profitability of property.

It is not prudent to reactively wait for problems to arise. Banks should have a policy of regularly reviewing their entire property-lending portfolio. Each review should consist of a property visit, a review of the tenants and leases, and an analysis of the Client’s latest financial position. This process should pinpoint any weaknesses in any of these areas, which can then be dealt with immediately, e.g. by providing support to the Client or calling up the loan in more serious situations.

Since this could require the review of thousands of loans, a practical method of reviewing can be based on the risk category of each loan. This entails allocating a time span between reviews based on the risks associated with each loan.

For example: a loan carrying a risk category of A (low risk) could be allocated a three-year time span between reviews, whereas a risk category of C (high risk) could carry a one-year time span between reviews. This addresses the risk in an appropriate
and efficient manner by logically focusing on and applying resources to properties based on probability.

This proactive approach provides the Bank with the time and opportunity to tackle problems before they reach crisis levels. The ability to manoeuvre is not restricted by the available time frame, which is afforded by the "fat" in the security held.

**Project representatives**: where the Bank has extended loan facilities for the purpose of property development, the success of the project is largely dependent on the development cash flow being accurately estimated. This entails adherence to the cost projections, construction schedules and purchasing lead times of building material. The Bank will usually utilise its own valuer or QS to represent it at all project meetings where planning, purchasing, construction and progress issues are discussed.

Project meetings to address any problems with the project are at the heart of all developments. By having a Bank representative at these meetings, serious problems are brought to the attention of the Bank at the earliest possible time, thereby providing it with the ability to take corrective action. This could include releasing funds out of line from the projected cash flow or, in extreme instances, insisting on replacing contractors or project members.

**7.7.3.2 Network**

The active participants in local property can provide a significant and meaningful contribution to the Bank's information regarding developments within the market. There are very few secrets and generally any activity is quickly absorbed and communicated throughout the local property community. The Bank should be a part of and contribute to this network.

Banks that have developed and maintained links in the property network not only benefit from a marketing perspective (new investments that will require funding) but also in terms of feedback on tenant defaults, vacancies and other problems that might affect the risks associated with lending.
**Brokers:** these property participants are involved in the buying, selling, letting and managing of properties. They are generally very close to the market and the first port of call for most property transactions. Banks that develop a close relationship with the major brokers will benefit significantly from their early feedback. This entails making regular calls and visits to these brokers in order to obtain market information.

**Clients:** while brokers provide the most valuable information, clients can also provide meaningful information. Relationship management plays a key role in determining the extent of information provided by clients. The closer the Bank (in the form of the relationship manager) is to the Client, the more likely information will be shared. Since it is the clients that are the entrepreneurs and the initiators of most projects or property-related ventures, there is certain information that they will, at times, be aware of before the brokers.

**Attorneys:** these legal professionals operate within the broader legal community, where information vital to the Bank is freely communicated. Liquidations, property transfers, upcoming litigation matters and other legislative matters require interaction amongst the legal fraternity. It is beneficial to banks to have early access to any non-privileged information that is exchanged.

This relationship with the legal profession can be developed by making use of a panel of attorneys employed exclusively to deal with all legal matters relating to the Bank. Since they receive a dedicated line of business, they in turn supply the Bank with pertinent information such as recent judgements, new legislation or amendments that might introduce a risk issue to the Bank.

### 7.7.3.3 Market

The market is a broad classification, as it encompasses all the participants in the property industry, including those discussed above. Among the participants discussed below are property professionals who can help banks to identify potentially problematic loans timeously. While information received from the market might not necessarily influence the Bank directly, it may be useful at a later date (e.g. information on the unethical practices of property professionals).
• **Architects:** these professionals are closely associated with property developments and construction projects.

• **Valuers:** they are utilised in feasibility studies for new developments, property valuation for sale purposes and liquidations.

• **Town planners:** they are the designers of new and extensions to existing townships, clearly at the forefront of where future developments are likely to take place and thus best able to understand the impact that these might have on existing areas and infrastructures.

• **Suppliers:** the suppliers of raw building materials and equipment will be the first to experience the late or non-payment of accounts. Developers that cannot pay the suppliers will most definitely run into severe problems, as credit facilities will be withdrawn immediately, thereby severely stressing the projected development cash flow.

• **Local government:** from time to time local governments will publish a list of rates and tax defaulters in the local newspaper, thereby highlighting potentially problematic loans. Since government has a preferential right to funds from any liquidated property, the higher the default the less likely the Bank will be able to recover sufficient funds to liquidate the debt.

• **Press:** the news media can also supply information that may be useful to banks. Controversy surrounding a development, such as community objections, land claims and environmental issues, provides good press and will be communicated through television, newspapers and the radio.

Timely information on the possibility of clients defaulting is important to the Bank as it provides a window of opportunity to confirm the information, establish the hard facts and take appropriate action. Every day that passes without the Bank knowing of a pending problem has the potential to reduce the margin between successfully liquidating the debt, thereby recovering the funds advanced, and writing off part of the debt.

The time, money, resources and effort invested in developing procedures, networks and information providers from the market can significantly assist banks in reducing
their bad debt exposures. The more effectively a bank can tap into the formal and informal property network, the better its chances of reducing the impact of bad debt on its bottom-line performance.

7.7.4 **Factors that influence the creation of bad debt**

Despite the in-depth risk analysis performed on each loan application and the best intentions of the Client, bad debt is a reality. Post-mortems reveal that the following areas are the major factors contributing to the underperformance of a loan.

