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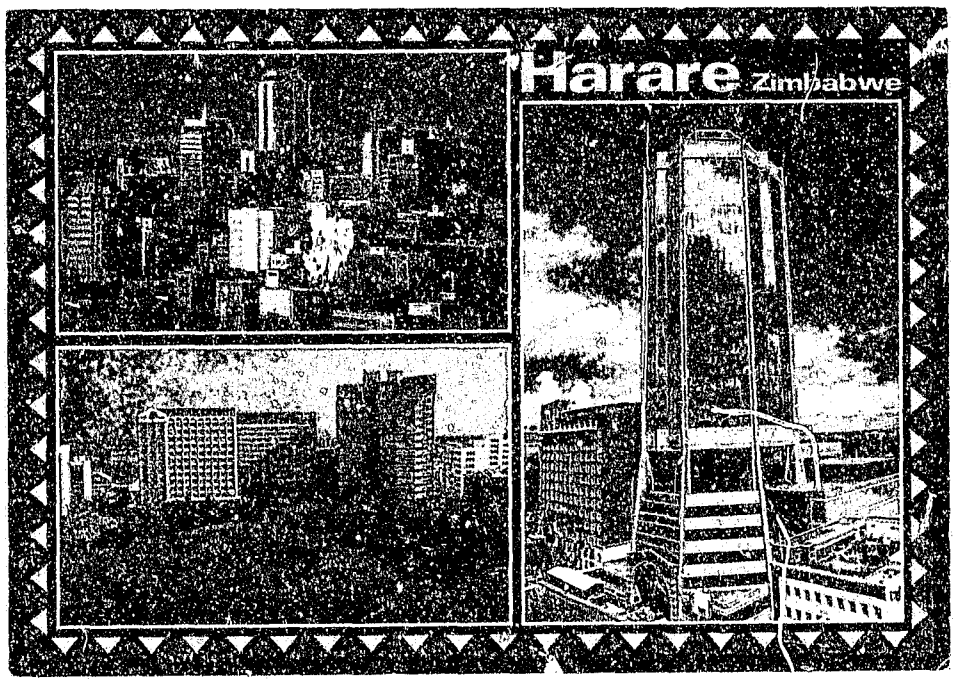
The factors that have affected the demand and supply patterns of commercial office space in the central business district of Harare from 1993 to 1998

Hove, Stephen N.

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THE FACTORS THAT HAVE AFFECTED THE DEMAND AND SUPPLY PATTERNS OF COMMERCIAL OFFICE SPACE IN THE CENTRAL BUSINESS DISTRICT OF HARARE FROM 1993 TO 1998.



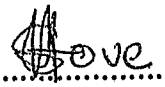
STEPHEN N HOVE

A research report submitted to the Department of Building and Quantity Surveying, Faculty of Architecture, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the Degree of Master of Science in Building (Property Development and Management)

MARCH 1999

DECLARATION

I declare that this research report is my own unaided work, it is being submitted in partial fulfilment of the requirements for the Degree of Master of Science in the University of the Witwatersrand Johannesburg. It has never been submitted for any degree or examination in any other university.



.....

STEPHEN N HOVE

MARCH 1999

DEDICATION

To my mother, Mrs R. Hove and my late father, Mr M. M Hove

ACKNOWLEDGEMENTS

To the following persons, whose efforts, guidance, information and assistance resulted in the production of this research report; I am greatly indebted to:

PROFESSOR R SCHLOSS	Head of Department of Building and Quantity Surveying, University of the Witwatersrand
DR RAYMOND NKADO	Lecturer in the Department of Building and Quantity Surveying, University of the Witwatersrand
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MR J M YARNOLD	Deputy Manager (Project Development), Old Mutual Properties, Zimbabwe

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LIST OF ABBREVIATIONS

C.B.D	CENTRAL BUSINESS DISTRICT
H.C.B.D	HARARE CENTRAL BUSINESS DISTRICT
Z.C.S.O	ZIMBABWE CENTRAL STATISTICAL OFFICE
K.F.Z	KNIGHT FRANK ZIMBABWE
E.S.A.P	ECONOMIC STRUCTURAL ADJUSTMENT PROGRAMME
L.P 22	LOCAL PLAN 22
L.P 17	LOCAL PLAN 17
R.E.I.Z	REAL ESTATE INSTITUTE OF ZIMBABWE
Z.A.N.U (PF)	ZIMBABWE AFRICAN NATIONAL UNION (PATRIOTIC FRONT)
I.P.P.S.A	INSTITUTE OF PROPERTY PRACTITIONERS OF SOUTH AFRICA
U.K	UNITED KINGDOM
B.S.A.C	BRITISH SOUTHERN AFRICA COMPANY
D.M.B	DAIRY MARKETING BOARD
C.A.B.S	CENTRAL AFRICAN BUILDING SOCIETY
R.E.P.T	RICHARD ELLIS PROPERTY INDEX
N.A.S.S.A	NATIONA SOCIAL SECURITY ASSOCIATION
L.A.P.F	LOCAL AUTHORITY PENSION FUND

SYNOPSIS

The primary focus of this research project is to test whether the factors that affect office space supply and demand in the Central Business District of Harare are similar to those factors that affect office space supply and demand identified in the literature. It highlights and analyses the factors that have affected the supply and demand of office space from 1993 to 1998 within the Central Business District of Harare.

The principal methodology adopted in the research was to review South African, Zimbabwean and international literature on the supply and demand of office property and subsequently conduct a questionnaire based survey on 22 estate agents operating in central Harare. Informal and formal interviews were also conducted with professional valuers, town planners and institutional investors in office property within central Harare.

The study revealed that the factors affecting demand and supply of office space in the study area are not different from those identified in the literature. Eight out of the thirteen factors affecting the demand and seven out of the nine factors affecting the supply of commercial office space identified in the literature were considered by the respondents to be of importance within the study area. However the research facilitated the identification of other factors affecting the demand and supply of office space that are unique to the study area.

Another important observation from the study is the sharp contrast between the significance of the factors identified in the literature and those established in the survey for example in the literature a high vacancy rate was an important factor affecting the supply of office space however within the study area this factor is of little significance. The study revealed that the demand for office space is greater than supply within the study area. Recommendations have been put forward on how the imbalance can be alleviated through the improvement of the infrastructure, relaxation of town planning restrictions and increasing parking facilities so as to attract office property developers into the study area.

***Keywords*: supply, demand, office space and central business district.**

CHAPTER ONE

INTRODUCTION AND PROBLEM DEFINITION

1.1 INTRODUCTION

In one of the clearest and most comprehensive texts, Cadman and Austin-Crowe (1983) define property development as "an industry that produces buildings for occupation by bringing together various raw materials, which include land, building materials, public services and utilities, labour, capital and professional expertise". The final product from the process of property development is a building structure that can be let and held as an investment or alternately sold to an investor. The office building is one of the products of property development and is itself a marketable commodity, more in demand in some places than others, at some times than others, of certain sizes and standards of appointment than others. This research report will provide an analysis of the factors that have affected the demand and supply of office space in the CBD of Harare from 1993 to 1998 and to identify the causes of the currently reported shortage of office space.

1.2 SCOPE OF STUDY.

Harare is the political and commercial capital city of Zimbabwe, and the study area is located within Harare (see Figure 1.1, page 2 and Figure 1.2, page 3). The study area comes under the City of Harare (Salisbury) Town Planning Scheme Phase 1, 2nd Resubmission of November 1973 now falling under the new Local plan 22 of 1995 and the Kopje Market Square Area Local Priority Plan No.17 of May 1990. It is bounded on the northern side by Parklane Street and Central Avenue, on the southern side by Kenneth Kaunda Avenue and the railway line, on the eastern side by fourth street and lastly on the western side by Rotten Row and the Kopje (see Figure 1.3, page 4)

The foregoing constitutes what is commonly defined as the Central Business District of Harare by the municipality of the city of Harare. However, the research study will focus on specific zones for the CBD in which commercial office development is permitted.

LOCATION MAP
ZIMBABWE

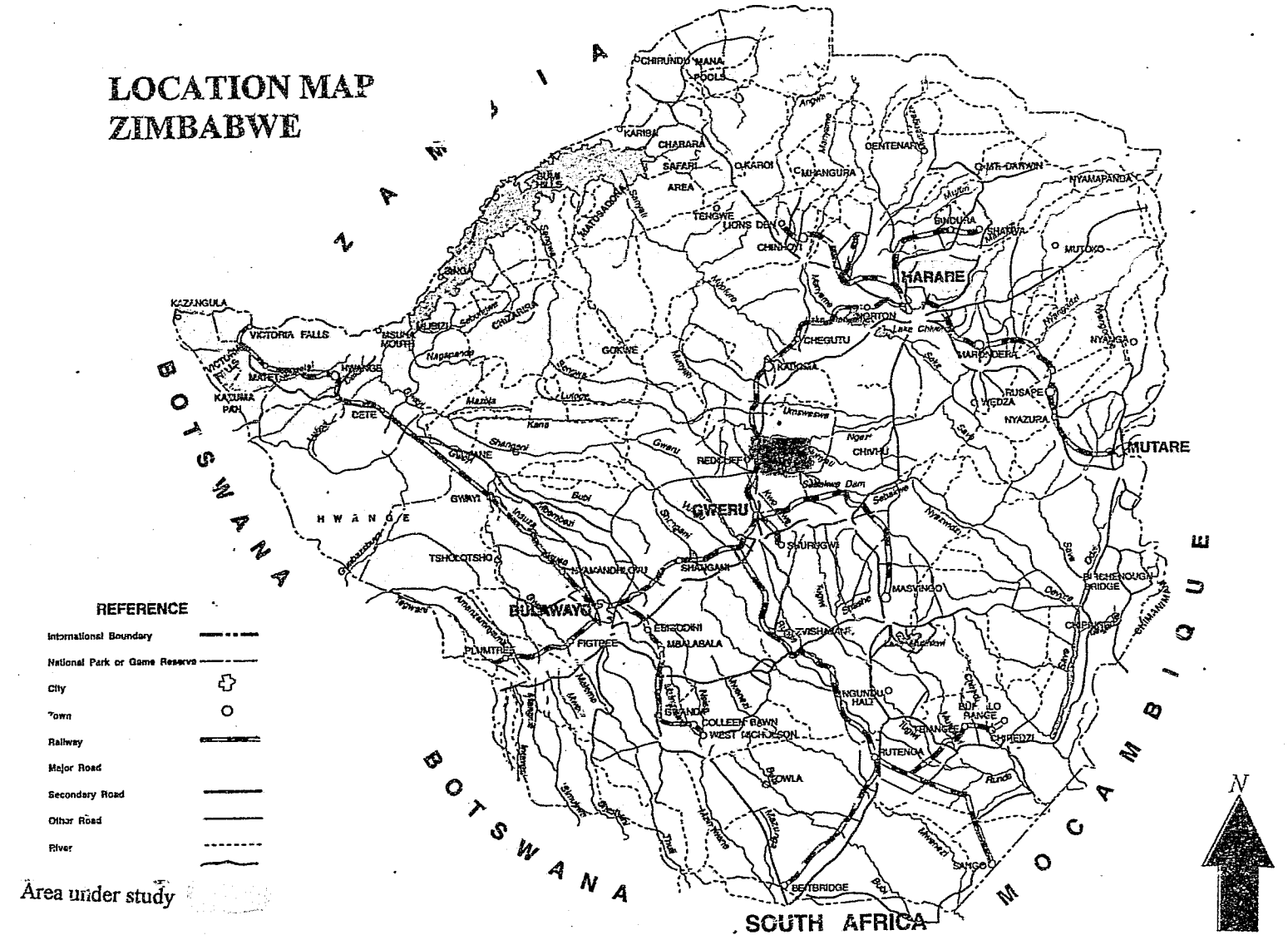


FIGURE 1.1

LOCATION OF THE CENTRAL BUSINESS DISTRICT OF HARARE

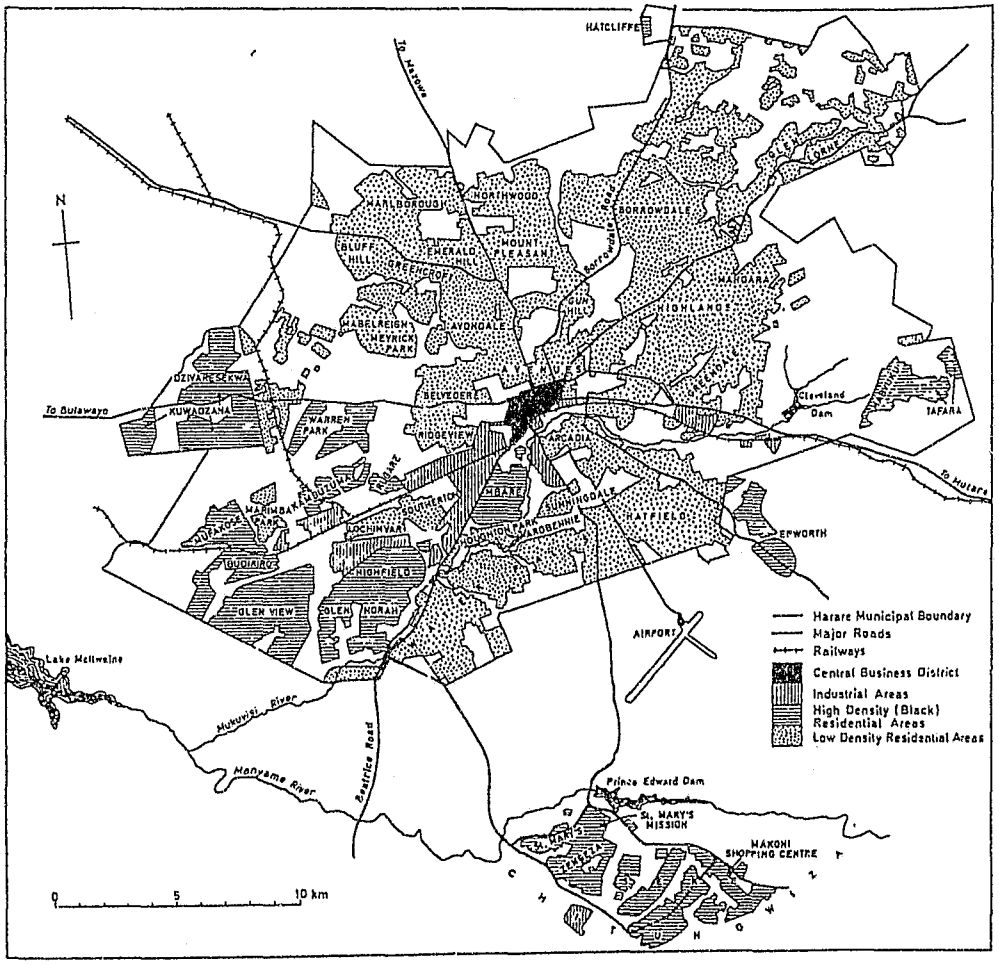


FIGURE 1.2: MAJOR LAND USES IN HARARE AND CHITUNGWIZA, 1997.

SOURCE: ZINYAMA, TEVERA AND CUMMING (1990)

BOUNDARIES OF THE CENTRAL BUSINESS DISTRICT OF HARARE AND THE AREA COVERED BY THE TWO PHYSICAL PLANS FOR THE CENTRAL BUSINESS DISTRICT.

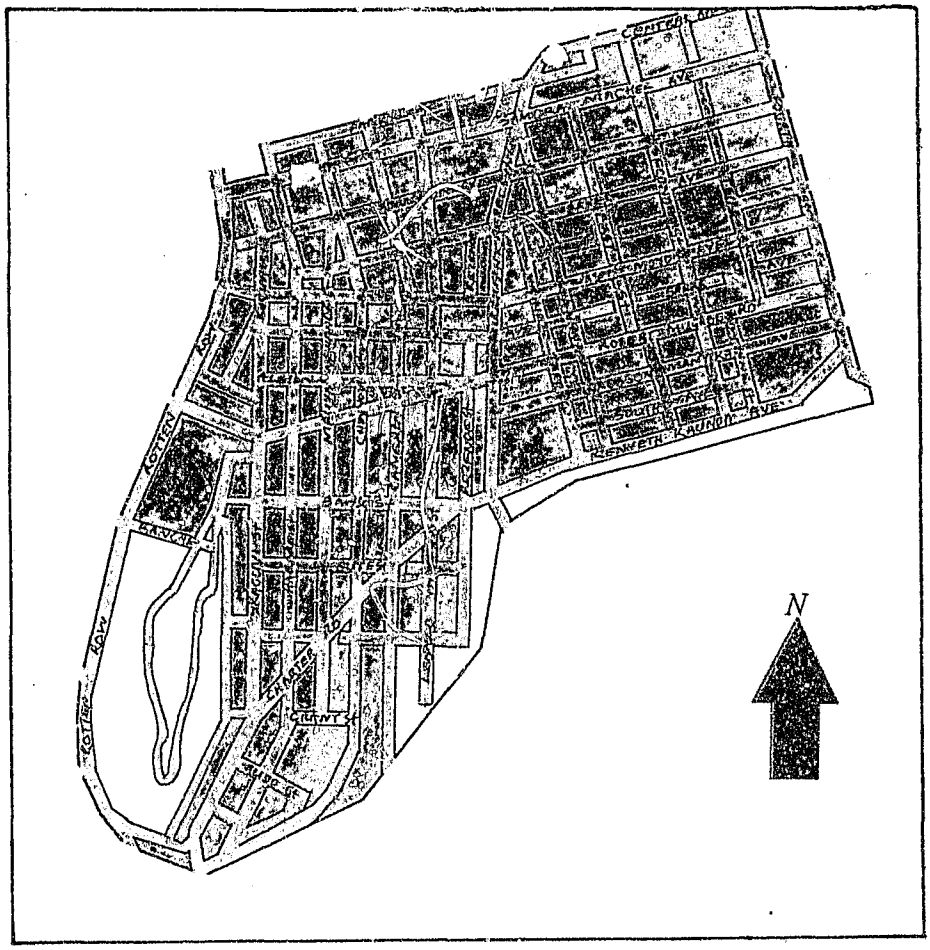


FIGURE 1.3 AREA COVERED BY THE LOCAL PLAN No 17 AND LOCAL PLAN No 22

LEGEND

LOCAL PLAN No 17 AREA

LOCAL PLAN No 22 AREA

These zones include Zone 1and 2 of the Kopje Market Square Area Priority Plan No 17 and Sub –Zone 1A1, 1A, 1B and 9A of the Town Planning Scheme Phase 1 now Local Plan No 22 (See Figure 1.4, page 6).

The study area has distinct characteristics from the rest of the City of Harare.

- It has a higher bulk factor allowance than the rest of the City of Harare, an aspect which allows upward growth within the CBD and a characteristic of most Central Business Districts of towns and cities (KFZ, Zimbabwe Property Report, July 1993)
- It is the most accessible area from the corners of the Greater Harare area (See Figure 1.2, page 3). Centrality is vital to office and retail activities, which are the main functions, found in the Central Business District of Harare (REIZ, Property & Development, June 1998)
- Historically, the centre of Harare was developed here because of defensive reasons; the Kopje on the western side provided a natural form of defence (REIZ, Property & Development, June 1996)

There are however constraints in the study area. There is no room for lateral or horizontal expansion of the central area of Harare with regard to office developments at the present moment because of spatial fixates and limited space.

- South and south-eastwards there is an existing railway line and the presence of fragile soils of the Mukuvisi River. The vlei soils are only suitable for recreational developments. Expansion in that direction is therefore restricted.

- North westwards the expansion of the CBD is hampered by the fact that the area is zoned for the development of public buildings. Currently the Harare Polytechnic College, Queen Victoria Museum and the ZANU (PF) Headquarters occupy this area.

- South westwards the Kopje hampers the growth of the CBD.