**Management**: the knowledge, experience and ability to effectively and profitably manage property investments is a specialist function requiring property management, financial, negotiation and product expertise. Clients may incorporate these functions in their businesses, or they could outsource to property management companies.

Notwithstanding the availability of these resources, bad management remains one of the primary reasons why the performance of a property or property portfolio degrades to an extent where the loan repayment obligations cannot be met. Management errors can be categorised under the following headings:

- **Maintenance**: the lease agreement usually requires the landlord to maintain the property to a certain standard, definitely in no worse a condition than when the tenant took occupancy. If the Client utilises monies earmarked for maintenance for other purposes, the property will suffer. Although this practice might be sustainable in the short term, after a number of months minor maintenance items can become major projects, requiring far more money than would have been the case had the maintenance been done timeously. This can lead to tenants withholding rentals until such time as the problem is sorted out, which means the loan repayment obligations could also suffer.

- **Cash flow segmentation**: bad management of the property investment cash flow can stem from the maintenance problems described above, but it can also be caused by failure to isolate the separate property cash flows within a portfolio of
property investments. Each property investment must be clearly segmented in all respects to enable the Client to fully understand the dynamics and profitability of each property within the portfolio. While at portfolio level the investment as a whole may appear to be performing well, underlying terminal problems could be developing (e.g. increasing vacancies, hidden by escalations).

**New developments:** A performing property can quickly lose its appeal to tenants if new developments in the area provide better business prospects as a result of location, public support and facilities. While the lease agreement might provide some comfort in the short term, problems may arise as the lease expiry dates draw closer (lease renegotiations might fail, or rentals may have to be reduced in order to retain the tenants).

In extreme situations, tenants might continue to pay the required rentals but vacate the premises, preferring to accept the loss but reap the benefits of tenancy of the new development. This further degrades the lettable and saleability of a property.

**Declining area:** Historically, income-producing properties enjoyed loan terms that were set at 20 years, much like today's residential loan terms. However, for various reasons (e.g. migration of purchasing-power customers, new developments and the opening up of residential areas), traditional long-term lending in certain areas has become quite risky.

At the time of loan disbursement an area might have provided the comfort of stability, but over time it may degrade, notwithstanding the fact that the Client may have had a faultless repayment record. Should banks continue to entertain lending in areas that might decline in the longer term, they will usually match the term of the loan to the length of the lease. In this way, their exposure should be removed completely or reduced to a level where the liquidated security should easily cover the outstanding loan amount.

**Local authorities:** These government bodies rely on rates and taxes as their main source of income (other than national government contributions). To increase their income, they will understandably focus on the establishment of new development
areas through re-zoning, or opening undeveloped land for development (additional rates and taxes), as well as maintaining existing cash cow areas.

Unfortunately, owing to competition between local authorities (by design or otherwise), micro spatial development plans can be called into question when viewed at macro level. An uncoordinated approach could (and does) produce an oversupply of properties, providing a finite number of tenants with the opportunity to capitalise on market forces (supply and demand). Rental-free periods of up to a year were not uncommon in the late 1990s in some upmarket areas, reflecting the desperation of property developers and investors.

In this kind of environment, the likelihood of an established investment property in a good location becoming uneconomically viable is a very real possibility. Coupled with a downswing in the economy, this can substantially increase the incidence of bad debt experienced by property finance institutions.

### 7.7.5 Corrective actions and loss limitation

**Judgement:** many an experienced credit manager will testify that the first calculated loss is the best loss. This can be interpreted as taking control of the underlying asset as fast as possible, seeking judgement and liquidating the asset. The faster this is achieved, the less chance of accruing interest, as legal costs and delaying tactics have a negative impact on the final value of the liquidated asset.

This course of action should be taken only once it is clear that the Client is in distress (signified by missed payments or partial payments only for a period of three months). Obviously, the standing of the Client in the community should be considered – it would be foolhardy to aggressively follow the liquidation route when dealing with wealthy individuals. A co-operative approach might produce better results.

**Nurse maid:** in some instances, when dealing with inexperienced property investors, the underlying property might be performing adequately enough to meet the loan
repayment obligations. However, owing to lack of expertise, the potential property cash flow does not materialise or falls short of the repayment requirement.

In these instances the Bank might provide the Client with the benefit of its experience, legal expertise or financial structuring capability. A typical example could be providing the Client with a soft rate (less than the market rate) or a fixed rate of interest for a period of time. This could ease the cash flow burden until such time as rental escalations materialise or new tenants are found. Once the cash flow is no longer in distress, the Bank would of course charge a higher-than-market interest rate to recoup the lost margin.

**Attach rentals:** where the property is still providing, through its generated cash flow, funds that can meet or significantly contribute to the loan repayment obligation, the Bank can exercise its option to attach the rentals. This option can only be exercised where provision has been made for it in the loan agreement, generally under the default section.

This ensures that the cash flow is directed at the debt and property-related expenses, and not being used to meet other obligations that the Client might have incurred. This frequently happens when a Client gets into financial difficulty and uses available cash flows to make partial or delayed payments to creditors in an attempt to create time to sort out the financial shortfall. Unfortunately, the success rate of this tactic is very small and it merely manages to delay the inevitable day of reckoning with the Bank and other creditors

**Find investors:** there are situations where a Client might be having difficulty meeting the loan repayment obligation and is willing to sell it in an attempt to relieve the payment pressure. The Bank has the benefit of a large client base that comprises, amongst others, a large proportion of property investors.

The Bank therefore has the opportunity to “tap into” this database and capitalise on these relationships. Where the Bank believes a write-off is inevitable, the more prudent route is to find an existing Client who believes that the property has potential and is willing to take over the investment.
However, there is normally a price to pay for this "favour" that can materialise in a soft interest rate or an interest holiday for a certain period of time. Through negotiation, this method can result in a win-win situation for the Client (relieved of the debt burden), the Investor (new property investment with a below-market interest rate) and the Bank, whose bad debt is no longer material.

7.7.6 Learning from bad debt

Bad debt is inevitable and part of the business of property finance. While the inevitability of bad debt is not an issue, the reduction in the occurrence and quantum of bad debt is. Although lending policies and procedures give the Bank certain guidelines to provide good business governance, these measures are not static and should be adjusted to help employees learn from each bad debt experience.

**Post-mortem:** it is imperative that each occurrence of bad debt is thoroughly analysed to understand all the factors that contributed to the loss situation. It is only by understanding the real issues that the Bank will be in a position to add to its body of knowledge and experience. These findings can then be incorporated into the Bank’s policies and procedures, providing prudent and timely guidelines.

**Policy and procedure adjustments:** the policies and procedures of the Bank are living documents that must be maintained to reflect the latest risk containment measures. It is these documents that guide the personnel in their decision making and process execution. Failure to provide up-to-date guidelines will continue to expose the Bank to identified risks that could have been avoided or managed more effectively.

**Communication and training:** to increase the effectiveness of the Bank’s personnel, regular communications should be sent out and workshops held on post-mortem findings and guideline changes. This ensures that the experiences of bad debt are shared within a wider circle, rather than being restricted to loss control staff, who really only become involved after a problem has surfaced.
Knowledge transfer should be extended to those involved at the start of the loan application process to facilitate the earliest possible detection of risk areas associated with loans. Ideally, relationship managers, credit analysts and granting authorities should be equipped to identify unacceptable risk areas prior to granting, thereby eliminating the risk before it can materialise.

This can only be achieved through the sharing of bad debt experiences and related information with staff who have the potential, position and opportunity to reduce the risks faced by the Bank.
7.8 CONCLUDING REMARKS

The risks facing property finance institutions are a systemic part of risk management and assessment. All risk attributes, from both the macro and micro perspectives, have a direct influence on the financing of property. This chapter has highlighted the risk elements that most often provide cause for concern from a property financier's perspective.

The intention of this chapter has been to provide additional insight into the world of property finance, thereby adding to the body of general risk management principles available through the linking and correlation of property investment, development and valuation principles with prudent property finance principles.
8 OBSERVATIONS, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

The research undertaken to complete this dissertation provided a unique opportunity to gain insight into and document the business of property finance within South African financial institutions. The understanding of the depth and complexities of this subject remains largely institutionalised, as knowledge is imparted to employees within these institutions only.

The general method of gaining the required knowledge to follow a career of this nature is through one of the fundamental functions of property finance, namely marketing, valuations, credit risk, administration and conveyancing. However, each one of these expert fields must be supplemented with property finance-specific knowledge.

The main findings, along with some observations and conclusions by the researcher, will be summarised in this chapter.

8.2 OBSERVATIONS

8.2.1 The property finance industry in South Africa

The industry has had the benefit of operating in an extremely dynamic environment. The rate of change during the 1990s far exceeded that of most westernised countries. This forced financial institutions into a rapid learning curve to survive the volatility of the market and environment in which property finance operates in South Africa.

A good example of this volatility is that within a 12-month period (circa 1998), fluctuations of 10% or more in the prevailing prime interest rates placed pressure on the cash flows of most clients. In many situations, cash flows were compromised to the extent that clients were unable to meet their repayment obligations.
Marginally profitable property investments quickly became loss situations. Property investors and financial institutions had to come up with innovative methods to create mutually acceptable compromises to loan repayment conditions, such as soft rates, fixed rates, rescheduled capital redemption requirements and extension of loan periods to reduce instalment amounts.

The banks did not do this wholly out of concern for their clients. Rather, it was out of concern for the magnitude of bad debt that could have been created should they have foreclosed on all loans facing cash flow problems. Had they embarked on this course of action it would have had catastrophic consequences for the industry.

At the height of the interest rate crisis, the property market was not an attractive investment option. Foreclosure by banks would have resulted in severe write-offs, as most properties are funded through gearing that, in this situation, made property an unpopular investment option. The only exception was where investors had enough equity to fund these investments out of their own funds.

This highlights the experience that was gained by the industry in a very small space of time. At the same time, however, the industry was also exposed to the collapse of central business districts, the creation of new business nodes and decentralisation. All of this made understanding the long-term nature of property finance and investment an important and complex issue.

Those investors and financiers that survived and continue to make a profit from this industry, despite the extraordinary challenges they have had to face, can make a substantiated case for being of the most knowledgeable and experienced property market participants. Any insights into how they survived these challenges and which solutions they adopted in this dynamic environment could benefit the finance world in general, and the business of property finance in particular.

As a result of this change, property finance institutions have segmented their markets far more clearly than in the past. The previous ethos of providing property finance solutions for the entire property market has largely been replaced by very focused
areas of property finance, where lending parameters such as property type, market and locations are well defined and enforced.

Property financiers now understand that it is extremely difficult to remain fully conversant with and knowledgeable about all segments of the property market, and it is this realisation that brought about a change in marketing strategy and segmentation.

The South African property finance industry is stronger as a result of the last decade of change, which has developed the combined intellectual capital of the industry. Institutions that changed continuously, adapted their policies and procedures to reflect the current market and predicted future conditions remain strong participants and operate profitably within the market.