PERMITTED OFFICE USE ZONES WITHIN THE CENTRAL BUSINESS

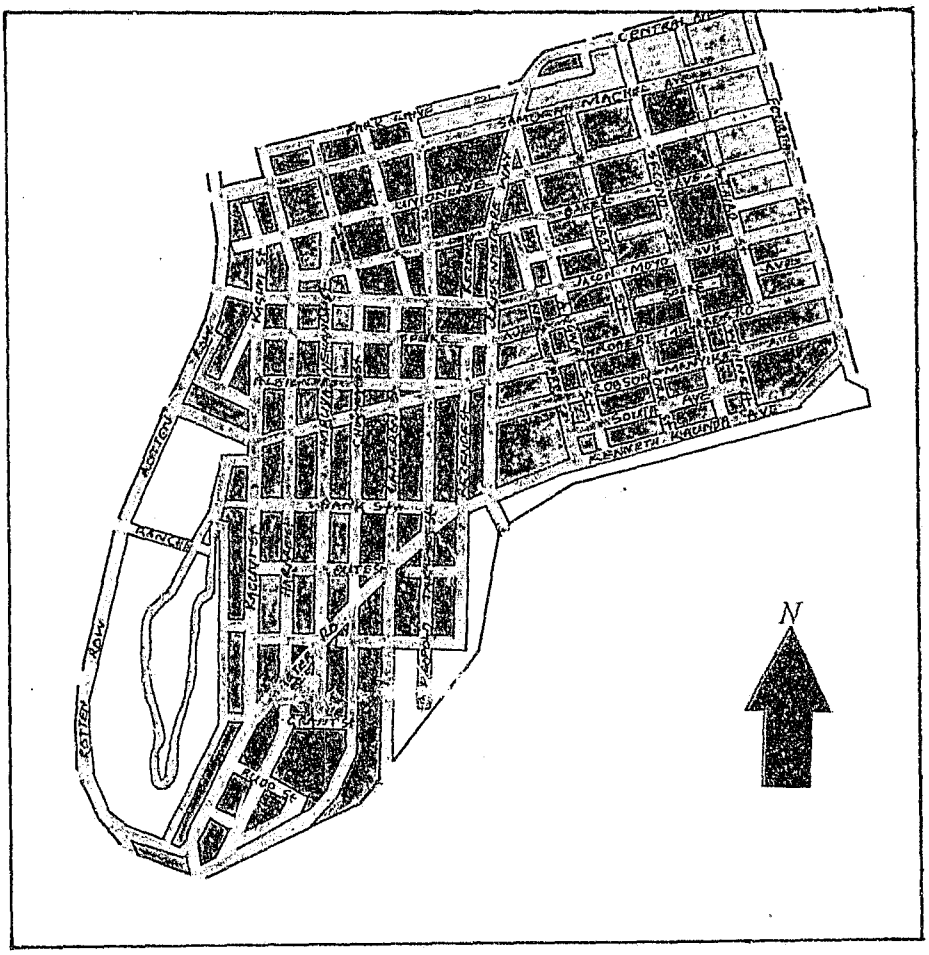


FIGURE 1.4: OFFICE USE ZONES WITHIN THE LOCAL PLAN No 17 AND No 22

LEGEND

LOCAL PLAN No 17	MAJOR USE	FLOOR AREA FACTOR
ZONE 1 AND 2	*OFFICE/SHOPS*	*4*
LOCAL PLAN No 22	**MAJOR USE**	**FLOOR AREA FACTOR**
ZONE 1: COMMERCIAL CENTRAL		
SUB-ZONE 1A1	*OFFICE*	*5*
SUB-ZONE 1A	*OFFICE/SHOPS*	*4*
SUB-ZONE 1B	*OFFICE*	*4*
ZONE 9: COMMERCIAL GENERAL		
SUB-ZONE 9A	*OFFICE*	*2*

Future expansion of the study area or the CBD of Harare is therefore restricted towards the North and North-east. The Local Plan No.22 of 1995 directs expansion towards these directions by changing the use zones thus allowing office use in areas that were once for residential use only, for example, the Avenues area.

The choice of the CBD of Harare as an area of study and not elsewhere around the country can be justified. Harare clearly provides the greatest property investments and development opportunities simply because of its size. It is a primate city with a total population of 1 189 103 whilst Bulawayo, the second capital city, has a population of 621 742. The figures are based on the 1992 Census (CBRichard Ellis Africa, Property Report, October 1997). It is endowed with the strongest economic and infrastructural base in Zimbabwe and it enjoys geographical centrality in Southern Africa's trade region. These characteristics give it the best advantages for attracting investors both local and foreign.

The CBD of Harare was chosen as the area of study because its office property market is vibrant. Unlike other cities such as Johannesburg where office occupiers and office property investors are reported to be moving out of the Central Business District, in Harare commercial office property developers still prefer the CBD.

1.3. OBJECTIVES.

The main objective of the research is to test whether the factors that affect office space supply and demand in the CBD of Harare are similar to those factors identified in the literature.

The primary aims of this research study are to examine the following:

a) The factors that have affected the demand and supply of office space in the CBD of Harare from 1993-1998.

b) The role of institutional investors in office property development within the CBD of Harare.

c) Why investors chose to invest in office property in the CBD of Harare and also why office occupiers prefer the CBD.

d) If the supply of office space meets the demand.

e) The city of Harare Town Council's policies on commercial office developments in the CBD of Harare and to assess whether or not these relate to the objectives of the private sector.

1.4. THE RATIONALE OF THE STUDY.

Funk and Wangles New Standard Dictionary of the English Language defines an office as "a place, building, or series of rooms in which some particular branch of the public service is conducted", or, " a room or building which a person transacts his business or carries on his stated occupation: distinguishing it from shop, store, studio, etc.". An office building can be defined as a substructure in which a service is provided, in contrast to structures in which products are manufactured or sold or people reside. It is a property used in the pursuit of a vocation, business or profession. The office building creates space wherein administration, management and information is processed. Office space is therefore the space in which all types of office workers are accommodated for their day to day activities.

Modern office buildings are complex, so are their development and the reasons behind such developments. Various stakeholders are involved in the office development process for example lending institutions, city planners, architects, engineers and developers. It is, therefore, important that a research study be undertaken and geared at understanding the above aspects of office development and the supply and demand of office space with a special emphasis on the location of the office building in the CBD.

It is also common knowledge that investment in office building is not made in a static environment or economy. Social, economic, physical and political (legislative) factors are constantly at work, creating a climate of ever present change and transition. Furthermore, the sponsors and developers of office space have a variety of outlooks and objectives. It is, therefore imperative that the study be aimed at understanding the

relationship between the direct/ indirect, macro/micro socio-economic forces and office property development within the CBD of Harare.

The common objective of the Harare City planners and those of Johannesburg is to sustain and enhance the vitality and viability of the city centre. A study of this nature is important to urban planners in that it helps them to appreciate the implications of planning decisions for example zoning on the property market particularly the office property section. This ultimately ensures that physical plans for example, the new Local Plan No.22 for Central Harare are based on sound economic principles in order to attract property investors, so as to maintain the vitality of the CBD of Harare.

The introduction of the Economic Structural Adjustment Programme in 1990 opened the Zimbabwean economy to foreign investment. This has resulted in a lot of foreign based companies investing in the country and specifically locating their administration offices in Harare's central business district. The period 1993-1998 is the time in which investment advantages of the Economic Structural Adjustment Programme were experienced most. The boost in business confidence resulting from the implementation of the Structural Adjustment Programme is exemplified by the increase in number of building plans approved in Harare by the Harare city council, in 1990 it was 411 638 and this figure increased by 64% to 644 169 in 1994. These figures can be compared with the period prior the Economic Structural Adjustment Programme whereby in 1988, 211 134 building plans were approved and only 237 189 in 1989 (Quarterly Digest of Statistics, June 1995, Harare, p37) **(Figures include additions and alterations to buildings)**

It is hoped that the research will add to the library of literature on offices and office supply and demand. It is envisaged the study will be useful to practitioners in the field of office property development, management and valuation. Through supply and demand analysis the appraiser can identify and test the level of market support, which is critical in the analysis of highest and best use.

Not only should investors in office developments find a study of this nature useful, retail property investors should also benefit from the information provided.

1.5 METHODOLOGY

An attempt was made to identify the factors that have affected the demand and supply of office space in the CBD of Harare. This was done through the administration of questionnaires to Estate Agents and professional valuers as well as personal interaction with bank managers', pension fund authorities, property owners, property portfolio managers, Harare city planning authorities, and the office occupiers of office space.
On the basis of the literature review and the results obtained from the questionnaires and personal interaction, the theoretical factors that affect office property demand and supply were identified and compared to the factors affecting office demand and supply as obtained from the study area.

The differences between the theoretical factors and the identified factors within the study areas have been highlighted and solutions to address the imbalance of demand and supply leading to the office space shortage in the study area have been highlighted.

1.6 LIMITATIONS TO THE RESEARCH

A number of constraints hampered the research work. Access to information was one major problem. Estate Agents considered information of rentals charged per square metre as confidential information. Owners of certain organisations did not have time for interviews.

Distance to the study area was also a major constraint as well as the high cost of travelling. The author therefore worked under a tight schedule.

The research focused only on office property and did not consider other types of property investments such as residential, industrial, and farm.

1.7 DEFINITIONS

Basic definitions are essential prerequisites for an understanding of the subject under examination. An attempt has been made to define the term's central business district

and office. The proper understanding of the two terms would enable us to avoid the confusion, which surrounds the use of these terms.

1.7.1 Central Business District (CBD)

According to Johnston (1968, p105) the CBD represents that area of the city, where retailing, services and offices are dominant. The modern city as seen in American and other Western cultures is characterised by a variegated pattern of land-use areas. There are sections dominated by business establishments, localities where manufacturing prevails, vast expanses that are residential. One of these subareas is known as the Central Business District or CBD, often popularly known as downtown (Murphy, 1972.p1).

The CBD is regarded as the centre for retailing, office location and service activities (banking and finance). It contains the principal commercial streets and main public buildings and forms the core of a city's business and commercial activities (Waugh, 1995, p396). Some large cities such as London and Tokyo may have more than one CBD and may have experienced a decentralisation of offices and a relocation of retailing.

The Central Business District has the following distinctive characteristics. It is central, at least in terms of accessibility. It has a greater concentration of tall buildings than any other region of the city, since it normally includes most of the city's offices and largest retail stores. It is the area where vehicular and pedestrian traffic is likely to be most concentrated. It averages higher assessed land values and taxes paid than any other part of the city, and it draws its business from the whole urban area and from all ethnic groups and classes of people (Murphy, 1972, p2)

Shops and offices are said to be central or CBD functional elements. "In the CBD...we expect to find the department stores, the skyscraper office buildings, the railroad stations, the great hotels, the theatres... and the city hall.... Encircling the downtown area is... an area of transition, which is being invaded by business and light manufacture"(Burgess, 1925, p38, p40). Recent studies have shown the CBD of many cities to be advancing in some directions 'zone of assimilation' and retreating in others 'zone of discard' (Waugh, 1995, p396).

1.7.2. Office

According to Goddard (1975) offices can be defined in terms of functional and physical concepts.

a) Functional Concepts

- Office activity refers to individual jobs that involve dealing with information, ideas and knowledge.
- Office occupation refers to groups office activities handling similar types of information in a similar way.
- Office organisations are formal groupings of different office occupations.

b) Physical Concepts

- Office buildings are work places whose principal use is for office-type activities and are equipped with information handling facilities (e.g. typewriters, computers etc.). It is this physical definition that will be used in this paper.
- Office establishments are physically separate locations where office activities are conducted. Organisations may have all of their office activities in one establishment or they may be dispersed.

c) The standard industrial classification of South Africa goes on further to distinguish offices by occupational sectors thus those offices housing the primary, secondary and tertiary sectors (IPPSA, Property Development, Vol.2, p225). However it should be noted that there is no uniformity concerning the meaning of the word "office".

In addition to the various theoretical bases for classifying the concept of office, a more practical, general definition of office premises may be as follows:

"A physical space, the floor area of which is used completely or mainly for, and the staff of which work wholly or partly on behalf of, the leadership of an enterprise or organisation and /or the rendering of services and/or the performance of commercial acts and/or the performance of an administration where the emphasis is on the professional and written processing of data arising from the above" (IPPSA, Property Development, Vol. 2, p224).

1.7.3 The concept of a dominant office centre

Hall (1966) in his analysis of the world cities, showed that the major commercial centre of each country attracts much more than its proportional share of offices. To benefit from accessibility and from a 'prestige' address firms have demanded more and more office space within the central areas of cities and are attracted more to large rather than small cities (Balchin andn Kieve, 1995, p65). Thus London dominates England and Paris dominates France. This appears to hold true for all countries **(Harare distinctly dominates Zimbabwe as will be shown in the next sections).**

Horwood and Boyce's (1959) analysis confirmed Hall's findings and noted that: -

- The larger a city grew the faster the rate of office growth; the per capita rate of change increasing with population but at a decreasing rate;
- Cities with more office space than usual are high in central place importance.

Hoyt (1971) is very clear regarding these findings when he states that "office building expansion unlike retail stores, bears no direct relation to population growth, but depends entirely upon the extent to which a city becomes an international or regional office management or financial centre"

1.8. THE STRUCTURE OF THE RESEARCH REPORT

The structure of the research report is as follows:

Chapter one: Introduction and Problem Definition. It looks at the objectives, aims and rationale of the study and provides definitions of terms and concepts used in the report.

Chapter two: The commercial office market. This provides the conceptual and theoretical framework to the study. Particular attention is paid to the nature of the commercial office property market, the factors affecting the supply and demand of this type of property.

Chapter three: Methodology. This concentrates on the methods used for data collection and limitations faced in the use of each method.

Chapter four: History of Harare and the analysis of findings. This deals with data analysis and the findings of the research. Particular attention is paid to the nature of the commercial office property market and the factors affecting the supply and demand patterns of this type of property.

Chapter five: Observations. The chapter summarises the major observations of the research project focusing on the main aims of the research.

Chapter six: Conclusions and Recommendations. The conclusion summarises the main points raised in the research project. The recommendation focuses on how intervention in the office property market should be carried out in order to redress the office space problem. Economic, institutional and political policies are proposed as recommended solutions to the identified negative factors that affect office space supply and demand within the study area.

CHAPTER TWO

THE OFFICE PROPERTY MARKET

2.1. INTRODUCTION

The silhouette of office blocks is the visible sign of a city's growth and progress. The investment in office property has grown as a direct result of financial institutions recognising office property as a home for their capital (IPPSA, Property Development, Vol.2, p 224). This chapter will offer a theoretical perspective of the nature of commercial office property and the factors, which determine the supply and demand of commercial office space. In section one the theory of office spatial location and investment is investigated, in section two the office market is analysed, in section three the theory of office space supply, demand, price determination and an analysis of the property cycle in relation to the business cycle is presented. Finally the summary and implications for the fieldwork concludes the Chapter.

SECTION ONE: OFFICE LOCATION AND INVESTMENT

2.2. THE OFFICE FUNCTION

The function of offices can be described as personal services, administration and the management of economic systems. As stated in Chapter One offices may be defined on the basis of the function performed in them, on the basis of the space or the type of premises or building occupied or on the basis of the occupational sector accommodated in them. The value of a definition of office premises is that it enables a developer of office accommodation to define his/her target market, for example he/she should know for whom he/she is developing the office building (IPPSA, Property Development, Vol.2, 1996, p225). Supply and demand analysis for real estate requires an understanding of the real estate product. Knowledge of the product in this case office property is essential also for the understanding of the factors that affect its demand and supply (Fanning, Grisson , Pearson , 1994, p100).

2.2.1 The office function and the CBD

With the development of the urban economy, the need to control, finance and manage business activities grew so that the office function became established as a separate entity within the city. New buildings were built to house office related activities and more and more of the labour force worked in offices. The office function has become the predominant activity in the central business district of the modern city (Speirs, 1975, p3). With the growth of cities and the expansion of commercial activities, the demand for office space in areas of concentrated activity has increased, and land for such areas has become increasingly scarce. This demand for central locations, with the resultant higher land costs, together with technical advances in construction methods, has led to the general construction of multi-storey office blocks in the CBDs of larger cities. Most of the larger developments also contain a certain amount of retail space, usually at the ground floor (IPPSA, Property Development, Vol.2, 1996, p225)

There is a strong positive relationship between the population size and the amount of office space per region or metropolitan. In France the highest concentration of office workers is found around Paris. In the USA the nine major urban areas house 22% of the population, offer 27% of the tertiary employment and have 39% of company head offices. The same trend is found in South Africa, where office workers are concentrated in the Gauteng area, the Cape Peninsula area, Port Elizabeth, the Durban area and Bloemfontein (IPPSA, Property Development, Vol.2, and p228). In Zimbabwe the highest concentration of office workers is found around Harare (CBRichard Ellis research report, 1997, p3)

The CBD may justifiably be regarded as the most important area for the establishment of offices. In Britain the CBD occupancy figure by office activities for the five most important urban complexes is not lower than 40%. More than 80% of total office population in Australia work in the Sydney and Melbourne CBDs. In the USA it is about 66% of the 20 largest cities (IPPSA, Property Development, p228)
One of the most important determinants of a central office location is the type of market served. There is a clear distinction, for example, between the location preferences of head, regional and local office. Local offices serve only a limited area and are spread throughout the city to a greater extent than regional offices. Head offices, on the other

hand, serve the national and international markets and are typically found in the central CBD. The external economy and advantages of concentration increase so rapidly that only the highest orders of urban centres are able to support the supplementary services, specialised labour and inter-firm communication demanded by national marketing functions (IPPSA, Property Development, Vol.2, 1996, p228).

The advantages of a central area location are; public transport, major banking and brokerage houses, lawyers, doctors, a full range of eating and shopping facilities and a proven labour market. Because of the intensity of office development, the central area offers unique advantages for communication and contact especially face to face contact between different office types, between clients and offices, and between executives and managers of different firms and so on (Speirs, 1975, p10). However there are disadvantages associated with CBD location like traffic congestion, inadequate parking and high rents.

2.2.2 The office function and decentralisation

Decentralisation in this case is meant decentralisation from the city's core to other areas within the metropolitan region. Office activities outside the CBD of a city are found mainly in the following areas; office parks, office cores in suburban areas, accessible areas next to ribbon developments, offices as part of retail centres. Firms may consider decentralisation for one or more of the following reasons; expansion of the firm, high rents in the CBD. According to McKeever (1970) some of the advantages of a decentralised location are; spacious surroundings, landscaping, ample on-site parking, lower rent and free flowing traffic movement. According to the same author major offices show a marked resistance to decentralise regardless of the city size, while the more service orientated offices for example medical and dental, show a greater tendency to decentralise with an increase in city size. While for some firms the advantages of a decentralised location outweigh those of a central area location, for many the external economies of the central area are far more important. Of these the most important seems to be the opportunities for contact, which are offered (Speirs, 1975, p9)

Thus in a study of communication patterns between offices, Goddard (1971) found that of the firms he studied, the bulk of decentralisation has been concerned with firms with very routine functions and virtually no external communications. The decentralised locations have their own disadvantages for example limited public transportation, few eating places and shopping facilities and an unknown labour supply.

2.3 OFFICE PROPERTY AS AN INVESTMENT

According to (Gitman and Joehnk 1984), investment is a vehicle into which funds can be placed with the expectation that they will be preserved or increased in value and or generate positive returns. It has also been described as the sacrifice of something now for the prospect of later benefits (Greer and Farrell 1984). It is therefore a calculated risk, the higher the risk the greater the return. Office property is a form of investment, which competes for the allocation of institutional funds with other forms of property investments like retail, industrial, agricultural properties and other forms of investment like stocks, company shares, and bank saving accounts.

The generation of returns and benefits in property investment can arise in three ways according to Buam (1991, p2). These are:

- Generating a flow of income.
- Generating a return on capital whether it is less than, equal to or more than the initial sacrifice, upon the sale of the investment.
- Producing a psychic income, a positive feeling induced by ownership of an investment, which may be incapable of financial quantification.

The appeal of office property lies in its ability to enhance portfolio returns or to reduce portfolio risk. The ability of office property to enhance portfolio returns is dependent on its reaction to demand and supply factors as will be revealed in this chapter.

2.4. INSTITUTIONAL INVOLVEMENT IN OFFICE INVESTMENT.

The office investment market is very largely patronised by insurance companies; superannuating funds, property unity trusts and numerous unity linked insurance funds which are generally regarded as "the institutions" (Marber, 1985, p121). Since the

Second World War a financial structure has emerged in the UK and other European countries that is vitally dependent on the investment value of land and property (Ambrose and Colenut, 1975). Initially the involvement of financial institutions in the property market was exclusively via the provision of long term finance to property development companies on a secured loan basis. For their part, the property companies retained the completed developments as investments or they could sell them on completion to realise immediate development profits.

With time the financial institutions realised that profits were being made on the back of their money by the property companies and began to demand a share of it through equity sharing arrangements, forming joint companies with property development companies or simply undertaking the developments themselves. Currently, most of the direct ownership and development of property is the province of financial institutions because of the large volume of their investments. Table 2.1 below is an indicator of the way institutional property holders split their investments in percentage terms between the portfolios monitored by Richard Ellis, Jones Lang Wootton and Michael Laurie produced by the Economic Intelligence Unit in London.

TABLE 2.1: Percentage investment between each property sub-market in London

Property Type	Jones Lang	Richard Ellis	Michael Laurie
Shops	30	24.2	27
Offices	46	48.8	55
Industrial	17.6	26.9	18
Agricultural	5.6	N/A	N/A

Source: Darlow, 1986

It is clear from the figures that office development has been the major recipient of institutional investment in property. The same trend has been followed in countries like the United States and South Africa up to the present moment (IPPSA, Porperty development, Vol.1,1996). Over 50% of total property holdings are invested in offices, with the balance in shop and modern industrial units (Balchin and Kieve, 1995, p95). Sweeney (1983) made a case for an increased role for property in institutional portfolio investments. She argued that in order to achieve maximum resilience of the institutional portfolio to market risk, at least 20 percent by value of the portfolio had to be invested in office property. Hargitay (1986) proposed that given the historical and long term

prospects for rental growth in office property, it would be prudent for holders of property portfolios to have 40 to 45 percent of their investment value in the office property sector.

2.5. REASONS FOR INVESTING IN OFFICE PROPERTY

The rationale for investing in office property is as follows:

a) Property is an effective hedge against inflation. Rental growth in property and offices in particular has in some cases outstripped inflation. Property therefore represents the safest investment capable of yielding an acceptable rate of return and maintaining its value in the face of inflation. Brackspear (1992,p12) succinctly stated that "there is security in brick and mortar".

Darlow (1983) has however warned that the correlation between inflation and rental growth should not be carried too far. Inflation raises the cost of constructing property with the result that a developer has to achieve a higher rent to obtain an adequate return for any given development cost. But rents are determined by supply and demand factors and not by the cost of supplying the product.

If the demand for office space were not there the construction costs would have little relevance to the rent the building would command. Rental growth occasioned by rent reviews and the additional capacity of the tenant to pay rent, where demand exists, are the crucial factors in guaranteeing sufficient returns from property in inflationary conditions. Demand has to be sufficiently high to achieve rental growths that outstrip inflation for this advantage to be realised.

b) The popularity of office accommodation as a form of investment has also been occasioned by the unprecedented increase in the size of the service sector. According to the Census of Employment in the United Kingdom for example 53 percent of the workforce was employed in the manufacturing and primary industries in 1961 and 43 percent in the service sector. By 1981,38 percent was employed in manufacturing and primary industries and 62 percent in the service sector. Office jobs as a percentage of total workforce increased from 24 percentage to 38 percentage between 1960 and 1990 in the United Kingdom due mainly to technological improvements. The service sector

increased the demand for office floorspace and consequently increased the role of office employment as a proportion of total urban employment.

c) During the past two decades there has been an increase in the amount of office floorspace per worker. A survey commissioned by London Corporation found that office floorspace per worker increased by 41 percent between 1961 and 1981 (Cadman and Austin-Crowe, 1978, p30).

The combination of the foregoing factors has resulted in increased demand for office floorspace in areas where the level and nature of the economy requires ready supply of such space. Examples of such areas are Sandton City in Johannesburg, Central Harare in Zimbabwe and The Hill in Nairobi, Kenya. Financial institutions have been quick to realise the advantages that are offered by investment in property and office property in particular has come to represent one of the most suitable vehicles for maximising investment security and profitability (Morley and Martinos, 1989, p29).

SECTION TWO: THEORY OF THE OFFICE MARKET

2.6. OFFICE PROPERTY MARKET

The interacting of market participants representing the forces of supply and demand forms real estate markets. Each property has a set of physical, locational, legal and design attributes known as its 'productivity attributes' that make it suitable for different uses. Sellers auction these attributes to the highest bidders and they represent the supply side. On the other hand the buyers, who bid for the attributes that the properties offer, represent the demand side.

A working definition of a real estate market may be stated as follows: A real estate market is a group of individuals and firms that are in contact with one another for the purpose of conducting real estate transactions. Transaction participants may be buyers, sellers, renters, lessors, lessees, mortgagors, mortgagees, developers, builders, managers, owners, inventors, or brokers. It is unnecessary for each transaction participant to be in contact with every other participant; a person or firm is part of the market if that person or firm is in contact with another group of market participants (Fanning, Grisson and Pearson, 1994, p123).

Real estate markets vary enormously in size and in the arrangements and procedures that govern their operation. Major office and retail buildings have long been part of a national market which is increasingly becoming an international market. Thus the office property market can be defined as simply the arrangement by which buyers and sellers of office property are brought together to determine a price at which a particular office property can be exchanged (Harvey, 1987, p20).

2.6.1 Interests in office property

Fundamentally the subject of office property transactions are not the land and buildings themselves but interests in rights over land which in aggregate are known as property. "Land is merely the medium in which property rights subsists" (Balchin and Kieve, 1986, p91).

Office property is durable and this enables more than one interest to exist, in particular ownership and right of use may be separated. The different interests in office property are freehold, leasehold, sectional title, sublease, licenses, joint ownership, deed of sale, life interest, usufruct and mortgages. Therefore in any given office building different persons, real or juristic may have different rights/interests. The ability to identify the level of supply and demand characterising a market depends on the understanding of the specified number of rights describing the legal estate in the property (Fanning, Grisson and Pearson, 1994, p42). Property rights may also be legally transferred.

2.6.2 Efficient market hypothesis

Traditionally pricing theory is based on the efficient market hypothesis, which assumed the existence of perfect market conditions. Briefly stated this hypothesis requires the following conditions:

a) Homogeneous or identical products.

b) Many buyers and many sellers; Both groups are:

i) indifferent as to whom they buy from or to whom they sell;

ii) influenced by price considerations only;

iii) do not give or receive favoured or preferential treatment.

c) Free entry and exit to the market and;

d) Rapid and easy communications exist so that all traders have complete information as to what is happening throughout the market.

e) Factors of production are assumed to be perfectly mobile.

f) Goods sold are assumed to be standardised, durable, divisible easily and cheaply transportable.

g) Price is uniform. (Leeds, 1982, p61)

On this basis the price of the good will accurately reflect the value placed on the good by the participants in the market.

In the short term the prime commercial real estate market does not fulfil the conditions of the efficient market in that:

a) Real estate is not homogeneous, but heterogeneous, each parcel of land is unique in its location and physical characteristics.

b) In real estate there are only a few buyers and sellers competing at one time, in one price range and at one location for any type of property.

c) The high value of real estate requires strong purchasing power, generally supported by equity. Real estate markets are highly sensitive to changes in wage levels, the stability of income and the employment rate. Construction costs, housing costs, and rent levels are all affected by the ability of market participants to pay.
There are price setters (oligopolistic market) in real estate markets and as a result there are usually a limited number of market participants. There are a few participants on the supply side for example the seller, developer and subdivider and a few participants on the demand side for example the buyer, investor and speculator (Fanning , Grisson and Pearson, 1994, p101)

d) Knowledge tends to be obtained infrequently and is limited geographically.

e) Spatial constraints that limit the number of real estate suppliers help determine the marketing and pricing of property.

f) Office property is durable however it is not standardised and the ability to subdivide it is very much dependant on the property concerned. The costs involved in subdivision are quite high and the time it takes to achieve subdivision is relatively long.

g) The price is not uniform since all real estate properties are different. (Mac Mahan, 1976, p121).

2.6.3 Real estate sub-markets

The real estate market is not a homogeneous market. Since real estate has a fixed location, real estate markets have tended to be highly local in nature. Moreover sub-markets are generally organised around the type of real estate to be sold and the characteristics of the purchaser. (Mac Mahan, 1976, p119). The five major real estate sub-markets are as shown in Figure 2.1.

The following model is a graphical representation of the real estate market broken into the various sub-markets:

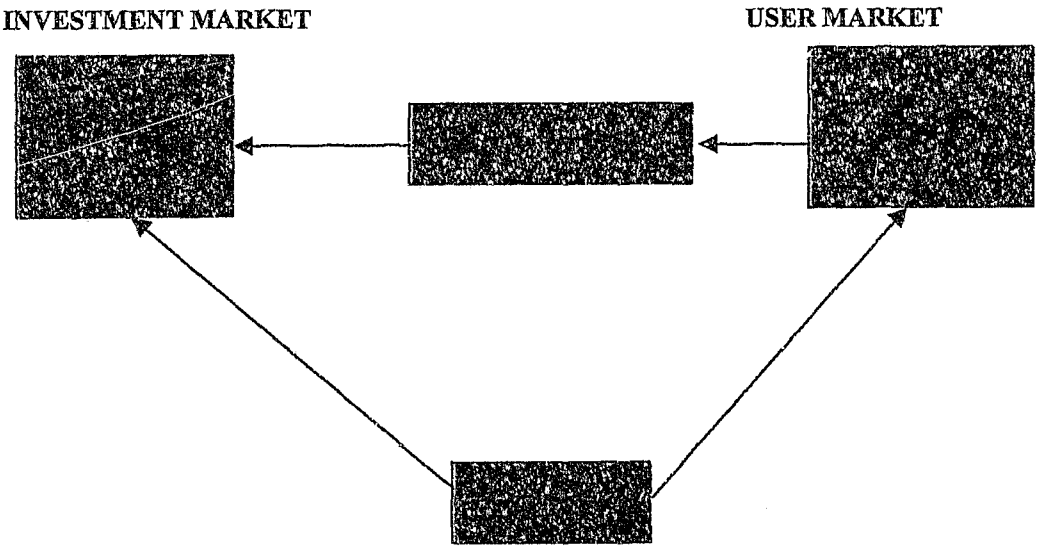


Figure: 2.1 (Mac Mahan, 1996, p120)

Both the buyers and sellers within the property market can be divided into two categories. Firstly, there are the occupiers (users) who demand office property as a producer good. They are on the demand side of the office property market. Property is wanted for the satisfaction it directly yields as a consumer good. Thus its demand is derived from the contribution offices make to production, and thus depend upon its marginal revenue of productivity (Harvey, 1991). The need for office space does not originate with an office building and its environment but stems from the advantages this working environment provides. The office space user has two needs, namely:

- Physical and economic needs including price, location, services and parking
- Social and psychological needs which means the need for acceptance, security, recognition, prestige and achievement (IPPSA, Marketing of industrial and commercial property, Part 1, 1996, p5)

It should be noted that occupiers are in both the private and public sectors. For example in the CBD of Harare, Fox & Carney (Pvt) Ltd occupies New Africa House a government building while the Ministry of Higher Education occupies part of the Old Mutual Centre a building owned by old mutual.

Secondly there are investors such as pension funds, insurance companies, property unity trusts, building societies and public property companies who regard office property primarily as an alternative to other types of investment assets such as stocks, bonds and public company shares as discussed in section 2.4 above. They represent the supply side of the office property market. Investors are concerned with the flow of income over an extended period of time. Policies of investment companies differ; some seek a balanced portfolio of uses rather than specialise in one particular use (Cadman and Austin-Crowe, 1981, p12)

However it is difficult to completely separate investment demand from occupation demand. Not only is investment possible because some occupiers prefer to rent rather than buy their premises, but the amount of rent paid will affect the capital value of the interest. In recent years there has been a drift back to the owner occupation of office and industrial buildings rather than renting from investors. (Morley, Marsh and Martinos, 1989, p50)

SECTION THREE: SUPPLY, DEMAND AND PRICE DETERMINATION OF OFFICE SPACE

2.7 SUPPLY AND DEMAND OF OFFICE PROPERTY

Real estate is space to be used for an economic activity over time. The economic activity established on a parcel of land interacts with other economic activities. Real estate is a space-time product, which must be considered within locational and temporal contexts. This understanding shades light on two important aspects of supply and demand analysis of office space (Fanning, Grisson and Pearson, 1994, p75)

a) Even if office property is perceived to be heterogeneous and unique, different sites can be compared or substituted for one another to some degree, for example a site with certain physical attributes may be a viable alternative to a site with different attributes.

b) Although office property is physically fixed, it is economically flexible. Despite the fact that a parcel of real estate is immobile, its location is an economic variable that can change over time.

The price of a commodity, service or product is created by the interaction of supply and demand. The two economic forces establish the price or rent of office property.

2.7.1 Office property demand

Demand is the quantity of good, which an individual is prepared to buy at a particular price. Demand in economics means "effective demand", that a person has the money to pay for something. This can be distinguished from "desire", "need" or "want" (Leeds, 1982, p35). In value theory it refers to the ability of people who desire a good or commodity to act upon their desire (Fanning, Grisson and Pearson, 1994, p137)

A practical, working definition of real estate demand that: in a given market area, it is the quantity of a particular type of real estate product or service that will be purchased

or leased. Demand is determined by the price of (or rent for) the real estate as shaped by several factors. These factors include the number of prospective purchasers and their incomes (economic forces), the price of related real estate goods and services (economic forces), the appeal of the real estate to the tastes and preferences of consumers (social and psychological forces), the role of the government in determining or influencing the availability of the product (legal and regulatory forces) and the expected rate of change in price (economic forces) (Fanning, Grissom and Pearson, 1994, p137).

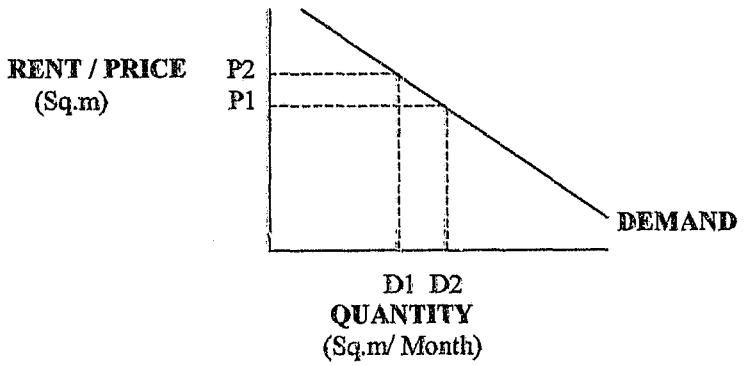
In an analysis of office market demand, the factors described above are the major variables to be investigated by the analyst. Office demand is derived from the demand for the product or service that the office space provides. To estimate the demand for office space, an estimate is made of the demand for services provided by businesses housed in offices. The demand of these businesses for employees who will use the office space must also be estimated. In general, the demand for real estate must be estimated from the number of businesses, employees, and residents that use, or are housed in the real estate facilities in the area. An individual parcel of real estate is fixed in location and has certain attributes that generate demand (Fanning, Grissom and Pearson, 1994, P137). In the short run, the ratio between the general population and the number of people employed in offices remains relatively constant.

Real estate market segmentation means dividing market demand into meaningful buyer groups based on the property's attributes. Identifying different buyer groups attracted to the physical location, legal/political, and design/amenity attributes of the real estate. Office property can be single tenant/multi-tenant, low, mid, high rise, class A.B.C, and prestige/image, CBD, suburban node, free standing. Occupancy rates serve as indicators of an increase or decrease in demand of office space. However building permits issued by the city council over a certain period of time can also be used to infer demand for all types of real estate.

2.7.2 The law of demand

Generally the lower the price or rental of a good or property space, the greater is the demand for it; hence there is usually an inverse relationship between demand and price or rental (Leeds,1985, p35). Figure 2.2 below illustrates a *change in quantity demanded* which refers to movement along a demand curve as rent or price changes (Kau and Sirmans, 1985, p223). Demand curves for typical normal goods are downward sloping (i.e. fall from left to right). Higher rents or prices result in smaller quantities being demanded, while, other things being equal, larger quantities are desired at lower rents or prices. Fundamental to this inverse relationship is the concept of opportunity cost. The higher rentals means that to buy the same amount of space, less of something else must be consumed assuming that the tenants have specific, limited incomes to spend, "budget constraint". Tenants attempt to substitute other relatively cheaper goods for the now more expensive office space to maximise their utility.

Figure 2.2: The demand curve



An increase in price or rental from P1 to P2 results in a decrease in the total amount of office space demanded from D2 to D1.Whilst a decrease in price from P2 to P1 results in an increase in the total amount of office space demanded as illustrated in Figure 2.2 above.

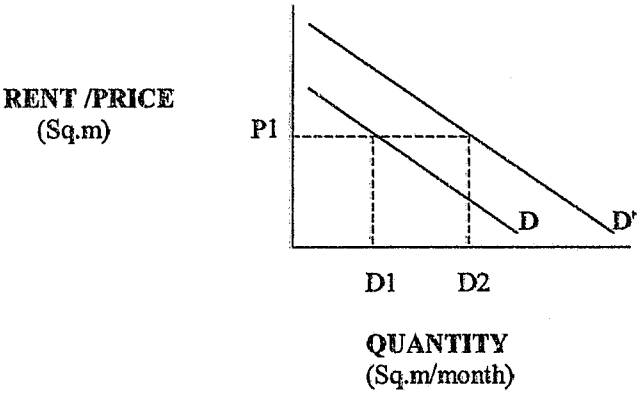
The elasticity of demand is an important concept in the study of office space demand. It is a measure of the change in the quantity of office space demanded relative to change in rent or price. The total revenue on any type of real estate would increase if rents

increase. Knowledge of the elasticities of demand enables the landlord (investor) to know what would happen to total revenue (income) if the rent were raised or lowered. The demand for office property is relatively elastic especially when the office space is divided into classes for example class A,B,C (Kau and Sirmans, 1985 ,P226)

2.7.3. Factors affecting office demand

The above analysis of demand has looked at demand for office property as a function of its own rent, ignoring other factors which also affect demand. There are four major forces that influence demand and these are the social, economic, political, and physical forces. These factors cause a *change in demand,* which means that at every rental, or price a different quantity is desired than before. Figure 2.3 illustrates a shift in demand.

Figure 2.3: A shift in demand



A shift in demand for office space from D to D' (i.e. caused by an increase in service sector employment) results in an increase in the total amount of office space demanded from D1 to D2 at the same price of P1. A decrease in service sector employment will result in a decrease in the total amount of office space demanded from D2 to D1.

2.7.3.1 Social

- Demographic factors (Population & Migration)

The increase in population is a function of the existing size and growth rate of the population. National population growth rates are a function of births versus deaths and

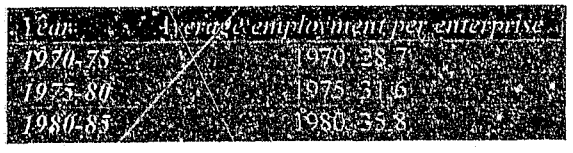
immigration versus emigration. Local population growth rates are a function of the same factors, as well as migration patterns within the country or area. Migration patterns include regional migration, urbanisation, urban-suburban relocation and industrial growth patterns (IPPSA, Property Development, Vol. 1, p 201).

Changes in population obviously have a direct bearing on the demand for office property. Increase in population mean more houses, more jobs, more schools, more services and more recreational facilities needed (REIZ, Property Valuation Part 1, 1992, p33). The need for more services increases the demand for office space. Dr Hungwe (1988) in his research thesis entitled " Office development and the conservation of the townscape": The case of Reading (U.K) noted that decentralisation of campanies from London to Reading and relocation of companies from the United States to Reading increased the demand of office space within city of Reading. However it should be remembered that sudden changes in the demography of the country do not cause immediate changes in demand. The demand for office space is not a direct function of the urban population. It is related more to the economic basis of the city, which relies mainly on administrative and management functions connected to strong financial sector (IPPSA, Property Economics, Vol.2, 1996)

❖ Professional Expertise

During periods of high economic growth, most office enterprises experience an increase in the number of office workers. Table 2.2 below shows how the average office workers per enterprise increased in Pretoria between 1970 and 1985.