8.2.2 The Loan Application Process

The processing of property finance loan applications by financial institutions in South Africa is largely standardised. Each loan is processed utilising the diverse and specialist skills of staff who operate within defined policies and procedures to limit the inherent risks in property investment financing, and thereby maximise the benefits of the transaction for both the investor and the financier.

The processes followed in South Africa are also followed in the United States of America and the United Kingdom (compare Essentials of Real Estate Finance, 1986, by David Sirota). From the available literature it is evident that the fundamentals of this process are widely standardised, which support the assertion that there are inherent and mandatory activities that must be conducted effectively in order to manage the property finance business consistently and profitably.

While the processes and activities have a large degree of commonality across the industry, the terms and conditions applied to loans are not particularly standardised. Approvals are similar in that interest rates and interest periods, loan terms and repayment obligations, terms and conditions are prescribed. However, the manner in
which these loan approval attributes are described in the loan documentation is not standardised.

At best, each financial institution has its own standard in defining its legal documentation through the use of predefined templates and conditions. However, there are cases where the creation of each legal document is done in isolation from any standard procedure or method. This has resulted in erroneous clauses being drafted and even copied from one document to another, with errors only being identified in crisis situations such as foreclosure, where reliance on legal documentation was critical.

This lack of detailed standardisation also makes it difficult for institutions to clearly understand the dynamics of their portfolios and to define systems with which to manage them. Emerging products such as securitisation require that portfolios of mortgage loans be risk-rated. Lack of standardisation, however, makes this very difficult and the financial institution involved will inevitably lose the opportunity to utilise this product. Without a clear understanding of the underlying asset, investors will generally not view an offering of this nature favourably.

Structured debt and finance products tend to have unique characteristics, which makes total standardisation difficult. In these cases, the use of legal expertise is essential to ensure that the terms and conditions of the loan fairly represent the loan approval and that, when translated into legal documentation (e.g. the loan agreement) and security, they will stand up under scrutiny in a court of law.

There are institutions that produce rigid standards and systems with which to manage them. These institutions are in a superior position, as they have a very clear understanding of the attributes of their portfolios such as maturity profiles, profitability margins, geographical spread and arrears. This allows them to manage their portfolios effectively and gives them the opportunity to utilise products such as securitisation.
8.2.3 Property finance systems

South African financial institutions have traditionally neglected to develop and utilise a true property finance system solution. The majority of banks have relied on a myriad of partial solutions, such as the utilisation of asset-based finance systems, home loan systems and pure accounting systems.

This large gap in the information required to effectively and efficiently manage the property-related aspects of the business has been recognised by some institutions such as Standard Bank, Board of Executors and NBS, which have or are currently installing multi-million rand system solutions.

This is a positive and encouraging step for the industry. Provided that it is implemented and utilised correctly, it will increase the level and quality of information, thereby providing management with the tools required to exercise greater control and increase their planning and management capability.

In addition, utilising systems characterised by stability of design, integration of data, flexibility of options and accessibility of information, banks are able to adapt rapidly to market changes and opportunities. This reduces their time to market with product offerings and compliance with legal reporting requirements such as those dictated by the Reserve Bank.

8.2.4 Property finance products

The level of funding sophistication required by the South African property investor has increased dramatically over the last decade. Although the traditional amortising loan still has a place in the market, competition and the need to meet investor needs has driven banks to provide the market with a wide array of products.
These products have not only been designed in the light of investor needs, but are also formulated so as to reduce the risk to banks. The products can be categorised under structured debt (utilising interest rate derivatives), structured finance (structures to minimise income tax exposure) and structured funding (alternative funding to traditional banks).

Although the South African investor now has a product range to suit most requirements, South Africa still lags behind First World countries in the area of structured funding where secondary mortgage markets have matured. These markets provide investors with the flexibility to move in and out of property (mortgage) backed investments with relative ease. This has been achieved or facilitated in part by government involvement in providing a legal infrastructure that ensures that the market can grow in a structured and controlled environment. This is particularly prevalent in the residential property markets of the United States of America, Canada and the United Kingdom (e.g. Fannie Mae and Freddie Mac), where origination and securitisation of mortgage-backed securities is the primary funding instrument.

8.2.5 Risk

The risks associated with the business of property finance historically revolved around the property investor’s ability to repay the debt and the value of the property being sufficient to cover the debt if liquidated. This would be adequate in a static environment, but the property market is subjected to diverse forces that include economic growth, market preferences, interest rate fluctuations and competition.

These forces make the environment a dynamic market where historical preferences and assumptions no longer hold true. Two primary events emphasised this in South Africa: firstly, the loss of the CBD as the preferred place of business, which resulted in urban decay of massive proportions, and secondly, the rapid increase in interest rates in and around 1998. Both of these events resulted in increased bad debt exposures.
These two triggers created the momentum within banks to adapt policies and procedures, at a far greater rate than previously required, to reduce future exposures of a similar nature. The focus was not only on the policies affecting individual loans, but also on the need to manage the characteristics and attributes of lending portfolios.

Most banks now have standard reporting mechanisms in place to understand the dynamics surrounding their mortgage portfolios. These were brought about through the introduction of systems that provide the flexibility to segment the portfolio in a variety of ways, including margin spread, geographical location, bad debt, arrears segmentation, and even various combinations of these. Query tools that allow management to interrogate their database on an ad hoc basis in whatever manner they require, supplements this information.

Property finance risk management is now recognised as a holistic function where control must be dictated centrally and executed uniformly. The old paradigm of focusing only on risks associated with the loan level has been discarded and the industry now recognises the need for an encompassing approach towards the management of property finance risk.