Table 2.2: Total Employment 1970-1985



Year	Average employment per enterprise
1970-75	1970: 25.7
1975-80	1975: 31.6
1980-85	1980: 35.8

Source: Prinsloo, 1983

However in recessionary times office space remains fairly constant. Mergers between large organisations lead to large-scale retrenchments and dismissals. This has a negative influence on the amount of office space occupied.

❖ Employment (Size of tertiary sector)

It goes without saying that office space requirements vary with the number of people employed in office related activities. An increase in manpower needing office space results in an increase in office space demand. In America, the 1950s and 1960s witnessed what has been called the "white collar revolution". The employment structure shifted from an industrial and agricultural economy to an office related economy. Increased office manpower requirements and increased demands for floor space per employee (largely the result of an introduction of new technology in business machines) increased demand for office space (Ibid, 1986, p8)

2.7.3.2 Economic

❖ **International**

Changes in the international economic environment could lead to changes in the office property market, a positive growth in the economies of major economic zones for example the United States of America, Western Europe and the Far East will have a spin off throughout the world. With an upswing in international economies, there will be an increase in the demand for office-related survices and thus an increase in the demand for office space. The reverse could be said of a depression in the major economies. These economic changes affect developing countries for example Zambia, more than the developed countries such the United Kingdom. An example of this is what happened to the world economies and the economies of developing nations in the 1970's when OPEC increased the price of oil. (REIZ, Property Valuation, Vol.1, 1992, p 32).

❖ **National**

Many of the factors affecting the demand of office property at the national level are as a result of Government policies. These are as follows:

Income

A change in the disposable income of consumers of services has an effect on the demand of office space. From our definition of office property demand, two important

2.7.3.3 Political (Regulatory)

❖ Rent Control

Office tenants are interested in comparing the rental they pay in relation to and the efficiency of their operations at a particular location. To attract a tenant to a particular building the best strategy will be increase the tenant's efficiency and reduce his operating costs through the proposed tenancy. The rent paid is part of the operating costs so a lower rental could increase the demand for office property. Governmental policies like the Rent Control Act have a positive effect on the demand for commercial office property (IPPSA, Marketing of Industrial and commercial property, 1996, Vol.1, p7). It offers protection to a buyer or lessee of commercial office property and this security to the tenant increases the demand for the property.

2.7.3.4 Physical

❖ Accessibility & Communication

The demand of office space depends on the location of the office space and a number of criteria need to be assessed before selecting suitable office location. For example the proximity to clients, markets, staff and to shopping facilities. However the importance of each depends on the type and scale of operation of the business (Marber, 1985, p85). Whilst it is a point worth debating, many would agree that a bad building in a triple A location would be easier to let than a triple A building in a tertiary location. This could well point to locational factors being the single most important aspect of property decision

❖ Availability of Parking

Parking is not only critical for personnel and clients, but it is necessary for the delivery vehicles. Specific areas located within the Central Business Districts of major cities like Johannesburg with a critical shortage of parking space experience a very low demand for office space. Its is not only the availability of office space that is important, security of the parking area is also important.

❖ External & Internal Appearance of Building

The aesthetic image of the building determines the potential tenant's first impression. The landscaping of the area around the building drastically influences this image. If

poor, the external appearance of a building could deter lessees. A good external appearance on the other hand could add to the prestige value of the building, whilst the appearance of the lobby, lifts, corridors and office interiors could add to or detract from the desirability of the building. (IPPSA, Marketing of industrial and commercial Property, 1996, Part 1, p7).

❖ Efficiency of Building

This is when a property is developed within the town planning constraints, but may be inefficient due to over development or under development; for example the development is far much less than the bulk factor allowed for by the local authority or the development suffers from incorrect layout planning, the building being positioned in one corner of the stand. Thus the tenant is not able to achieve the highest and best use of the property.

It should be noted that there is a strong relationship between demand and urban growth in that the rate of growth in the economic base determines the increase in demand for real estate and the rate at which land is absorbed for use and that the direction of growth determines where demand for real estate and land use will accelerate and where land will be absorbed.

2.7.4 Office property supply

Supply is the amount of goods and services on offer for sale in a market at a given price. It does not mean the available potential resources of a region for example underground coal (Leeds, 1982, p43). Competitive supply is the other side of the demand –supply equation. In office property the quantity of supply is in turn a function of the prices being paid for properties and the cost of the building.

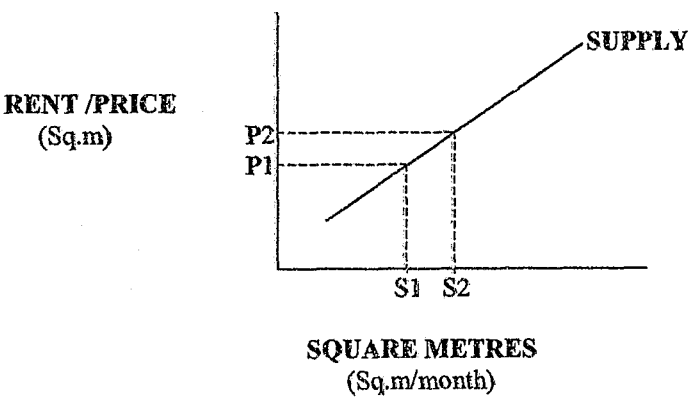
The supply of office space consists of two broad categories namely the *available space* and the *total office space*. The available space consists of that which is available immediately for leasing in newly completed or existing buildings not leased. The total supply includes all of the above and also that which is under construction at a particular time (IPPSA, Property Economics, Vol.2, p215).

Supply of office space reflects the definite or expected demand for office space as signified by the annual take-up rate and the expected growth in the market. It is however very cyclical and the cycles reflect the economic business curve at a particular time. A time lag always occurs in the supply process, with the result that the supply of office space is usually out of step with the demand at any given time. The vacancy rates serve as indicators of oversupply or undersupply of office space.

2.7.5 The law of supply

Generally more of a good and service is supplied at a higher than at a lower price or rental, hence there is a direct relationship between supply and the price or rental (Leeds, 1982, p35). Figure 2.4 below illustrates a *change in the quantity supplied,* which refers to movement along a supply curve as rent, or price is changed.

Figure 2.4: The supply curve.



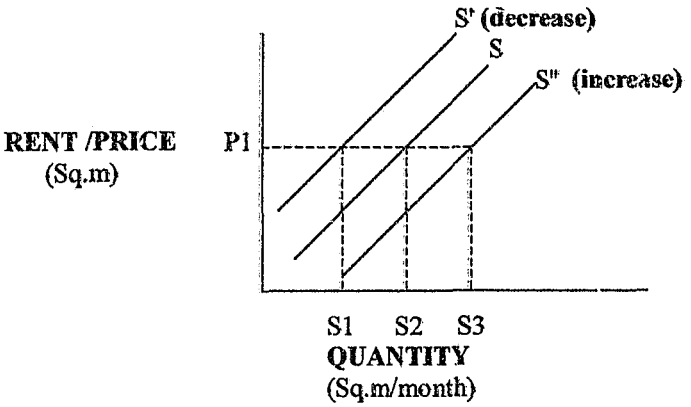
Supply curves typically slope upward from left to right as shown above. The upward slope of the curve is the result of diminishing returns. The quantity the sellers are willing to produce depends on the cost of production. As quantity supplied increases, producers face rising costs for each additional unit of production, given their fixed resources. At higher rents, producers of office space are willing to increase the quantity available, since rising costs are covered. For the profit maximising producers, every supply curve is a cost curve. An increase in rent or price from P1 to P2 results in an increase in supply from S1 to S2 from Figure 2.4 above. (Kau and Sirmans, 1985, p229).

The elasticity of supply is also an important concept because it tells us the responsiveness of the quantity supplied of office space to changes in the rent or price. It measures the percentage change in quantity supplied of office space relative to changes in rent or price. In the office property market, supply is determined by the time period, since the ability to bring new office properties into the market depends in great part on the period for acquiring new resources. In the short run therefore the supply for office space is inelastic and it is relatively elastic in the long run. In the long run the rising rents due to shortage of office space lead to increases in supply (Kau and Sirmans, 1985, p231)

2.7.6 Factors affecting supply.

In addition to the importance of the rent or price for the provision of new office space as illustrated above, there are a number of other factors determining the eventual provision of additional office floor space. These factors cause a shift in the supply curve, which means that at every rent or price a different quantity is supplied as shown in Figure 2.5 below. What follows is a discussion of these factors:

Figure 2.5: A shift in supply.



A shift in supply from S to S'' results in an increase in the total amount of office space supplied from S2 to S3. Whilst on the other hand a shift in supply from S to S' results in a decrease in the total amount of office space supplied from S2 to S1.

2.7.6.1 Availability of finance

The financing of office space projects is seen as a high risk because the demand can vary sharply. The construction of an office block depends on the availability of a site (land), capital, labour and raw materials. The first two are the most important (IPPSA, Property Economics, Vol.2, 1996, p219). The unavailability of finance means no properties can be developed. Soundly conceived office developments projects- either new or existing buildings are usually attractive collateral for institutional real estate mortgage lenders and to equity investors. As with all types of real estate, the availability of funds for office development is influenced by general monetary conditions. Macro-economic factors through their effect on finance, therefore, indirectly affect the supply of office space. Tight money can have the effect of delaying plans for new construction, particularly for smaller office buildings. The impact on multi-storey office buildings may not be as severe, since financing of these buildings is usually based on long term commitments whose terms remain the same regardless of charges in the money market (Beaton and Robertson. etal, 1985, p5)

2.7.6.2 Inflation

Inflation does not affect new projects in the same way as existing buildings. High inflation leads to increases in building costs, which in turn leads to larger loans and increased interest costs. During periods when market rentals escalate faster than building costs, developers are inclined to start new developments, and vice versa (IPPSA,Property Finance, Volume 2, 1996, p51).

2.7.6.3 Availability and cost of land

Land is a very important factor in the production of office space. This is reflected in the popular adage; "all a man needs to own a skyscraper is the money (finance) and the land. And he may be able to get along without money" (Fortune, 1930 quoted in Buttler , etal, 1985, p5). Land is fixed in supply, therefore, it is always a scarce commodity. In central areas of most cities like London and New York, there is a high demand for land resulting in landowners not willing to part with their land. It is sometimes retained in

advance of actual need or for speculative purposes in anticipation of profits to be gained when future trends (land prices) improve. Such a situation may ultimately affect the development of office space.

2.7.6.4 Vacancy factor

The vacancy factor for office space indicates the amount of space not occupied and thus the state of oversupply or under supply of space within an area. It can fluctuate a great deal in a particular area. A vacancy factor of approximately 5% is regarded as ideal, because it provides for firms that wish to relocate and those that want to expand, and also for the establishment of new enterprises. Unfortunately, some of this vacant space is located in older, less attractive office blocks, which does not give the market the necessary flexibility (IPPSA, Property Economics, Vol.2, 1996, p219).

2.7.6.5 Role of the developer

The developer can also often influence the supply for office space. In his feasibility study, the developer must make certain long-term assumptions regarding the future of the office market. This process is very important because it determines the amount of office space to be made available and the time at which this should be done, and also indicates the expected return at that stage. Compared to the development of a shopping centre, where the feasibility of the project is based on specific parameters, office development is far more uncertain.

2.7.6.6 Regulatory policies

Planning control measures built into the town planning schemes affect the supply of office space (Mallington, 1984). Zoning ordinances are passed to-: protect the locational integrity of individual parcels of land, assure sustained desirability for local areas, bring land developments in line with planned objectives, assume compatibility of use of land and to control densities (Downs, 1970. P109) These control measures came in the form of zoning restrictions in which buildings for certain uses for example office buildings are not permitted in particular areas and restrictions are placed on the

maximum height of buildings, floor area ratio or bulk factor, coverage and other building by-laws.

2.7.6.7 Building materials

The critical importance of building materials in the office development process cannot be overemphasised. They form the building fabric without whom no office building can be erected, a change in the cost of any major building material affect the total cost of construction of a project. The building materials that are more critical in commercial office development include cement and bricks. The cost of cement in a modern high rise office building represents only about 1.5% of the total cost of development, but a lack of cement will bring the entire project to a complete halt, which may result in phenomenal losses (Zimbabwe Institute of Quantity Surveyors, 1995). Material cost typically constitute 50% to 55% of the total building costs-a price increases of 20% in the price of bricks, for example, therefore leads to an increase in building costs of approximately 1% (IPPSA, Property Development Vol.1, 1996, p247). Losses may be due to both an increase in the construction costs and lost rentals as a result of the late completion of the office building due to the unavailability of materials and/or other causes.

2.7.6.8 Infrastructural services

Good infrastructure is a pre-requisite in commercial office development and hence has a bearing on the supply of office space. There is a need to provide water, electricity and sewerage connection points on a construction site well in advance of the construction process. Telephone and communication linkages are also essential particularly when the building is complete. The provision of site services by the responsible town planning council has an effect on the supply of office property within a specific area (REIZ, Valuation Part 1, 1992, p134).

2.7.6.9 Change in construction technology

Technological changes have an effect on the amount of office space available. New methods of construction reduce the cost of construction and the time taken to complete an office project (REIZ, Valuation Part 1, 1992, p34).

2.7.6.10 Others

These include other town planning and governmental controls on commercial office development for example the need for a planning permit invites possible delays in getting construction work started. Urban planning requirements for example " Townscape conservation", also impose conditions which may ultimately affect the viability of an office development project for example the need to preserve building facades of historical and architectural interests. Rent control especially intermittent rent freezes on commercial premises create uncertainty and a natural reluctance on the part of institutional developers to embark on the development of new office space. From the definition of office supply above in Section 2.7.5 more office space is supplied at a higher price or rental. The scale of demolition within a specific area also determines the amount of space available for construction activities. Government policies relating to other forms of investment have an effect on office investment due to substitution effects (Millington, 1984, p25).

2.7.7 Price or Rental determination

The analysis of office property supply and demand is complex because among other factors, office properties are heterogeneous. The commercial office market, by its nature, involves units of relatively high value, which reflect variation in buyers, sellers, local knowledge and unique locational factors. The complexity of the market is increased by the fact that it has no central agency or institution.

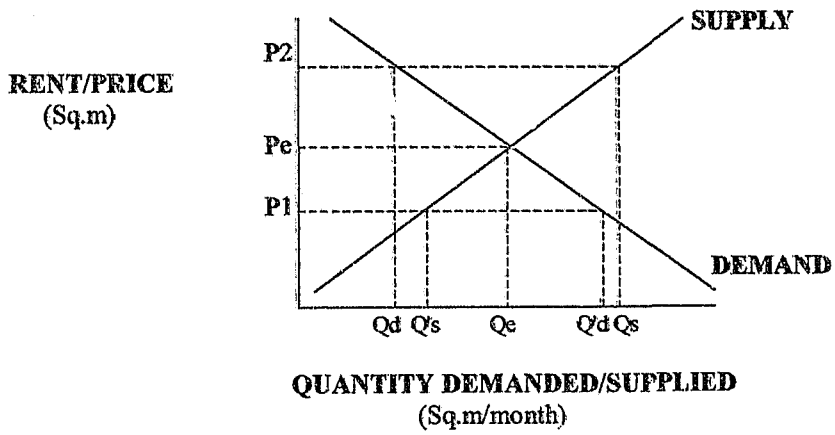
Assuming rational behaviour, any investor in the commercial office market, will be seeking to maximise returns in profitability or satisfaction from either owner-occupation or investment. The decision to rent or purchase will depend upon the current

level of rents, interest rates, the availability of credit, expectations about future trends and personal financial factors (Balchin and Kieve, 1985, p69). For instance, if anticipated rents are less than interest charges an office property owner might be induced to sell rather than rent, unless there is a prospect of capital gain in the future.

A potential lessee will decide to rent office space, when the expected utility of use of the office space is high. Similarly, the potential purchaser will bid a price determined by expectations regarding likely profits from ownership of that building (Ibid ,1986, p70). Therefore, the market price of commercial office space reflect economic assessments on the part of various buyers (demand side) and sellers (supply side) regarding anticipated net income, profitability and utility.

Prices within the office market will be determined by the various maximum and minimum prices determined by prospective buyers and sellers bidding against each other. Equilibrium prices may be reached at which the buyers take up the amount of office space offered for sale (Harvey, 1987, p32) as shown Figure 2.6 below.

Figure 2.6: Equilibrium and Market Rent/Price



The demand curve shows what quantity is desired at each rent, and the supply curve shows what quantity is provided. The two intersect at a point of equilibrium determining the equilibrium rent or price (Pe) and the equilibrium quantity (Qe). Figure 2.6 above shows how market rent or price is determined. At the rental or price P2 quantity Qd is demanded. Suppliers are willing to place quantity Qs on the market,

resulting in an excess supply equal to Qs- Qd. Each producer attempts to dispose of the excess supply by reducing the rent or price. As the producers lower rent or price, quantity supplied decreases and the quantity demanded increases. Eventually rent or price falls until the amount supplied just equals the amount demanded and this is known as the market rent or price.

Similarly, suppose rental or price is P1 as in figure 2.6 above. Consumers desire quantity Q'd at this rent or price but suppliers place only quantity Q's on the market. This time an excess demand occurs. Consumers desire an amount greater than the available supply and bid against each other for it. As rent or price rises, less is desired and more is supplied until the quantity demanded equals the quantity supplied (Kau and Sirmans, 1985, p233)

A characteristic of office market is that it lacks the flexibility to clear itself. At times property remains unsold because the maximum price asked by the owners is higher than the maximum price of bidders. That the office space remains unsold may bring about an adjustment in the owner's maximum price or buyer's maximum in a subsequent market period. Alternatively, the owner may keep to his price hoping that buyers well raise their maximum price in a subsequent market period. Any potential buyer/lessee of commercial office space is likely to view several properties before making a decision and making a sale. However, because of the imperfection of the office market, few persons are able to investigate all alternatives. Where a potential buyer lacks information he is more likely to pay a price, which may be higher than the market level generally. Similarly, the potential seller lacking information or making a forced sale will ask for a price, which may be lower than the market price (Opsit, 1985, p25)

2.7.8 Market dynamics

The existence of building cycles in the economic activity is generally recognised. Shifts in demand and supply over time explain the dynamics of national business cycles. Reverberations from the national business cycle are transmitted to the local economy through the linkages that tie the local economic base to the national economy. The reason for the importance of the business cycle is that the building industry is an

integral part of the overall economic structure (IPPSA, Property Development, 1996, p219). The latter's behaviour has important consequences for all of its elements, including the property industry. The economy tends to move through four predictable, recurring stages of business activity these are the boom, downward trend, recession, and upward trend.

The property industry also follows through the similar four stages as a leading indicator, thus it takes the lead in upturns and downturns of the national business cycle. The reason being that interest rates are responsive to the phases of the business cycle. What follows is a brief overview of the four stages of the property cycle.

1) Expansion: a period characterised by rising occupancy (offices in short supply) and absorption rates, all property prices rise, interest rates down and ultimately greater construction and development activity.
2) Slowdown, peak, and downturn: a period characterised by positive but declining absorption rates and a slackening in construction and development of property. Prices, which are already high, are rising and occupancy rates remain high. Once the peak of cycle is attained, absorption rates and construction activity begin to decline.
3) Contraction: a period characterised by declining occupancy and absorption rates, decreasing prices and ultimately a fall of in construction and development activity.
4) Slowed contraction, trough, and upturn: a period characterised by a bottoming out of the construction downturn and stabilisation of both absorption and occupancy rates and interest rates. Once the trough, or low point, is reached, the real estate industry begins a moderate upturn, which sets the stage for the next expansion (Fanning , Grissom and Pearson, 1994, p183)

Long term real estate cycles or secular real estate cycles are primariiy a function of nation wide changes in population and income. If the birth rate and real income are rising nationally demand for real estate will grow .A growing population with higher income needs places to live, work, play and demands more services thus more office space is required. Whilst on the other hand the primary determinants of the short-term real estate cycle are the availability of credit and the level of interest rates (Fanning, Grissom and Pearson, 1994, p184). Purchasing of real estate generally requires a

considerable amount of equity financing as stated in section 2.7.6.1 and fluctuations in interest rates affect the demand for property.

As short-term shift in demand and supply gives rise to the successive phases of a cycle, time lags will occur as the markets attempt to adjust. Real estate markets do not transmit information instantaneously. The two common mistakes that are made in the property market when the occurrence of cycles are not recognised, are the following:

- Investment in new construction and capital equipment is only done very late in the economic revival phase, when construction projects have become very expensive, interest rates have risen and delays in delivery times frequently occur (IPPSA, Property Development, 1996, p215)

- Non –optimal financing strategies are often followed. In the early stage of revival phase, for example, interest rates are low and financing easily obtainable. Instead of balancing their leverage ratio and ensuring sufficient long-term funds, many enterprises make excessive use of bank credit, which, during later stages of the economic revival, becomes very expensive and difficult to obtain serious liquidity problems are then often experienced, when the upper curve of an economic cycle is approached (IPPSA, Property Development, 1996, p215)

2.8 SUMMARY AND IMPLICATIONS FOR THE FIELDWORK

This chapter has revealed that office structures in some of the major cities of the world for example New York and London are located within the most accessible part of the city, which in most cases is the CBD. It was however noted that in some cities there is a growing tendency of the office functions moving out of the CBD. It has been indicated that investment in office property is increasing as it is perceived to be a hedge against inflation and that most investment in office property is done by institutions. It has been stated that like in any other market the price or rental of office space is determined by the factors of supply and demand.

The major factors affecting the demand of office space that were identified are: demographic factors, professional expertise, size of the tertiary sector, changes in the international economy, changes in income, high inflation rates, availability and cost of

finance, availability of complementary activities, rent control, accessibility and communication, availability of parking, external and internal appearance of building and the efficiency of the building. The major factors affecting supply identified were: availability of finance, inflation, availability and cost of land, vacancy factor, role of the developer, regulatory policies, building materials, infrastructural services and change in construction technology. However due to the spatial fixate of the land on which the buildings are constructed the factors change over time and geographical location.

The design and analysis of the questionnaire, formal and informal interviews that follows in the next four chapters does not only focus on testing the similarities and differences of the factors identified in the literature to those factors affecting supply and demand in central Harare, it also looks at the extent to which each factor affects the demand or supply of office space as well as the issue of how the imbalances in supply and demand created by these factors can be minimised within the study area.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

The methodology section below is a description of the procedures, which have been implemented to facilitate the collection and measurement of meaningful and usable data. Lombard (1981, p31) writing on the management research states that the objectives of methodology is to;

"...ensure that the research procedure creates a conducive learning situation for the student to work to do further research".

Clearly the manner in which the methodology of a study is designed depends on a number of factors: for example the subject matter to be covered, the data to be produced, and the manipulations to be performed on the data. As McGrath (1964, p534) states:

"Hence methods are not totally interchangeable, and the choice of methodology in any given case should be made on the basis of the possibilities and limitations of that methodology vis-à-vis the research problem it is to be applied".

3.2 DATA COLLECTED

The research has definite focus on the CBD of Harare as the study area (see Figure 1.1, Chapter One, page 2). This is the area falling under the city of Harare (Salisbury) Town Planning Scheme Phase 1, 2nd resubmission now incorporated in the new local plan 22 of 1995 (see Figure 1.3, Chapter One, page 4) and within the Kopje Market Square local priority Plan No.17. The research aims at establishing the factors that have affected the supply and demand of commercial office space in the study area for the period 1993 to 1998. Due to the diversity of the information, which is required by the research, different methods of data collection were used to cater for specific data needs. The main basic goal of the survey instruments used for the purpose of this study was to obtain relevant information and to ensure the reliability and validity of the data collected.

Given this background, only the methods that seemed efficient, dependable and easy to administer within the short period of the research study were adopted and used. These included questionnaire surveys and personal interviews, which provided the primary data. Secondary data sources included the use of texts, journals, newspapers, photographs, magazines and government publications. The fundamental factor underlying the choice of a data collection strategy or combination of strategies in this study were the objectives and aims of the study as stated in Chapter One, section 1.3, page 7. It is important to explain the kind of data each method was designed to collect together with the problems encountered in the use of each method.

3.3 SECONDARY DATA

This is data that is collected by other researchers and is reflected in textbooks and cassette tapes. Secondary data or documented data for the purpose of this study was collected through a literature review of South African, Zimbabwean and international texts on office property; planning and property magazines; Zimbabwean Central Statistical Office (ZCSO) documents, for example the Quarterly Digest of Statistics; newspapers for example the Pink Property section of the Financial Gazette publication; Knight Frank Zimbabwe (KFRZ) property report; the Real Estate Institute of Zimbabwe (REIZ) seminar papers and publications. Lastly publications by the Harare City Council were also utilised as sources of secondary data.

3.4. PRIMARY DATA

This is data personally collected by the researcher in the field or area of study through:

3.4.1 Questionnaire Survey

A questionnaire was designed and administered in an interview setting to the total population of real estate agents, professional valuation and property management firms operating in Harare.

3.4.1.1 Structure of questionnaire

The questionnaire was structured into three main sections. Section one dealt with introductory information on respondents with regard to their position in the firm, their level of experience in the property industry, the main functions of their organisations or companies and their total office property portfolio in Harare and within the CBD ranked according to class A, B, C. The questions in section two were centred around the various factors that have affected the supply and demand of office space within the CBD of Harare. Section three dealt with the current and future office developments and their expected impact on office property supply and demand. The full questionnaire is found in appendix B

3.4.1.2 Identification of the companies to be interviewed

Discussions were held with the role players in the property industry within Harare like architects, quantity surveyors, estate agents, property management firms and valuers to determine which of the property firms were active in the study area (Harare central business district), and those who have appreciable knowledge of properties in the study area. Information from the Real Estate Institute of Zimbabwe of the companies operating within the CBD of Harare was also utilised. A total number of 22 real estate, property valuation and management companies are currently operating in the CBD of Harare.

3.4.1.3 Pilot survey

To assist in the development of a meaningful questionnaire a pilot survey was undertaken in order to test respondents' reaction to the questionnaire prior to dispatching them to the final respondents. The pilot survey took the form of semi-structured interviews with a sample of five real estate firms, property valuation and management firms selected by a convenience random sampling technique. The five represented the smallest to the biggest firm according to the size of their property portfolios within the study area. The participants were informed that it was a pilot survey and they were encouraged to criticise the questionnaire and make suggestions as they completed the questionnaire. The specific areas the respondents were encouraged to review included: question order, question format, relevance of question to the

research objectives, clarity of the questions and correct space allowance for open-ended questions.

The major concern also included the most probable time within which the questions could be completed, since it was intended that the completion of the questionnaire would take a maximum of ten minutes. All the concerns expressed by the participants to the pilot survey were fully investigated and addressed before the final questionnaire was sent out to the selected respondents.

3.4.1.4 Questionnaire administration

The main aim was to try as much as possible to obtain a credible response rate to give credibility to the findings. The author travelled to Harare during the month of July and stayed there for three weeks during which period a questionnaire was personally submitted to each selected respondent. It was left in the respondent's possession for a week and then the completed questionnaire was personally collected. This was done to increase the level of response, if by any chance the firm had not responded they were encouraged to complete the questionnaire on the day of collection.

In all a total of twenty two sets of questionnaires were sent out, and twenty responses were received. The method of administration proved effective. The two firms that did not respond to the questionnaires claimed that they did not possess the required knowledge to answer the questions posed. This reduced the total number of questionnaires that was used in the analysis to twenty.

3.4.1.5 Analysis of responses

All the responses were coded and typed on Microsoft Excel and analysed. A factor was considered as worthy of further analysis and comment if at least 50% of the respondents answered "yes" to it. It terms of impact, a factor was considered worthy of further analysis and comments if it received a weighted total at least equivalent to the minimum number of respondents to a question.

- Due to pressure of work on the part of the respondents some could not complete the questionnaire within the stipulated one week.

- There were also instances where respondents refused to answer certain questions especially on the future office developments that the firms will be involved in, fearing that the information will leak to competitors.

3.4.2 Personal interviews

Interviews were conducted within the three weeks that the author was in Harare.

3.4.2.1 Formal Interviews:

These were conducted with the major stakeholders in office property development. The author focused on financial institutions, banks, pension fund organisations and property development companies. Questions relating to the costs involved in the office development process were tabled so as to identify the factors affecting the supply of office property. Office occupiers were also interviewed so as to identify the factors affecting demand of office property. A convenience random sampling technique was used in order to select the organisations involved in office development.

3.4.3.2 Informal Interviews:

These were made by interviewing the planners of Harare city council so as to examine the provisions and development restrictions on office property development within the CBD as laid down by the existing Town Planning Schemes. Two senior planners in the department of physical planning were interviewed. The questions were centred on what their current and future plans were for the city centre and what they are currently engaged in (any new town planning scheme for the CBD) and its effects on office space development.

3.4.3 Photographs

Photograghs of the office developments were utilised so as to have a visual representation of current office development and they were coupled with direct observation techniques especially when identifying current office developments taking place in Harare's CBD.

CHAPTER FOUR

HISTORY OF HARARE AND THE ANALYSIS OF FINDINGS

4.1 INTRODUCTION

This chapter is divided into two sections. Section one focuses on a brief discussion of the historical development of Harare, it looks at how commercial office development evolved over the years and the origins of some of the problems that are facing the town planners of today for example shortage of office space. Section two looks at the analysis of the questionnaire and the information gathered through informal and formal interviews with the property developers, town planners and the institutional investors.

SECTION ONE: BRIEF HISTORY OF HARARE

4.2 THE FOUNDING OF HARARE

The city of Harare was founded in September 1890 when the Pioneer Column of white settlers organised by the British South African (BSA) Company terminated its march from South Africa at the site of the present city. Although a few kilometres short of their destination of Mount Hampden further to the north, they decided to establish a settlement here because the site had ample water from the Mukuvisi River, the nearby hill (Kopje in Afrikaans) would provide a defensible site in case of attack, it was close to the gold deposits in the Mazowe area about 30 km to the north, and the high altitude (1 500m above sea level) made it relatively free from malaria (Jogi, 1970; Kay, 1970; Kay and Smout, 1977). Infrastructural developments soon gave permanence to the new urban settlement and with them came quicker and more efficient means of transport and communication than ox-wagons or head portage.

4.3 HISTORY OF OFFICE DEVELOPMENT IN CENTRAL HARARE

The original settlement of Harare comprised a small fort (at the site of the present day Africa Unity Square), around which were established the administrative offices and dwelling huts for the officials of the BSA Company, and to the west across a swampy stream on a route now followed by Julius Nyerere Way, was a cluster of shops and huts belonging to the settlers.

Between 1892 and 1894, the area was surveyed and an extensive cadastral plan was prepared. While clearly over-ambitious at that time, the plan laid the framework for the subsequent development of the city to this day. The two sections of the new town were surveyed separately, with larger plots (up to 892 m2) and wide streets (generally 25 m wide for minor and 37 m wider for the major roads) east of the stream the Kopje area. Streets in the west, the Causeway area were generally 20 m wide. A bridge or 'causeway' at the present intersection of Julius Nyerere Way and Manica Road now Robert Mugabe Way joined the two sections of the town (see Figure 4.1 and Figure 4.2, page 53 to page 54 respectively). Pictures in Figures 4.2 to 4.5 illustrate the state of development of the CBD in 1900,1912, 1963 and 1997.

In the area around the fort, later known as the Causeway area, the roads were aligned towards magnetic north to conform with the boundaries of the fort. In the Kopje area, the roads were aligned along the foot of the hill. When the swamp between the Causeway and the Kopje was eventually drained, it became apparent that the roads did not meet in a concordant grid pattern. This resulted in the awkward street intersections and oddly-shaped property blocks found along and immediately to the west of Julius Nyerere Way and on the western ends of Manica Road now Mugabe Way and Stanley Avenue now Takawira Avenue (Jackson, 1986).

North of the fort in the Causeway area a high income residential area was developed with stands of between 2 000m^2 and 4 000m^2 and this wealthy residential area became known as the Avenues. The development of the Avenues area adjacent to the Causeway led to the gradual shift of the main commercial area away from the Kopje area (centred on Pioneer Street now Kaguvi street) down Manica Road now Mugabe Way to the Causeway section of town.

FACTORS INFLUENCING THE STREET PATTERN OF CENTRAL HARARE

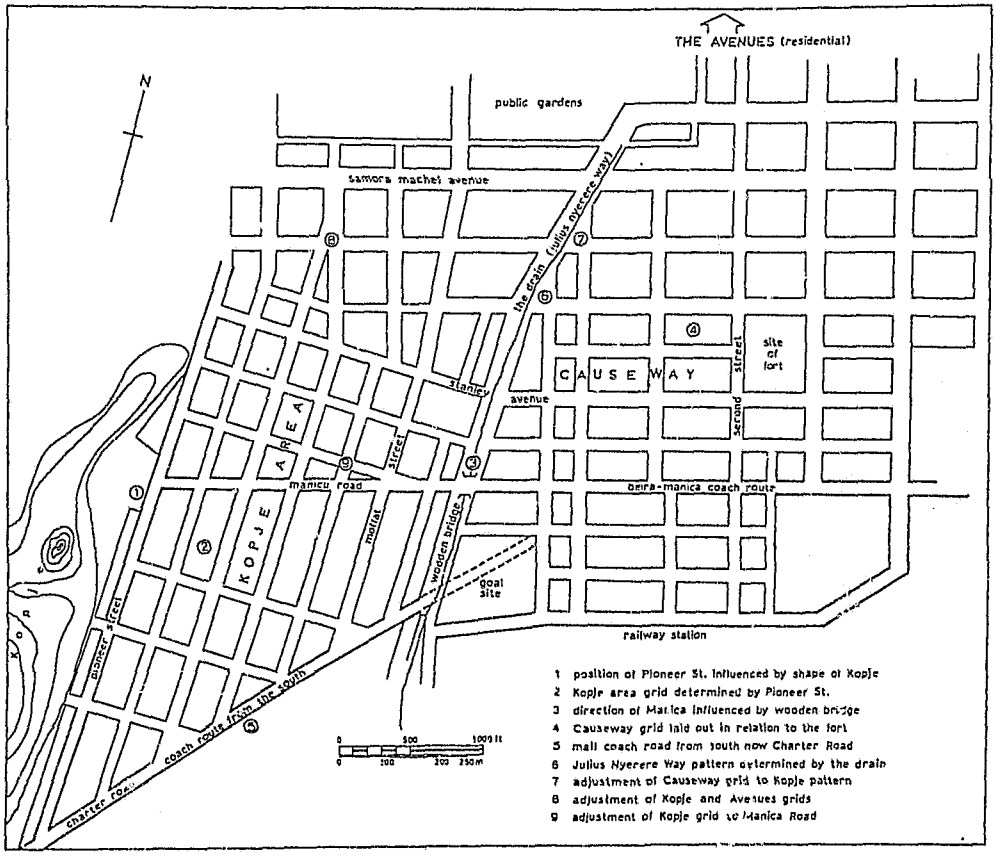


FIGURE 4.1: THE NUMBER 3 INDICATES THE POSITION OF THE WOODEN BRIDGE JOINING THE KOPJE AREA TO THE CAUSEWAY AREA

SOURCE: JOGI (1970)

PICTURE OF CENTRAL SALISBURY (NOW HARARE) IN 1900 LOOKING NORTH –EAST TWO CLEARLY DISTINCT NUCLEI CAN BE SEEN.

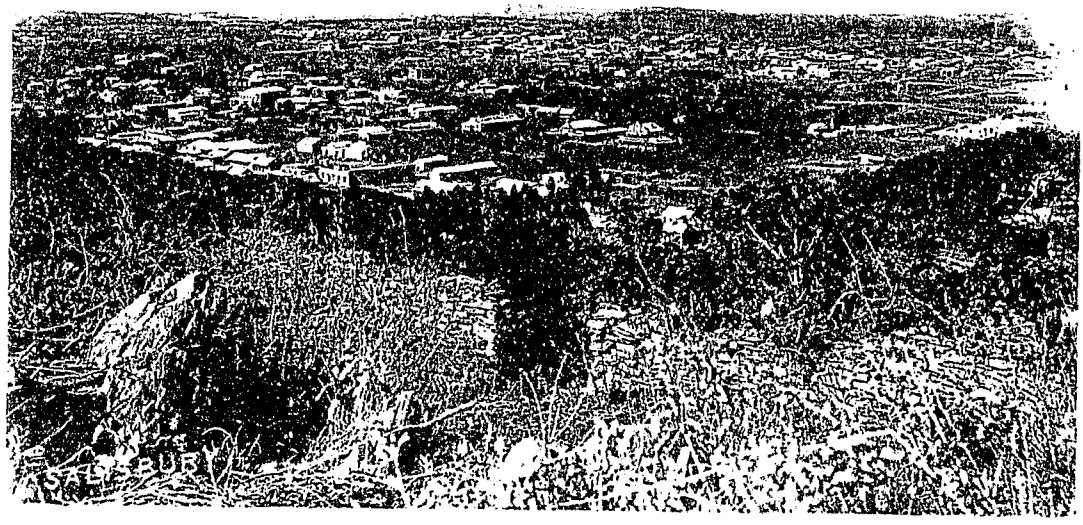


FIGURE 4.2: THE DRAIN SEPARATES THE KOPJE FROM CAUSEWAY

SOURCE: McCULLOCH (1963)

PICTURE OF CENTRAL SALISBURY (NOW HARARE) IN 1912 LOOKING NORTH –EAST. NOTE THE DEVELOPMENT OF MANICA ROAD (NOW ROBERT MUGABE WAY CENTER OF PICTURE) LINKING THE TWO NUCLEI

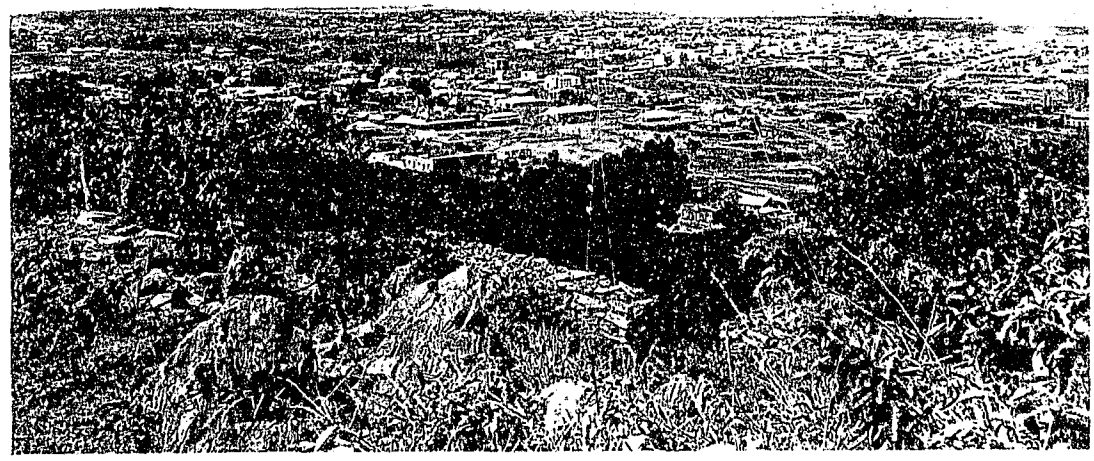


FIGURE 4.3: NOTE AGAIN THE DRIAN STILL SEPARATING THE KOPJE AREA FROM THE CAUSEWAY

SOURCE: McCULLOCH (1963)

PICTURE OF CENTRAL SALISBURY (NOW HARARE) IN 1963 LOOKING NORTH –EAST FROM THE KOPJE. THE HIGHLANDS AREA KOPJE IN THE CENTER BACKGROUNG.