Risk management is therefore a strategic function that can result in a sustainable, competitive advantage through the resultant reduction in bad debt exposures. The introduction and continued maintenance of pertinent and applicable policies, procedures, systems and management controls that reflect the changing market and economic conditions should provide favourable returns to shareholders.

One concern voiced by all the banks interviewed was the lost opportunity to learn from bad debt experiences. While most banks fully investigate the underlying causes of bad debt, none interviewed have formal processes in place to spread the lessons learnt across the organisation. Only those closely involved with the loan receive the benefit of this learning experience, which is to the detriment of the organisation as a whole.
8.2.6 General

The study of the business of property finance in South Africa is complicated by the absence of a readily available source of reference. Such knowledge is inherent within financial institutions and the intellectual capital of the staff employed. Financial institutions retain this knowledge by documenting it in their policies and procedures and grow their knowledge base by employing additional qualified staff.

The property finance industry is finite and with the introduction of world best practises such as outsourcing, solution-based systems and partnerships, property finance departments are shrinking. The natural attrition of staff who move to other banks provides for the sharing of information and knowledge, but there is no formal mechanism in place to achieve this.

The only professionals that provide property finance with meaningful contributions (non-managerial) are valuers, conveyancers and credit risk analysts. While these areas of expertise are solid foundations with which to enter the field of property finance, significant effort is required to successfully synthesise this knowledge with property finance expertise.

This was confirmed in the interview research, which revealed that, at an operational level, individual property finance expertise is largely functional where depth of knowledge across the business of property finance is limited. At senior and general management levels there was a broader appreciation for the entire business, yet lack of knowledge depth in functional areas was evident.

The business of property finance as a subject remains largely without holistic reference material. There are many references covering the professions relating to property and property investment, but little is available on property finance in a business context or framework. This report is an attempt to address this deficiency.
8.3 RECOMMENDATIONS

The recommendations detailed below are suggested not only to enhance effectiveness and efficiency of the business of property finance, but also include recommendations to encourage further investigation into property related socio-economic areas of concern.

8.3.1 Study of property finance

The importance of this business, particularly the success of it, is critical to the South African economy and to the industry as a whole. The prudent financing of property, coupled with sound and innovative products, will facilitate the continued healthy growth of the industry.

However, the combined and very specific knowledge required to function within this industry is currently locked inside it. It is proprietary in nature and only available or attainable through experience and by understanding the thinking behind the policies and procedures that guide property finance institutions.

It is recommended that educational institutions investigate the feasibility of providing the business of property finance as a subject to the general public, and to existing participants within the industry.

8.3.2 African property finance

South Africa operates within the greater African continent, where countries face similar challenges of operating under the direct influence of both world economies and internal circumstances.

There is an opportunity for these countries to share their experiences, thereby facilitating an accelerated development path, which should deliver mutual benefits by avoiding flawed strategies and policies and adopting proven and successful practices.
It is recommended that an African property finance forum be created with similar objectives to that of the African Real Estate Society. It should meet on a regular basis to present and discuss papers on related topics. This will encourage interested parties to meet and further develop the issues presented, and initiate activities that advance the cause and promote the benefits of property finance within the greater African context.

It is imperative for African countries to become more co-operative in order to fast-track development within internationally accepted frameworks. This will maximise their ability to compete and enhance their standing in world markets. The continued isolated development of this industry and others can only result in African countries remaining emerging economies.

8.3.3 Decay of central business districts

Several interviewees commented on the disastrous effects of the collapse of central business districts on property finance. The interviews revealed that it is the common, but unproven view that the primary cause of the collapse of central business districts was the opening up of new business nodes for development or the rezoning of existing residential areas for reasons primarily benefiting local councils (e.g. additional income through rates).

It would appear that these decisions were taken with little regard for the micro and macro consequences on the property industry and the economy as a whole, resulting in an oversupply of office accommodation and a spiral of uncertainty and instability.

The introduction of Unicity councils should remove the direct competition for rates between local councils, but the oversupply in the office market remains a concern. It is recommended that a scientific study be undertaken to understand the primary causes of the collapse of CBDs and to recommend sustainable strategies to improve the current overstocked office accommodation situation. Furthermore, it should deliver expansion decision support methodologies and criteria to ensure that the situation is not exacerbated.
8.3.4 Application service providers

Property finance industry participants within South Africa require sophisticated computer systems and solutions in order to manage their lending portfolios effectively and efficiently. These systems are expensive, but necessary, even though they merely provide institutions with the capability to operate their business, and do not provide any strategic or competitive advantage.

Local and international software vendors supply these solutions at enormous cost. This is replicated cost that can be avoided by the use of an application service provider (ASP) that supplies one system to the industry, thereby spreading overhead costs and achieving economies of scale.

The banking community should take cognisance of the fact that, as South African financial markets are penetrated by international financial institutions, competition will increase, which will ultimately put pressure on margins. Clearly, one of the options to combat this pressure is to reduce overhead costs, to which IT is a major contributor. This can be achieved through the use of an ASP.

8.3.5 Administration outsourcing

In a similar vein to the ASP model described above, non-risk administration (e.g. statements and conveyancing) can be outsourced to a company that specialises in mortgage administration. Currently, financial institutions are required to cover their administration requirements themselves, which entails the maintenance of the necessary infrastructure and staff resources.

It is recommended that banks consider the use of administration companies to manage their interests after mortgage bond registration and disbursement. Areas of risk such as property reviews should remain with the originating bank in order to maintain control over high-impact areas, but the management of day-to-day administration can be passed to specialists who operate administration as their core business.
As with the ASP model, economies of scale and cost overhead spread will be achieved, which will benefit participating banks by reducing administration cost. Additional benefits include reduction in staff, resources and infrastructure.

8.3.6 Securitisation

This recommendation is not directly related to the research undertaken; rather it is the result of the understanding of successful international initiatives coupled with local challenges.

The previously disadvantaged portion of the South African population is still struggling to achieve minimum living standards and basic living conditions. The housing subsidy plan that the government currently employs does, to a limited extent, facilitate growth in homeownership, but by utilising the allocated budget more creatively and in partnership with banks, more can be achieved.

Instead of providing direct funding for low-cost housing to qualifying people, government should merely underwrite a portion of the debt. The quantum of the underwritten debt will determine, in conjunction with the risk assessment, the level of funding that could be expected from the investment community. The exposure to government could be reinsured, thereby providing the country with additional funds (previously allocated to housing) for other national projects.

This concept is not new; it has been successfully employed in the United States of America through the Fannie Mae Institution. Initially, the US government underwrote each loan; however, as the product developed over the decades this was no longer necessary, as the debt or part thereof was insured through normal insurance products and therefore remained attractive to the investment community.
8.3.7 Concluding remarks

This research spanned two very informative years where significantly diverse institutions provided clear insight into a previously obscure industry. The competitive nature of these institutions has encouraged tactics that are predominantly internally focused, rather than collective strategies for the healthy growth of the industry.

This is perhaps one of the underlying causes of the lack of available and documented reference material on the business of property finance. As South Africa and African countries move further into First World best practices, our markets will become more attractive, resulting in increased international competition for our traditional markets. The failure of any financial institution to compete internationally will have a negative blanket effect on African sentiment.

It is only through collaborative development that the potential of our extensive knowledge and experience, developed in difficult and sometimes extreme markets, will be realised. In order to achieve this, the subject of property finance must be developed to provide knowledge depth to the industry, local and African continental strategies must be developed to provide effective direction in the future and forums must be established to ensure that strategies remain in line with the developing environment.
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ANNEXURE A QUESTIONNAIRE

The objective of this questionnaire is to research the property finance industry within a southern Africa context. The research will cover the major financial institutions and ultimately the results will provide a definitive explanation of the requirements for conducting the business of property finance.

The target sample is:

- Standard Bank
- ABSA
- Cape of Good Hope Bank (property finance is their major income contributor)
- Nedcor Investment Bank
- First National Bank
- Board of Executors
- Investec

These local banks cover over 77% of the commercial bonds registered over properties in the last two years (ex deeds office enquiries through MAPINFO and the Knowledge Factory Ltd). This should facilitate the following:

- Adequate: covers those banks that are currently strategically and operationally involved in the business of property finance.
- Comprehensive: the target banks are the major market shareholders in South Africa.
- Duplication: there is no duplication; each bank will only be interviewed once.
- Current: the target banks are currently active in the property finance market.
Questionnaire

The areas of research questionnaire will cover the following and be tapped for reference:

Bank fundamentals and nature of property finance

1. What is your name? Reference
   Position and function within the bank? Area of expertise and responsibility
   The registered name of the bank? Sample size and spread
   What other banks have you worked for, and in what positions? Experience level

2. What are your core property markets? Establishes their target market (commercial/industrial/residential/agricultural)
   Provincial representation Establishes geographical area focus.
The process of property finance

1. What is the process followed from loan application to disbursement?
   Why are these activities crucial to the process?
   Where are the most problems encountered in the process?
   How are these overcome?

   (Definition of the critical activities in this process and why they are necessary in the business of property finance)

2. What are the critical management activities that must be performed in the day-to-day operations of property finance?
   Why are these activities crucial?

   (Definition of managerial and operational activities that are exclusive to property finance)

3. What process is followed when loans are repaid and cancellation of bonds has been requested?
   Why are these activities crucial.

   (Definition of the loan closure process)

4. What process is followed to liquidate your security in the case of default?
   What are the problems encountered in this process?
   What are the risks?

   (Defines the litigation process and sets up the basis for further questions in the Risk section)

5. Are there any other major processes that are followed that relate to property finance?
   Why are they crucial?
(Definition and purpose of other processes that have not been identified in
the preliminary investigation)

Property finance structures

1. What structures do you employ to support the above processes?
   What is the ethos behind these structures?
   What other structures were considered?
   On what basis were they discarded?

(Definition and rationale of structures employed to support the processes of
property finance)

Property finance products

1. What property finance products does this bank offer its clients?
   What are the benefits to the client?
   What are the benefits and problems, to the bank, associated with this product?

(Identification and definition of products required by the market)

2. What specialised products are offered?
   Why are they specialised?
   What are the criteria used in providing such products?

(Identification, definition and rationale behind specialised products)
Risk

Property risk

1. How is traditional risk and credit analysis adapted to property?
   What are the key concepts of property risk?
   How is each property rated in terms of risk?
   How are these risks taken into account when assessing the entire risk of the application?

   (Definition of the property risk elements and how they are assessed in conjunction with the entire risk profile)

Portfolio and group management

2. How do the risks differ when dealing with a client or clients who have a portfolio of properties?
   How do you assess the risks involved when the client has a spread of financial institutions funding his properties?
   How do you group the clients and properties to gain a full picture of the exposure?
   What is the basis or rationale behind this grouping technique?
   What are the key elements relating to the management of your entire loan portfolio?
   How are these elements managed in terms of reducing portfolio risk?