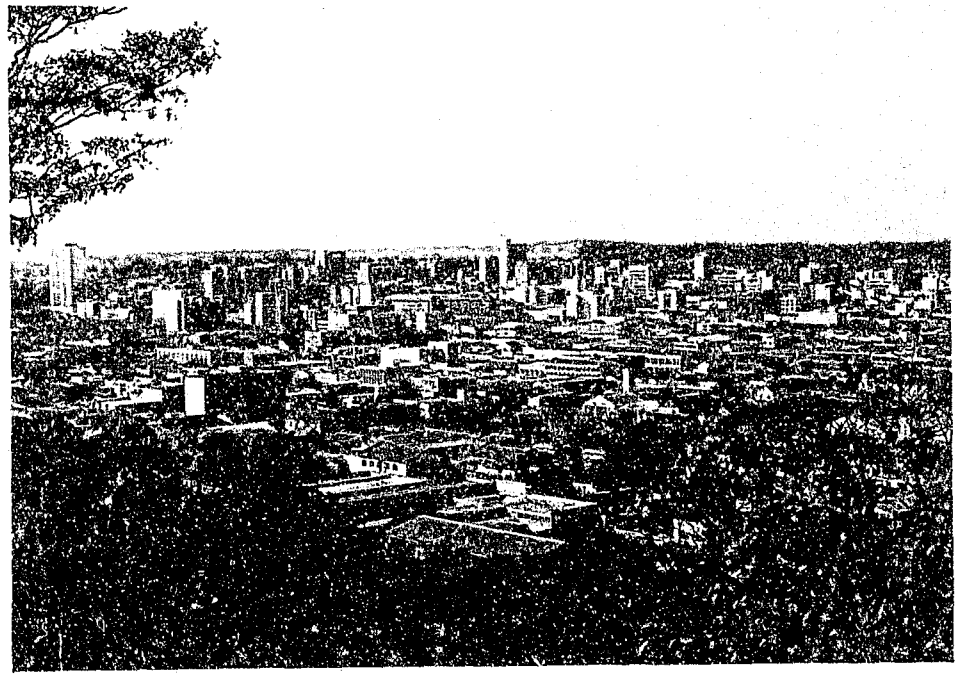


FIGURE 4.4: NOTE THAT BY THIS TIME THE SWAMPY AREA BETWEEN THE KOPJE AREA AND THE CAUSEWAY AREA HAD BEEN DRIANED AND OFFICE BUILDINGS WERE CONSTRUCTED ON IT.

SOURCE: McCULLOCH (1963)

THE DIFFERENT VIEWS OF THE CENTRAL AREA OF HARARE. TOP PICTURE LOOKING NORTH –EAST FROM THE KOPJE THE HIGHLANDS AREA KOPJE IN THE CENTER BACKGROUNG.

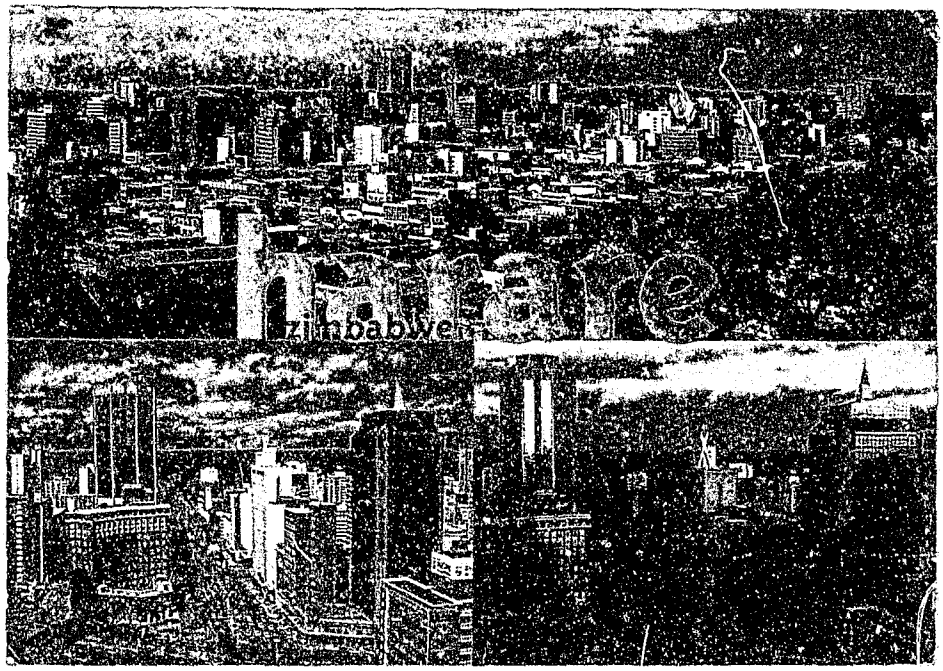


FIGURE 4.5: THE BOTTOM TWO PICTURES SHOW PART OF THE CENTRAL BUSINESS DISTRICT OF HARARE.

SOURCE: PHOTO SAFARI (1998)

The Kopje area became a second-class commercial area mainly comprising Asian-owned shops catering for the low-income Black market intermingled with service industries. Figure 4.6 on page 59 shows the movement of the commercial district from the Kopje to Causeway.

Once Pioneer street now Kaguvi Street was the centre of the city, then Manica Road now Robert Mugabe Way took over, and office development spread from the Kopje towards Second Street (the early locations of the CBD's core even today still have the old office buildings of the early 20th century). The commercial centre started moving north to Jason Moyo Avenue in the 1950s and now the pedestrianised First Street Mall is the definite axis for commercial office development (REIZ, Property & Development, 1996, p27).

This expansion northwards was encouraged by the following:

- The abundance of well drained soils to the north providing excellent building sites.
- The select residential area of the Avenues lay to the north.
- First Street already had strong attractions to the CBD movement as Barbour's, the Place Theatre and the Grand Hotel were all built in first street before 1912.

However it should be noted that expansion of the CBD to the south and the south east was discouraged by the presents of a land reserve for use by the railways, to the west the Kopje and the industrial sites and the railway line hindered any expansion to the east.One problem arose from this pattern of developing only the northern and eastern edges of the city centre. A lot of office building owners in the older parts of the city in the Kopje area allowed properties to run down as wealthier tenants moved to more developed and vibrant locations in the city's North and North-east areas. The older premises became uneconomic to redevelop and maintain.

The creation of the First Street Mall in the 1974 has slowed down and may even have stopped this continual drift of the Central Business District's core. It has been suggested that this might well prove vital, along with planning regulations, in stopping the continual north-east drift of commercial office development coupled with the south-west blight (KFZ Property Report, May 1993, p11)

MOVEMENT OF THE CBD CORE FROM PIONEER (NOW KAGUVI) STREET TO FIRST STREET MALL.

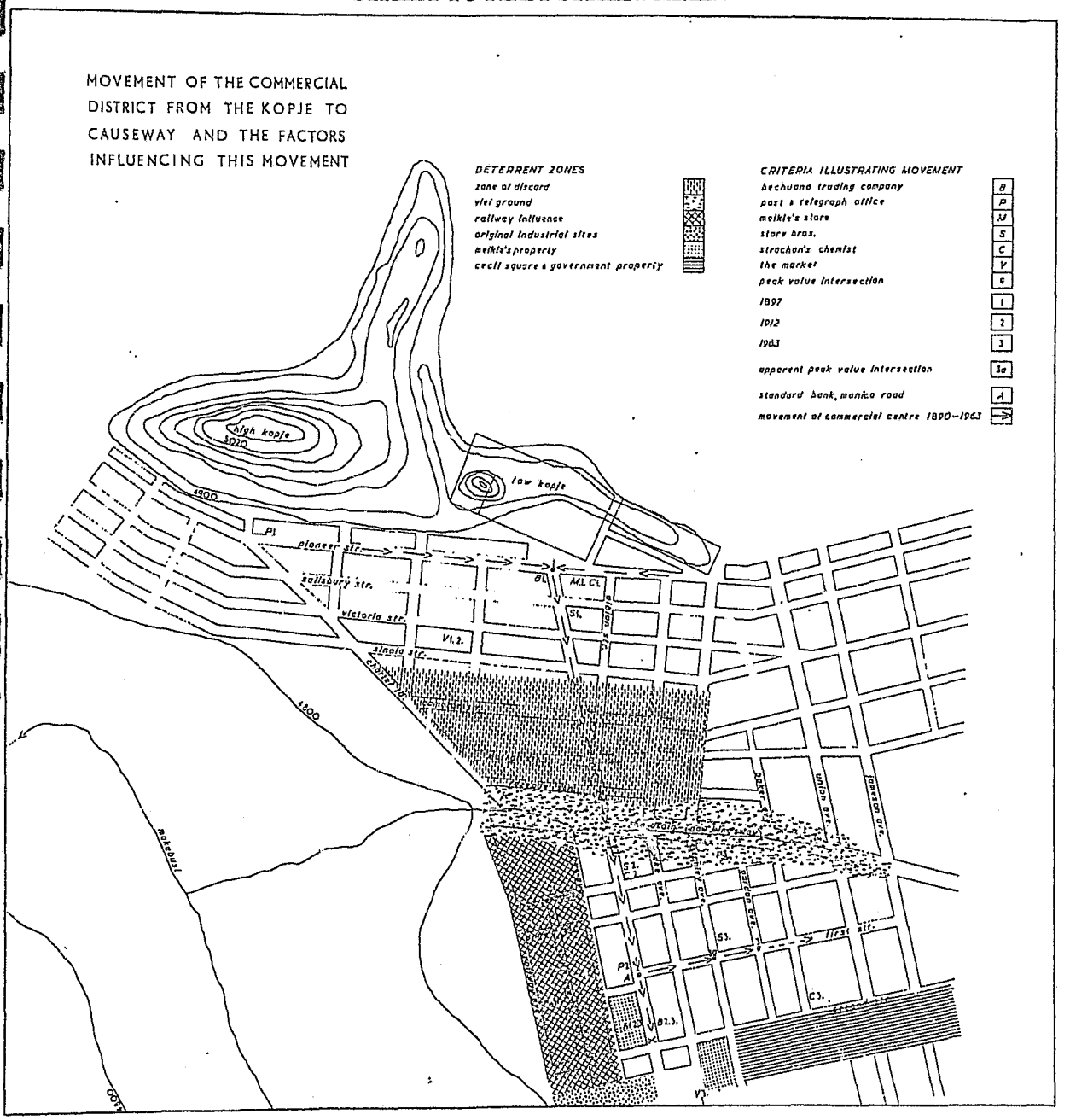


FIGURE 4.6: NOTE; *MOVEMENT OF THE CBD CORE INDICATES THE ZONE OF ASSIMILATION AND ZONE OF DISCARD THEORY BY (WAUGH 1995,P396)*

SOURCE: JOGI (1970)

In the Kopje area, the city's first dominant commercial area, the problem of deterioration became so bad that in 1990 a new Local Plan 17 was promulgated and this allowed for major redevelopment. As a result a number of commercial office developments have been developed in the Kopje area. Blocks of flats have almost all been converted to offices after tenants were forced out or encouraged to move out (KFZ Property Report, August 1994, p7)

With the advent of the Economic Structural Adjustment Programme in 1990 the CBD of Harare experienced an influx of foreign investment companies, as stated in Chapter one, section 1.5. The City of Harare Town Planning Council appears to be trying to prevent any type of deterioration of any part of the CBD. They have drawn the line against further major commercial office development along Herbert Chitepo Avenue and Fifth Street and want new developers to start moving back into the older parts of the city centre specifically the Kopje area. New commercial office complexes, such as the Fidelity Life Tower and the Post and Telecommunication (PTC) building have been built in the last few years to the west of First Street although major developments still continue to the North and the East up to Fourth Street (REIZ, Property & Development, 1997, p11)

SECTION TWO: ANALYSIS OF FINDINGS

4.4 INTRODUCTION

The analysis is based on the results of the questionnaire survey, the personal interviews undertaken and the documents from property consultant firms. The analysis will follow the format of the questionnaire whilst information from the personal interviews and documentation will be used as supporting information.

4.5 RESPONSES TO QUESTIONNAIRE

4.5.1 Section One: Personal Data

Question one: Information on the respondents' position in their respective companies.

The question was posed to verify the status of respondents in their company as way of assessing the credibility of the responses given in the entire questionnaire. Table 4.1 and Figure 4.7 below illustrates the responses obtained.

Table 4.1: Position of respondents in their companies.

POSITION	NUMBER	PERCENTAGE
Property Manager	8	40
Director	4	20
Managing director	3	15
Partner in a firm	3	15
Head of research	2	10
Total	**20**	**100**

The profile of the respondents ranged from managing directors to partners of firms. As shown below in figure 4.7, the respondents occupy positions of high standing, which lends credence to the answers that were given in response to the questionnaire.

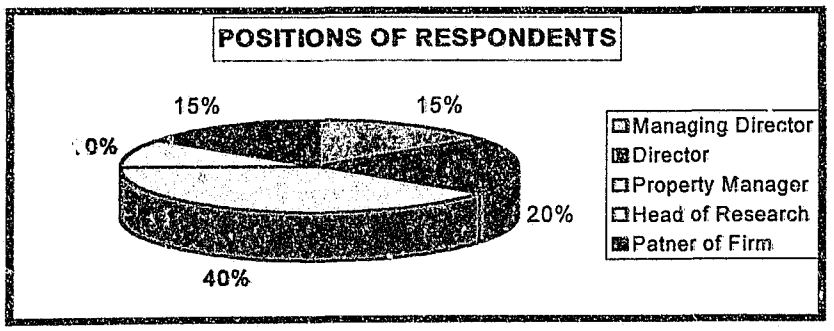


Figure 4.7: Positions of the respondents.

Question two: Duration for which respondents have been in the property business.

This question was aimed at finding out how long respondents have been in the property business. The responses are as shown in table 4.2 below.

Table 4.2: Experience of respondents in the property industry.

DURATION	RESPONSE	PERCENTAGE
<2 years	2	10
2-4 years	1	5
4-6 years	1	5
6-8 years	3	15
8-10 years	3	15
>10 years	12	60
Total	**20**	**100**

The responses as detailed in figure 4.8 below show that the majority of respondents have been in the property business for a reasonably long time to be able to give a credible view on the issue of the supply and demand of office space in the study area.

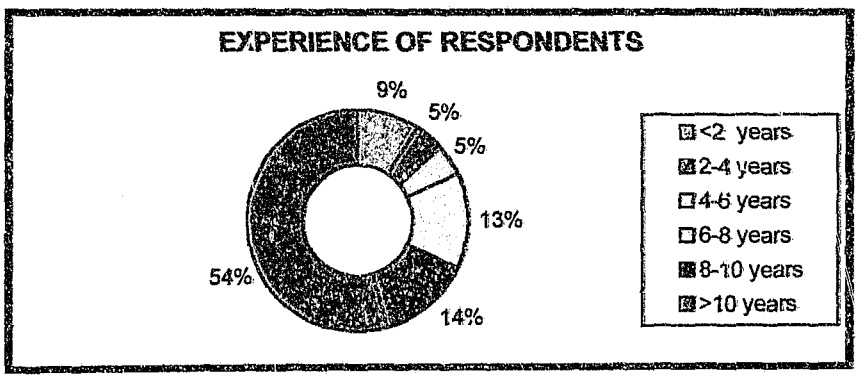


Figure 4.8: Experience of respondents in their company

Question three: The main function(s) of the respondents' organisation:

This question was aimed at verifying the background of the organisation to which respondents to the questionnaire belong. Six alternative suggestions were given and the responses are as shown in table 4.3 below. (A multiple choice of alternatives was allowed)

Table 4.3: Activities of the organisations surveyed.

FUNCTION	RESPONSE
A combination	8
Estate Agency	5
Property Management	3
Property Valuation	2
Property Development	2
Any others	2
Total	**22**

From the responses, it is clear that a large number of the respondents are engaged in varied activities within the office property business. Only one firm focuses on activities that are in no way related to those stated in the above table, it is engaged in town planning activities within the study area. One can therefore safely conclude that, all the respondents were engaged in activities directly related to the office property business and therefore could give reasonable views on the office space market in central Harare. The responses are shown graphically in figure 4.9 below.

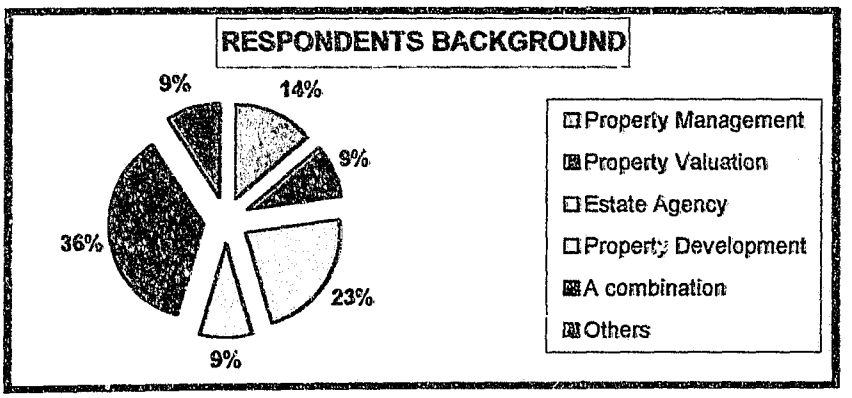


Figure 4.9: Respondents background

Question four: The class of office property holdings, the size of each class (class is determined by construction quality, condition and appeal) and the total floor area of office space for each firm.

This was a three part question aimed at seeking information on the class, sizes of each class and the total size of office property holdings under the control of respondents in the study area (Harare's Central Business District). Table 4.10 below shows the tabulated data on the issue of floor areas.

Table 4.4: Lettable floor areas of each class of office portfolio in central Harare.

RESPONDENTS	CLASS A	CLASS B	CLASS C	TOTAL
1	76 800m^2	25 000m^2	13 400m^2	115 200m^2
2	93 000m^2	62 000m^2	20 000m^2	175 000m^2
3	73 000m^2	50 000m^2	67 000m^2	190 000m^2
4	-	7 000m^2	8 000m^2	15 000m^2
5	-	10 000m^2	-	10 000m^2
6	-	-	12 000m^2	12 000m^2
7	-	2 000m^2	11 000m^2	13 000m^2
8	-	-	11 500m^2	11 500m^2
9	7 000m^2	3 500m^2	4 000m^2	14 500m^2
10	7 000m^2	5 000m^2	5 000m^2	17 000m^2
11	19 500m^2	11 000m^2	10 000m^2	40 500m^2
12	10 000m^2	4 500m^2	10 500m^2	25 000m^2
13	10 300m^2	10 000m^2	20 000m^2	40 300m^2
14	5 300m^2	14 000m^2	9 700m^2	29 000m^2
15	-	15 000m^2	10 000m^2	25 000m^2
16	16 500m^2	10 000m^2	-	26 500m^2
17	-	23 000m^2	-	23 000m^2
18	11 000m^2	10 000m^2	-	21 000m^2
19	-	9 000m^2	10 000m^2	19 000m^2
20	-	20 000m^2	3 000m^2	23 000m^2
TOTAL	**329 400m^2**	**291 000m^2**	**225 100m^2**	**845 500m^2**

Figure 4.10 below illustrates the total lettable floor areas in square metres of office space in the study area for each class of office space.

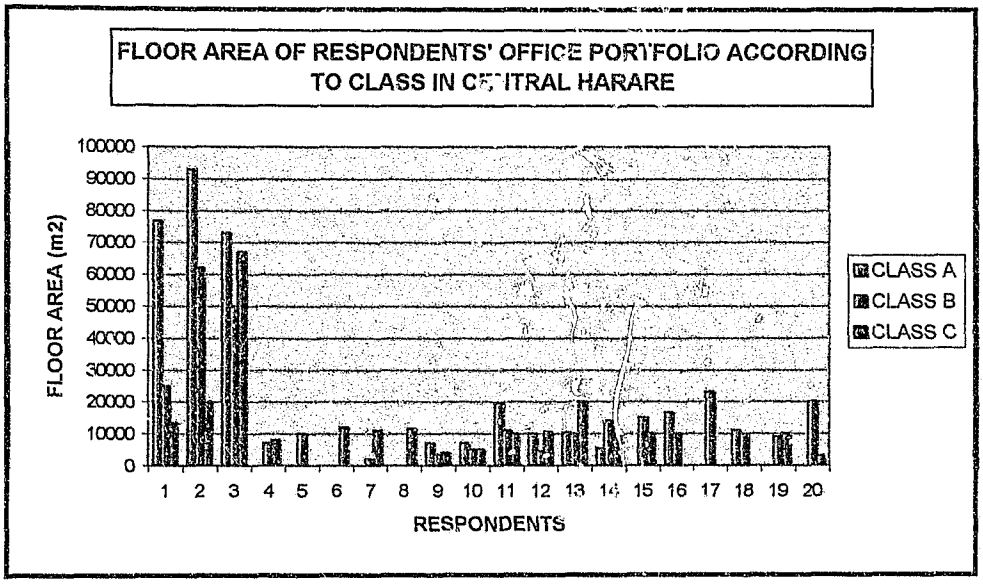


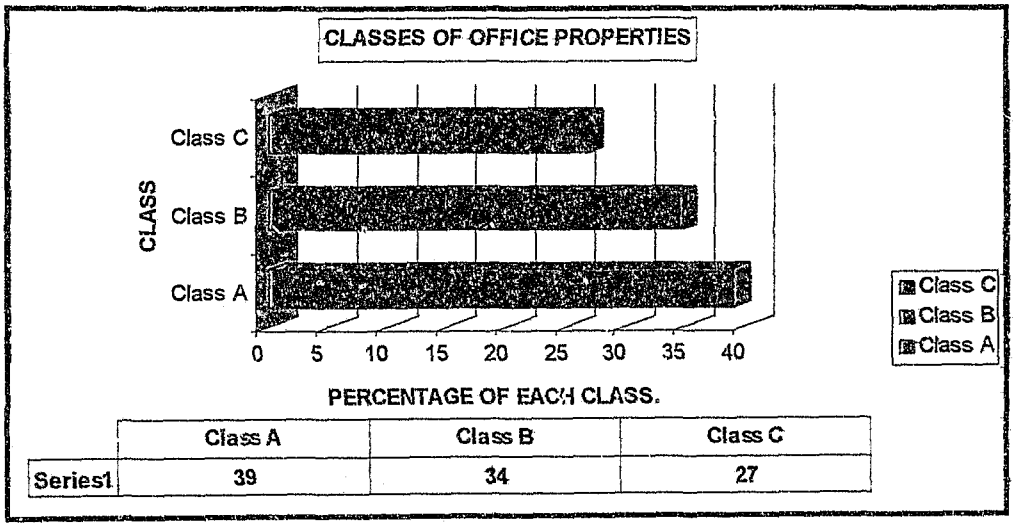
Figure 4.10: Floor areas of respondents' office portfolio in the study area.

As shown in figure 4.4 above, it can be seen that the total office floor space in the Central Business District of Harare was approximately 845 000m^2 and that respondents had a total of about 329 400m^2 of class A floor space, 291 000m^2 of class B floor space and about 225 000m^2 of class C floor space. One interesting observation from the figures above is that the three major real estate firms operating in the study area had a combined office floor space of about 476 000m^2 under their management. Thus they are in charge of more than half of the total office floor area in central Harare.

The information gathered from personal interviews revealed that most buildings in central Harare are fairly recent with most construction of these buildings taking place after 1990. This explains why the proportion of A class office space to total office space in central Harare is higher than that for classes B and C. Again office development did not take place on vacant land but on land occupied by older buildings that were subsequently demolished and replaced with new modern structures. A number of older

office properties have also been refurbished thus increasing the total size of A class office space.

Figure 4.11 below shows that class A at 39% of total office space is the single most important class of office property holdings in the central business district of Harare followed by class B at 34% of total office space and then class C at 27% of total office space according to magnitude.



	Class A	Class B	Class C
Series1	39	34	27

Figure 4.11: Proportion of each class to total office floor area in the C B D.

Question 4:The size of each firms' office portfolio holdings in the whole of Harare.

This question was aimed at verifying whether the Central Business District of Harare is the focal point of office development within the study. Only six firms responded to this question the rest of the respondents do not have office portfolios outside the study area. Table 4.5 below indicates the office floor areas according to class for the six respondents.

Table 4.5: Lettable floor area of each class of office space outside the study area.

NUMBER	CLASS A	CLASS B	CLASS C	TOTAL
1	12 880m^2	4 600m^2	920m^2	18 400m^2
2	14 525m^2	5 188m^2	1 038m^2	20 750m^2
3	10 500m^2	3 750m^2	750m^2	15 000m^2
4	8 650m^2	3 100m^2	620m^2	12 400m^2
5	6 400m^2	-	-	6 400m^2
6	8 120m^2	2 900m^2	580m^2	11 600m^2

The total office floor space outside the central business district of Harare is about 84 550m^2, there is at total of 61 105m^2 of A class office space, 19 538m^2 of B class office space and 3 908m^2 of C class office space. Thus office space outside the CBD constitutes approximately 10 percent of the total office space within the city of Harare and it is managed by a third of the real estate firms operating in the study area. Figure 4.12 below shows the total floor areas per class for the six firms with office portfolios outside the CBD of Harare.

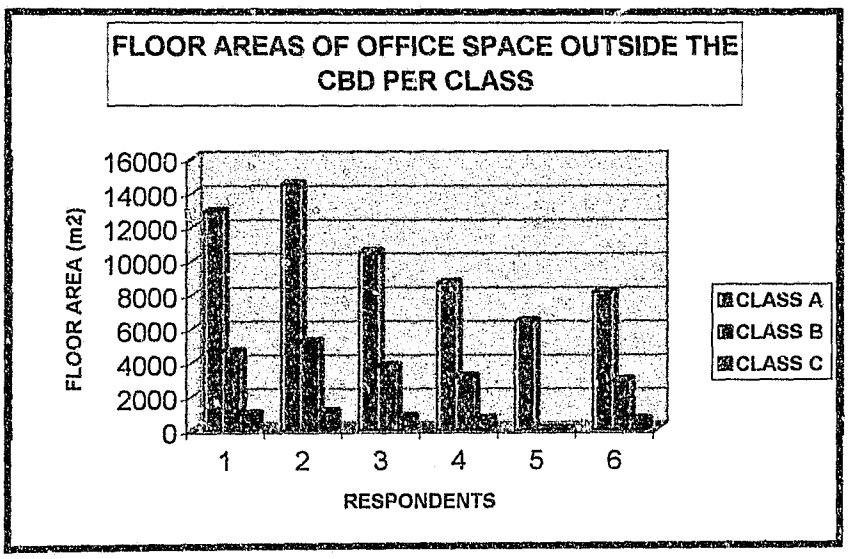


Figure 4.12: Floor area of office space outside the study area per class.

Of the office space outside Harare it is important to note that 72 percent is Class A, 23 percent is Class B and 5 percent is Class C. This can be explained by the fact that office development at a large scale outside the CBD is a recent phenomena most of the office space that is reflected in the above figures was developed within the past three years.

It is mainly in the form of office parks and the most notable ones are the Arundel, Mukuvisi, Newlands and the Chisipite office parks. Figure 4.13 below illustrates the percentage difference between CBD and out of town office space. The CBD is the most preferred area for office location by the office developers.

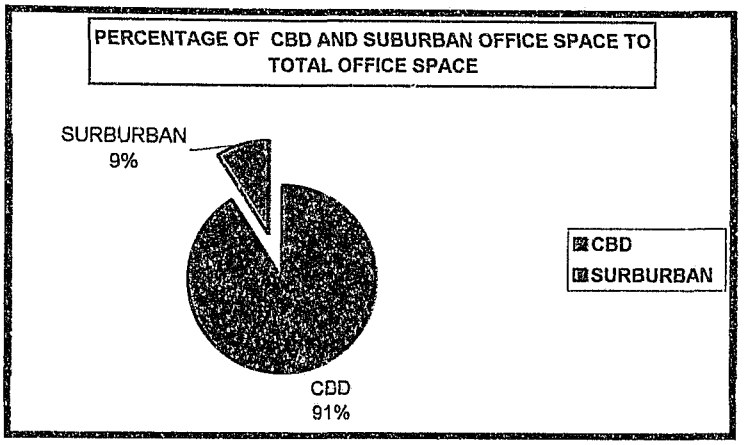


Figure 4.13: Percentage of office space in the CBD and suburban.

With a total office space of approximately 930 050m^{2}in the whole of Harare, the CBD has the largest share of office space. However suburban office development is increasing as some firms move their head offices out of the CBD.

4.5.2 Section Two: Demand and supply of office space in the CBD of Harare.

Question one: The opinion of the respondent on the current availability of office space in the CBD of Harare.

This question was posed to establish the current status of the office market in the study area so as to verify whether supply of office space meets the demand. All 20 responded to this question .The responses are shown in table 4.6 below.

Table 4.6: Status of the commercial office market.

STATUS OF OFFICE MARKET	RESPONDENCE	PERCENTAGE
A critical shortage	14	70%
A balance of supply and demand	4	20%
Abundant in supply	2	10%

From these responses, it was realised that only two respondents (10%) indicated that there is an oversupply of office space. However their response was influenced by the fact that their office portfolios within the study area are composed of class C of office space only, which is currently in low demand as tenants move to new A class space. Again only four (20%) of the respondents showed that there is a balance of office space demand and supply. They stated that there is a shortage of good quality office space of up to 200m^2 and abundance of poor quality office space (class C). But they argued that there is no oversupply since new tenants are coming in to fill up the vacant older buildings and all new buildings are pre-let before completion. The remaining fourteen (14%) respondents concurred to the fact that there was a critical shortage of office space within the study area. They argued that demand is greater than supply evidenced by all new buildings being pre-let and filled up before completion of the buildings. Figure 4.14 below shows the graphical representation of the responses.

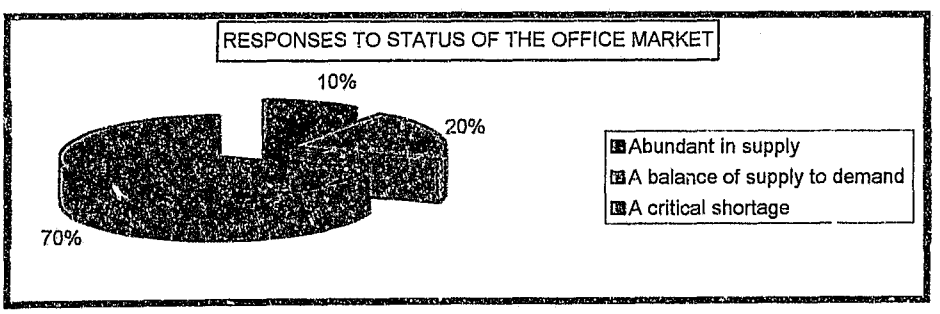


Figure 4.14: Responses to status of office market.

Question two: The average vacancy and occupancy rates of each firm's office portfolio in the central business district of Harare.

This question attempted to investigate the level and trend in demand through the occupancy rates and supply through the vacancy rates. It was based on the principle that changes in the occupancy rates reflect demand conditions and changes in the vacancy

rates reflect supply conditions as discussed in chapter two. Combined figures for all 20 respondents' firms between 1993 and 1998 were utilised. Table 4.7 below shows the total office floor space per year, the total increase in office floor space per year, total vacant office floor space per year and the total occupied office floor space per year. Information from the personal interviews was also utilised.

Table 4.7: Trends in office floor space in square metres between 1993 and 1998 within the study area.

Year	Total floor space	Total increase in space	Total vacant space	Total occupied space
1992	634 500m^2			
1993	660 000m^2	25 500m^2	6 000m^2	654 000m^2
1994	708 000m^2	48 000m^2	14 000m^2	694 000m^2
1995	750 000m^2	42 000m^2	15 000m^2	735 000m^2
1996	828 000m^2	78 000m^2	10 000m^2	818 000m^2
1997	832 000m^2	4 000m^2	3 000m^2	829 000m^2
1998	845 500m^2	13 500m^2	5 000m^2	840 500m^2

As shown in table 4.7 above there has been a general increase in total office floor area from 1993 to 1998 with rapid office development between 1993 and 1996 and little growth between 1997 and 1998. However it should be noted that the growth was not uniform as some years had a higher net increase than others did as illustrated by figure 4.15 and 4.16 below.

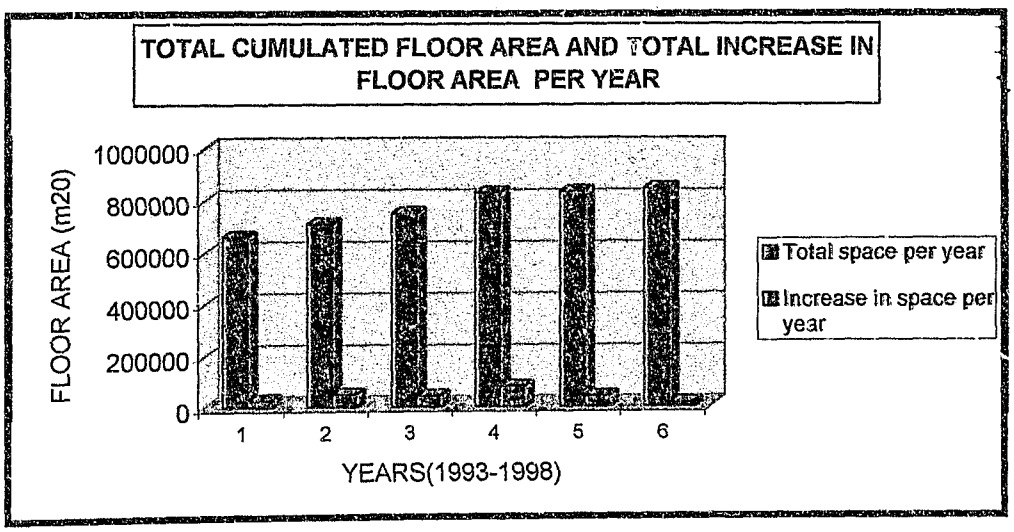


Figure 4.15: Total cumulated office floor area and the total increase in office floor area per year.

The peek of construction activity between the period 1993 and 1998 was achieved in 1996 in which 78000m^2 of office space was added to the office market.

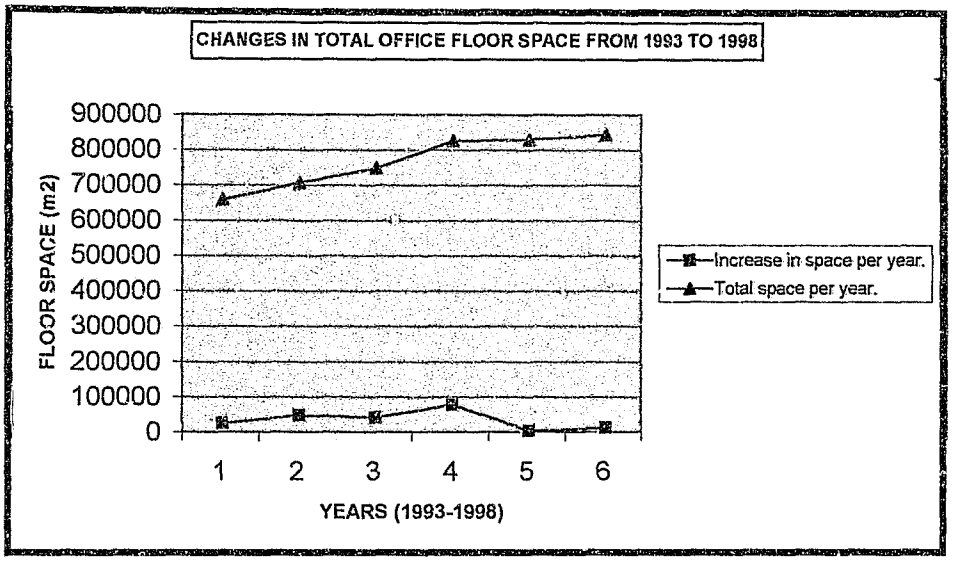


Figure 4.16: Linear relationship between increase in space and increase in total space.

The average vacancy and occupancy figures as derived from table 4.7 above for all the twenty repondenses per year are shown in figure 4.17 below.

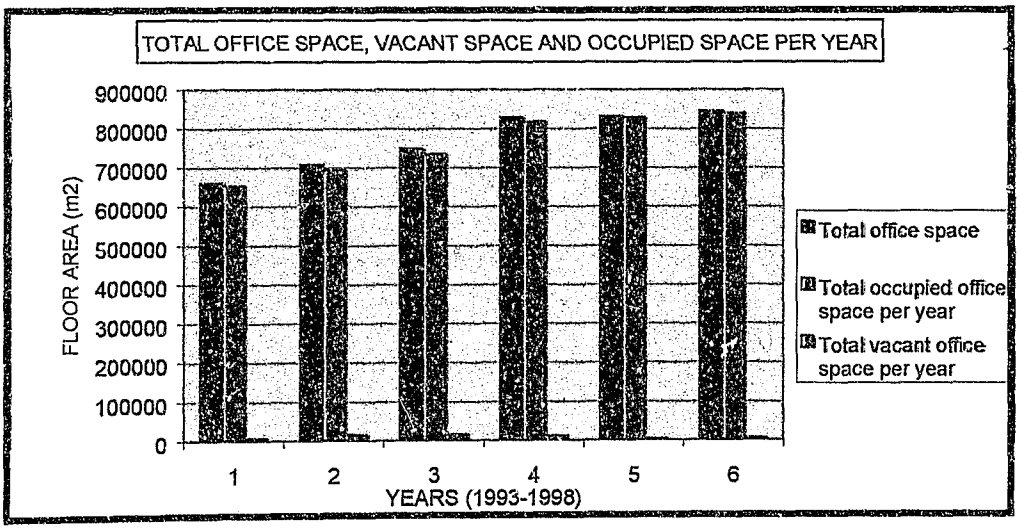


Figure 4.17: Figures showing the relationship between the total office space, total vacant office space and the total occupied office space within the study area from 1993 to 1998.

Table 4.8: Percentage average vacancy and occupancy rates from 1993 to 1998.

YEAR	VACANCY RATE	OCCUPANCY RATE
1993	1%	99%
1994	2%	98%
1995	2%	98%
1996	1%	99%
1997	0	100%
1998	1%	99%

Table 4.8 above is a summation of the vacancy rates and occupancy rates of all the office accommodation portfolios for each individual firm. All respondents concurred that there was a high occupancy rate and a very low vacancy rate within the study area. The years 1994 and 1995 experienced the highest vacancy rates averaging two percent (2%) 15 000m^2 for each year, this was a result of "blue chip" companies moving out of their old buildings into the new modern multi-storey buildings. It is only during these two years that landlords began to consider and make provision for the possibility of vacancies within their portfolio of office buildings. Landlords had to offer incentive such as rent free periods and discounted rents, " sweetheart" deals, as they are known in the market.

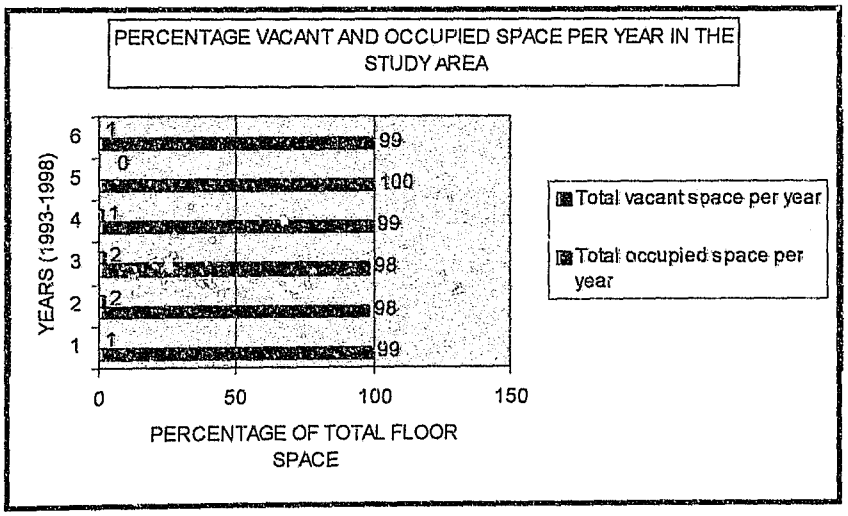


Figure 4.18: Percentage vacancy and occupancy rates from 1993 to 1998.