   (Definition of portfolio management and risk management thereof)

3. On what basis does the bank segment its loan portfolio to determine its risk profile?
   How does this segmentation relate to the policy making of the bank?
   How does this segmentation relate to the marketing drive of the bank?
(Identification of segmentation policies and rationale behind these policies)

Funding and pricing

4. How does the bank determine its pricing policy?
   Is pricing risk or market driven?
   What are the factors that derive the interest rate charged to the client?
   To what extent does the market determine the pricing?

(Definition of pricing policies and extent of pricing for risk)

5. What sources of funds does the bank use to fund its loan portfolio?
   What are the risks associated with each of these funding sources?
   Which funding sources are the most profitable?

(Definition of funding sources and risk selection criteria)

Bad debt management

6. What methods are used to timeously identify possible under performing loans?
   Is the process reactive or proactive in nature?
   What outside agencies are used in this process?

(Definition of the bad debt management process)

7. What methods does the bank adopt to rescue possible bad debt?
   How successful is this activity?

(Definition and benefits of rescue methods)
8. Does the bank carry out post-mortems on bad debt? What does it do with this information?

(Identification of knowledge transfer methods)

9. How does the bank quantify the cost of bad debt? What are the cost elements of bad debt? How are the effects of these elements reduced?

(Identification and methods of cost of bad debt reduction)

Profitability

Performance analysis

1. On what basis does the bank analyse its profitability? What are the benchmarks and performance ratios? How does the bank determine its profitability targets?

(Identification and definition of profitability indicators)

2. How does the bank segment its loan portfolio from a profitability perspective? Why are these criteria used? How are the results used?

(Identification, definition and uses of profitability segmentation)
Systems

1. What are the core systems employed in the bank to manage its property finance operations?
   What is the purpose of each of these systems?
   Are these systems in-house or outsourced?
   Do these systems also drive the management information outputs of the business?

(Identification and definition of core systems required in the business of property finance)

2. What value-added systems are employed by the business?
   How do they add value to the business?
   Where do you see possibilities in this regard for the industry?

(Identification of non-core systems and possible future information requirements)

Associated industries

1. What are the industries that are closely associated to property finance?
   How do they support the business of property finance?
   How reliant is property finance on these support industries?
   What is the reliance of these industries on the existence of property finance?

(Identification, definition and purpose of complementary and parallel businesses)

The future

1. How do you see the future of the property finance industry?
   What impact will this have on the industry?
   What are the driving forces behind this change?
**ANNEXURE B  TABLE OF INTERVIEWEES**

<table>
<thead>
<tr>
<th>Property finance institutions</th>
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</thead>
<tbody>
<tr>
<td><strong>Mr Frank Berkeley</strong></td>
</tr>
<tr>
<td>Divisional Director</td>
</tr>
<tr>
<td><strong>Nedcor Investment Bank</strong></td>
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<thead>
<tr>
<th>Property finance institutions</th>
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<tbody>
<tr>
<td><strong>Mr Neville Kain</strong></td>
</tr>
<tr>
<td>General Manager</td>
</tr>
<tr>
<td><strong>Nedcor Investment Bank</strong></td>
</tr>
<tr>
<td><strong>Board of Executives (NBS)</strong></td>
</tr>
<tr>
<td><strong>ABSA (United Building Society)</strong></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Property finance institutions</th>
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<tbody>
<tr>
<td><strong>Mr Willem Klopper</strong></td>
</tr>
<tr>
<td>Assistant General Manager</td>
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<tr>
<td><strong>Nedcor Investment Bank</strong></td>
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<tr>
<td><strong>Nedbank</strong></td>
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<thead>
<tr>
<th>Property finance institutions</th>
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</thead>
<tbody>
<tr>
<td><strong>Mr Gavin Bell</strong></td>
</tr>
<tr>
<td>Credit and Administration Manager</td>
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<tr>
<td><strong>Nedcor Investment Bank</strong></td>
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<tr>
<td><strong>Syfrets Ltd</strong></td>
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<tr>
<td><strong>Nedbank</strong></td>
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<tr>
<th>Property finance institutions</th>
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<tbody>
<tr>
<td><strong>Ms Michelle Kotze</strong></td>
</tr>
<tr>
<td>Administration Supervisor</td>
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<tr>
<td><strong>Nedcor Investment Bank</strong></td>
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<tr>
<td><strong>Syfrets Ltd</strong></td>
</tr>
<tr>
<td><strong>ABSA (Allied Building Society)</strong></td>
</tr>
</tbody>
</table>
Mr Nico Erasmus
Administration Manager
Property finance institutions
First National Bank
Syfrets Ltd

Leon Moore
Credit Manager
Property finance institutions
First National Bank
Syfrets Ltd

Mr Niel Main
Director
Property finance institutions
ABSA
Metboard

Mr Brian Wilson
Operations Manager
Property finance institutions
ABSA
Board of Executives (NBS)
Standard Bank

Ms Beverley Coetzee
Administration Supervisor
Property finance institutions
Nedcor Investment Bank
ABSA (Volkskas)
First National Bank
Ms Rika Gemmekin
Treasury Trader
**Property finance institutions**
Nedcor Investment Bank
Nedbank

Mr David Croeser
Valuer
**Property finance institutions**
Nedcor Investment Bank
Standard Bank
Cape of Good Hope Bank
Nedbank
First National Bank

Mr Gary Swan
Business Analyst
**Property finance institutions**
Nedcor Investment Bank
ABSA (United Building Society)
Standard Bank

Mr Tyrone Gower
Business Analyst
**Property finance institutions**
Nedcor Investment Bank
Nedbank

Ms Carol Crookes
Administration and Insurance Manager
**Property finance institutions**
Nedcor Investment Bank
Syfrets Ltd
Mr Riaan Spence  
Marketing and Administration  
Property finance institutions  
ABSA  
Nedcor Investment Bank

Mr Brain Stevens  
General Manager  
Property finance institutions  
Cape of Good Hope Bank  
Syfrets Ltd

Mr Mike Adams  
Credit Manager  
Property finance institutions  
Board of Executives (Natal Building Society)  
Nedcor Investment Bank

Mr Patrick Peters  
Credit and Administration  
Property finance institutions  
Nedcor Investment Bank  
ABSA (Trust Bank)

Mr Glen Davis  
Regional Manager  
Property finance institutions  
Investec Bank  
Cape of Good Hope Bank
Mr Ian Mason
Director
Property finance institutions
Standard Bank
Nedcor Investment Bank

Mr Carlos Esteves
Marketing
Property finance institutions
Board of Executives
Nedcor Investment Bank

MS Noreen Tudor-Tompson
Administration
Property finance institutions
Nedcor Investment Bank
Syfrets Limited
Standard Bank
The Knowledge Factory Ltd is a South African business that is involved in the geographic mapping of diverse information sources into a common data platform. Its importance to the business of property finance and the property industry as a whole is evident from the extent of consolidated information available through its products and services.

The Knowledge Factory web site provides the following explanatory summary, "The term normally used to describe the broad methodologies of the Knowledge Factory is GIS (Geographic Information Systems). However, the newer term business geographics would better describe the nature of our focus, as we concentrate on commercial and business applications, using geography as a foundation. The Knowledge Factory obtains a variety of data sets from many sources, and integrates these into a cohesive analytic framework".

The following web page extract on selected products and services provide an insight into the type of information available and utilisation potential of the information in the property industry.

- **Put a Map in it** ... we can map enable your company website.

- **Business Geographics** ... commercial and business applications, using geography as a foundation.

- **Map Plus: Computerised Maps** ... a comprehensive set of vector (digitised) maps for South Africa.

- **Map Plus: Data for Decision Makers** ...incorporate and integrate appropriate data sets.

- **ClusterPlus: Lifestyle Segmentation** ...lifestyle characteristics of every neighbourhood in South Africa.
GeoPlus: ADDRESS PROCESSING ...link internal customer data to the business geographics' system.

ENHANCED SPATIAL PLATFORM ...contains the erf boundaries of every property in the country.

NATIONAL ADDRESS DICTIONARY ...a listing of housing counts in every area.

DETAILED PROPERTY DATA SETS ...includes ownership details, price paid, date of transfer and more.

ANALYTIC BUREAU SERVICES ...we offer a high-level analytic service, on an ad-hoc or bureau basis.

BUSINESS STATISTICS ...a comprehensive listing of Southern African businesses.

THE TECHNOLOGY PLATFORM ...the Central Data Warehouse.

Source: www.knowledgefactory.co.za/products and services

The Detailed Property Data Sets product is used within this dissertation in Chapter 5 to highlight the impact of these products within a decision support framework in a property finance context such as market share and property transfers. The latter was also used to identify the representative interview sample (financial institutions) during the research phase of this study (see Chapter 2).
<table>
<thead>
<tr>
<th>Glossary of Terms</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACB</td>
<td>Automated Clearing Bureau</td>
</tr>
<tr>
<td>BA</td>
<td>Bankers Acceptances</td>
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<tr>
<td>CC</td>
<td>Close Corporation</td>
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<tr>
<td>CCL</td>
<td>Compulsory Convertible Loan</td>
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<tr>
<td>DOM</td>
<td>Debit Order Mandate</td>
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<tr>
<td>DTI</td>
<td>Deposit Taking Institution</td>
</tr>
<tr>
<td>EFTS</td>
<td>Electronic Fund Transfer System</td>
</tr>
<tr>
<td>EGI</td>
<td>Expected Gross Income</td>
</tr>
<tr>
<td>FRA</td>
<td>Forward Rate Agreement</td>
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<tr>
<td>GA</td>
<td>Granting Authority</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical Information Systems</td>
</tr>
<tr>
<td>LTV</td>
<td>Loan To Value</td>
</tr>
<tr>
<td>NACA</td>
<td>Normal Annual Compounded Annually</td>
</tr>
<tr>
<td>NACB</td>
<td>Normal Annual Compounded Bi-annually</td>
</tr>
<tr>
<td>NACD</td>
<td>Normal Annual Compounded Daily</td>
</tr>
<tr>
<td>NACM</td>
<td>Normal Annual Compounded Monthly</td>
</tr>
<tr>
<td>NACQ</td>
<td>Normal Annual Compounded Quarterly</td>
</tr>
<tr>
<td>NAV</td>
<td>Net Asset Value</td>
</tr>
<tr>
<td>NCD</td>
<td>Negotiable Certificates of Deposit</td>
</tr>
<tr>
<td>NEWCO</td>
<td>New Company to be formed</td>
</tr>
<tr>
<td>NII</td>
<td>Net Interest Income</td>
</tr>
<tr>
<td>NOI</td>
<td>Net Operating Income</td>
</tr>
<tr>
<td>PGI</td>
<td>Potential Gross Income</td>
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<tr>
<td>ROA</td>
<td>Return on Assets</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>SAFEX</td>
<td>South African Futures Exchange</td>
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<tr>
<td>SPV</td>
<td>Special Purpose Vehicle</td>
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