Figure 4.18 above shows vacancy rates vary between less than one percent to two percent. The year 1997 had the lowest vacancy rate of less than one percent at 3 000m^2 and the year 1995 and the highest vacancy rate of two percent at 15 000m^2. The year 1996 experienced the highest construction activity a total of 78 000m^2 of office space

was added to the office market yet the vacancy rate remained low for that year at 1% as shown in figure 4.18 above. This therefore indicates that the demand for office space in the study area was greater than supply for the period 1993 to 1998 a similar result was shown by responses to question one above.

Question 3(a): The major factors that are believed to have affected the demand of office accommodation in the CBD of Harare.

The question was aimed at identifying the factors affecting the demand of office space within the study area, the respondents were asked to indicate the extent to which they agree or disagree with the effect on demand of each factor. A total of 13 alternative factors numbered A to M were given and the responses are as shown in Table 4.15 below. A total of twenty respondents responded to the question. (A multiple choice of alternatives was allowed).

Table 4.9: Number of respondents to the factors affecting demand in descending order.

FACTORS	AGREE	NEUTRAL	DISAGREE	TOTAL SCORE
K	18	2	0	58
J	16	4	0	56
H	15	4	1	54
C	14	5	1	53
G	13	4	3	50
E	11	7	2	49
F	11	5	4	47
A	10	5	5	45
D	8	8	4	44
I	5	5	15	40
B	7	3	10	37
M	4	8	8	36
L	4	6	10	34

*SCORE FACTOR= (3*AGREE+2*NEUTRAL+1*DISAGREE)*

Key:

(A) Demographic factors (population and migration)
(B) Professional Expertise in construction
(C) Size of tertiary sector
(D) International economic trends
(E) Turnover
(F) Inflation

(G) Availability of finance
(H) Proximity of complementary activities
(I) Rental levels
(J) Accessibility and communication
(K) Availability of parking
(L) External and internal appearance of building
(M) Efficiency of building

From the responses above it was realised from the "**agree**" responses that alternative K which represents availability of parking space was the most dominant factor affecting the demand of office space in the CBD of Harare. It was followed by alternative J (accessibility and communication), alternative H (proximity of complementary activities), alternative C (size of the tertiary sector), alternative G (availability of finance), alternative L (external and internal appearance of building), alternative A (demographic factors) and lastly alternative F (Inflation). The factors with the lowest response rates were M (efficiency of building) and E (turnover).

Adopting our bench mark of a minimum of 50% "**agree**" response to a factor out of the total number of responses to a question as representing significant level of importance for further consideration, it is realised that eight factors showed up to be of significance as factors affecting demand within the study area with 50% and more responses. Whilst the remaining five factors had little impact on the demand of office space with a response rate below the minimum (50%) of the respondents to the question The responses are shown graphically as in Figure 4.19 below.

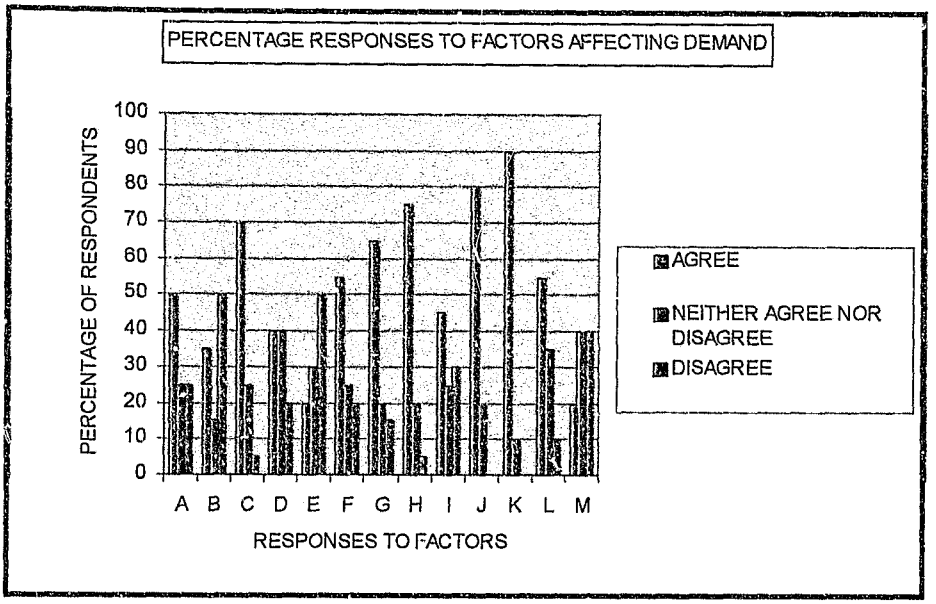


Figure 4.19: Percentage of respondents for each factor of demand within the CBD of Harare.

On the issue of the level of impact of the chosen factors the following responses were obtained. In order to be able to analyse the impact, weights were given to the responses in the following order.

AGREE = 2, NEITHER AGREE NOR DISAGREE= 0, DISAGREE = -2

Note: this weighting system has been followed in the entire analysis.

Table 4.10: Weighted level of impact on demand of each factor in descending order.

FACTOR	AGREE	NEITHER	DISAGREE	WEIGHTED EFFECT
K	38	0	0	40
J	32	0	0	36
H	30	0	-2	28
C	28	0	-2	26
G	26	0	-6	20
L	22	0	-4	18
F	22	0	-8	16
D	16	0	-8	8
I	18	0	-12	6
A	20	0	-10	5
B	14	0	-20	-6
M	8	0	-16	-8
E	8	0	-20	-12

Using our benchmark of a total weighted impact equal to or greater than the maximum number of respondents to a question as representing a factor of significant impact. It is clear from table 4.10, above that respondents do not perceive the impact of the factors E (turnover) and B (professional expertise) and M (efficiency of building) as of significance. Whilst on the other hand factors K (availability of parking) and J (accessibility and communication) are considered to have the greatest effect on the demand of office space within the study area.

(b) Reasons for the decisions taken by respondents.

The following is an analysis of each factor affecting the demand of office space in the CBD of Harare and the reasons given by the respondents as to why it is of great significance or why it is not significant at all.

Availability of parking

90% of respondents concurred that availability of parking is a major factor that has affected the demand of office space in central Harare. Between the period 1993 to 1998 a lot of office tenants moved into new and old office space within the CBD of Harare. The provision parking spaces did not increase at the same rate. The result is that there is a critical shortage of parking in Harare central. Most of the old buildings in central Harare do not have on site parking and a lot of refurbishment activities are being undertaken in central Harare in order to increase the amount of parking in central Harare.

Accessibility and communication

80% of the respondents agreed that accessibility and communication were some of the most important factors affecting the demand of office space within the CBD of Harare. The CBD of Harare is the most accessible place within the whole of Harare and internationally as the capital city of Zimbabwe, it has the best infrastructure. It is therefore the most ideal place for office location and thus most office users prefer the CBD.

Proximity of complementary activities

75% of respondents concurred that office users prefer to be located close to other complementary activities like shopping facilities, banks, restaurants and related office uses. Therefore the CBD of Harare provides the most ideal place for office location as all the complementary activities are in one place. It is the focal point of all economic activity.

Size of tertiary sector

70% of respondents concurred that the increase in the size of the tertiary sector has caused an increase in the demand for office space. The size of the tertiary sector in the whole of Zimbabwe has increased with the number of foreign companies coming in to invest in the economy. The need for office space has proportionally increased within the study area. Increased office manpower requirements and increased office space requirements per employee due to the introduction of new technology such as computers has resulted in an increase in demand for office space in central Harare.

Availability and cost of finance

65% of the respondents agreed that the unavailability and the high cost of finance had an effect on the demand of office space within the study area. During the period 1993 to 1998 financial institutions were reluctant to give out mortgages to those investors who wanted to purchase office property and even if they gave out the loans the interest rates were high averaging 30% for commercial mortgage bonds. They argued that this is the reason why most commercial office developments taking place in the CBD of Harare are being undertaken by pension funds and insurance firms. Pension funds do not borrow finance from the banks but use the pension contributions from the members to invest in property.

External and internal appearance of building

55% of respondents agreed that the external and internal appearance of the office building has an effect on the demand of office space by the users and investors. They argued that most of organisations are concerned with their corporate image. Prestige plays a major role in the location decisions of all firms. The completion of a number of office buildings between 1993 to 1998 saw a sudden rush by the "Blue chip" firms into the new office structures and the older buildings became vacant for a short period of time as the office market adjusted. New and smaller office users took over old building office space.

Inflation

High inflation is one of the major factors that were identified by the respondents affecting the demand of office space. 55% of the respondents agreed that with the inflation rate averaging 25% over the past five years and interest rates (NCD) around 34% business activity on the Zimbabwe Stock Exchange was slower. Property development offered steady and less risky returns than other types of investments in such difficult times. Properties will appreciate in value in times of high inflation and thus institutional investors will demand property as a hedge against inflation. However it was stated by some of the respondents that high inflation rates affect the expenditure patterns of a companies therefore companies tend to avoid high rentals. The table 4.11 below shows the inflation figures for the period in question.

TABLE 4.11: Average inflation rates from 1993-1998.

YEAR	ESTIMATED AVERAGE RATE OF INFLATION
1993	28%
1994	22%
1995	21%
1996	23%
1997	24%
1998	26%

Source: Knight Frank Zimbabwe, Property Report, July 1998.

Only 20% of the respondents suggested that the high inflation rates over the past five years had no effect on the demand of property but the effect was more on the supply of office space as they increased the cost of construction.

International economic trends

Only 40% of respondents agreed that international economic trends do have an effect on the demand of office space within the study area mostly however in the long run. They sited the resent Asian crisis or global melt down having effects on the office space demand. However the other 40% of the respondents concurred that international economic trends do have long term effects on the office market but during the period 1993 to 1998 the effect was insignificant. 20% of the respondents disagreed to the fact that international economic trends had an effect on the demand of office space within the study area. They argued that the Zimbabwean economy including that of the study area is too small to have an impact or to be affected by the changes in the global economy. They ague that it is only national factors like the drought of 1992 and government policies that have an effect on the demand for office space.

Rental levels

75% of respondents disagreed that rental levels had much effect on the demand for office property. They argued that Harare has some of the lowest rentals in the world. They sited the July 1996 world rentals' survey from the international property consultants, CBRichard Ellis which stated that Durban has the lowest rentals at \$94 / m^2 per annum and Harare was close by at \$100/ m^2 per annum. Besides the fact that rents are some of the lowest in the world there are rent controls in Harare. Rentals therefore have affected the supply of office property in the long run more than the demand. The monthly rentals per square meter per month for central Harare from 1993 to 1998 are as shown in table 4.12 below:

TABLE 4.12: Average rentals per m^2 per month from 1993 to 1998.

YEAR	ESTIMATED AVERAGE OFFICE RENTAL PER MONTH
1993	Z$45
1994	Z$55
1995	Z$60
1996	Z$65
1997	Z$85
1998	Z$120

Source: CBRichard Ellis Property Index - "REPI",1998, Harare

The sudden increase of office rentals from 1997 to 1998 is a result of the depreciation of the Zimbabwean dollar against other major currencies by more than half since November of last year up to August 1998. Some of the respondents also argued that rental levels are a function of demand rather than a factor affecting demand. Figure 4.20 on page 81 shows the distribution of average rentals within the CBD of Harare. The highest rentals for office space are achieved along First Street whilst the lowest rentals for office space are achieved along Charter Road

OFFICE RENTALS PAYABLE PER M^2 BY GEOGRAPHICAL LOCATION

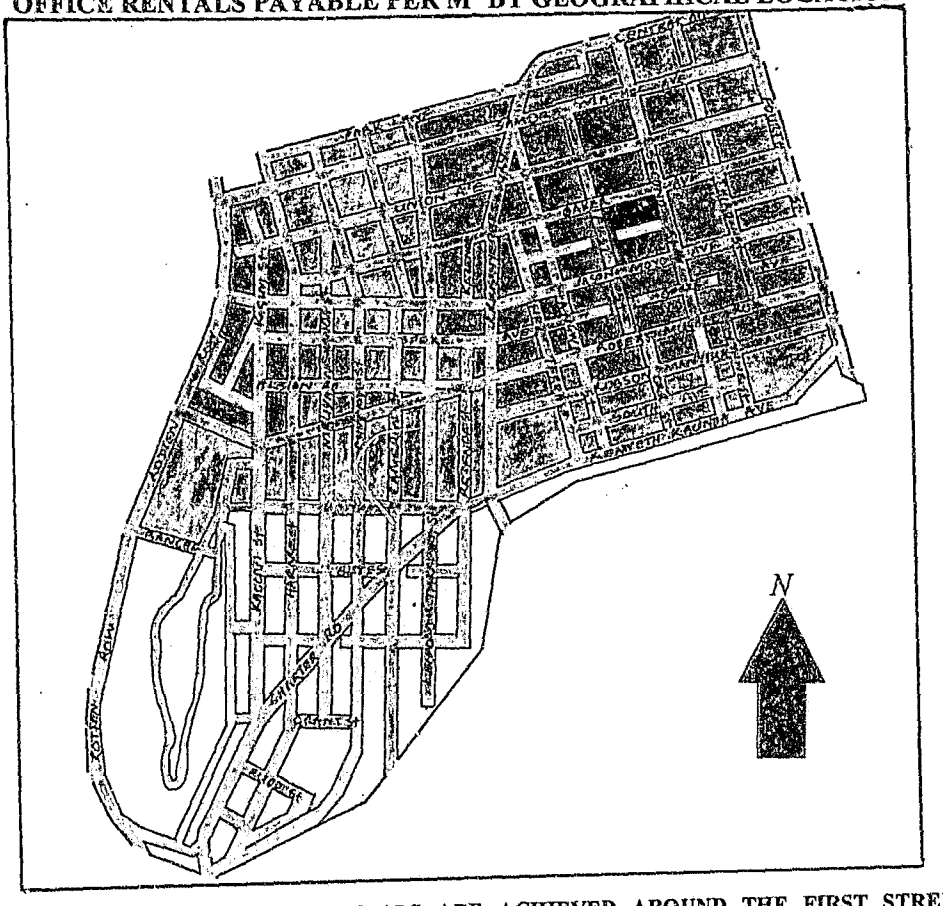


FIGURE 4.20: THE HIGHEST RENTALS ARE ACHIEVED AROUND THE FIRST STREET MALL IN GREEN

LEGEND

- ZS110.00 TO ZS120.00
- ZS105.00 TO ZS110.00
- ZS100.00 TO ZS105.00
- ZS 90.00 TO ZS100.00
- PEDESTRIANISED FIRST STREET MALL
- TO BE PEDESTRIANISED GEORGE SILUNDIKA

Demographic factors (population and migration)

50% of the respondents considered this factor of importance in determining demand within the study area. With a population growth rate of 2.6% per annum and high levels of rural-urban migration the city of Harare is growing at an accelerated rate. However most respondents concurred that the real increase in office demand being experienced in Harare was a result of relocation of companies from Bulawayo, Zimbabwe's second capital city to Harare.

Most respondents gave the relocation of the parastatal Dairy Marketing Board (D M B) as a shining example. However it is believed that most firms had relocated fearing that the water problem in Bulawayo will get worse. With the inauguration of the Zambezi Water project, a pipeline from the Zambezi River will supply Bulawayo with water and the relocation it is believed will stop.

Professional expertise (increase in number of professionals)

This is one of the factors that were considered to have very little effect on the demand of office space in the central business district of Harare. Only 35% of the respondents agreed to the fact that an increase in the number of professional expertise has resulted in an increase in the amount of office space demanded within the study area. The 50% of respondents who disagreed indicated that several thousands of professionals were retrenched between the period 1993 and 1998 as companies streamlined their workforce in order to be competitive. These were some of the effects of the economic structural adjustment programme (ESAP).

Efficiency of building

Only 20% of respondents suggested that the efficiency of a building had an effect on the demand for office space in central Harare. They argued that some properties are underdeveloped such that the building structure occupies a small percentage of total area of the stand. This they argued increases the total operating cost to the tenant since the costs of maintaining the landscape features is quite high and that this will be reflected in the higher rentals the tenant is required to pay by the landlord. However the

other 40% of respondents argued that the efficiency of building is not a critical factor affecting demand within the study area. It affects supply more than demand and since town planning issues (bulk factors, floor area ratios and coverage) have to be strictly adhered to during construction it is not a factor to consider in the study area.

Turnover

Changes in disposable income can have positive or negative effects on the demand of office related activities and thus have an indirect effect on the demand of office space. Only 20% of the respondents agreed that disposable income has a positive effect on the demand of office space within the study area. However 50% disagreed with the fact that disposable income has a direct effect on the demand of office space. They argued that the effect on demand is long term and indirect thus between 1993 and 1998 the disposable income component contributed very little to total demand of office space.

Any other factors

This was the last option out of the multiple-choice of factors affecting demand within the CBD of Harare. The aim was to give respondents the opportunity to generate other factors which affect the demand of office space within the study area and which have not been covered by the suggested factors. Since this was an open ended question, a number of ideas were expressed. Personal judgement was therefore used to condense these ideas into three unique and discernible categories and the responses have been tabulated below in table 4.13. All the 20 respondents participated with some respondents giving more than one suggestion.

TABLE 4.13: Respondents suggested factors affecting the demand of office space

FACTORS	% OF RESPONDENTS
A: Government policy	70
B: Infrastructure	60
C: Social problems	55

From the factors suggested by the respondents it could be observed that government policies (70%) have had a lot of influence on the demand of office space. Infrastructure provision (60%) and lastly social problems (55%) followed this.

Government policy

70% of respondents suggested that from 1992 the idea of indegenisation of the Zimbabwean economy became very popular. The aim of this government policy was to encourage the growth of small enterprises through the provision of loan facilities. The implications of this policy to office space demand was that there was an increase in the demand for high quality smaller office space of up to 200m^2 during the period 1993 to 1998 as new small enterprises sprang up from all directions within the study area.

Infrastructure provision.

60% of respondents concurred that between 1993 and 1998 a total of 211 000m^2 of office space was added into the city with no significant change in infrastractural provision notably roads, water and sewerage reticulation. There has been an increase in the level of congestion in the CBD both pedestrian and vehicular traffic. Whilst the provision of lettable office space has been occurring at a very rapid rate there has been no matching increase in parking bays and no noticeable improvement in the road system in general. There has been pressure on the water and sewerage reticulation systems as well. Only the telephone systems were upgraded to match the rapid development in office space.

Social problems

55% of the respondents suggested that social problems had some effect on the demand of office space within the study area. They argued that there was a decrease in the attractiveness of the CBD due to the presence of street kids, pavement traders and general vagrants. However the social problems were at their peak during the period 1993 to 1995 from that time onwards the social problems became less important as factors affecting the demand of office space. The reasons as put forward by the respondents are that the government realised the need to maintain the standards of the city centre such that new laws were promulgated. All pavement traders were encouraged to use centralised facilities constructed specifically for their use and most

street kids were taken off the streets by the social work department to training schools were they are taught technical courses like metal work and woodwork.

Question 4(a): The factors that are believed to have affected the supply of office space in the CBD of Harare.

This question sort to identify those factors that have affected and supply of office space within the central business district of Harare. The respondents were asked to indicate the extent to which they agree or disagree to the effect on supply by each factor. A total of 10 alternative factors were given and numbered from A to J as shown in table 4.14 below. All 20 respondents responded to this question. (Note: a multiple choice of suggested answers was allowed).

TABLE 4.14: Respondents to factors affecting supply.

FACTORS	AGREE	NEUTRAL	DISAGREE	TOTAL SCORE
A.	18	2	0	58
B.	15	3	2	53
C.	0	6	14	26
D.	8	2	10	38
E.	11	5	4	47
F.	10	2	8	42
G.	15	4	1	54
H.	11	7	2	49
I.	17	1	2	55

*SCORE FACTOR= (3*AGREE+2*NEUTRAL+1*DISAGREE)*

KEY.

A. Availability and cost of land
B. Rent control
C. Vacancy factor
D. Change in technology
E. Cost of building materials
F. Role of developer
G. Regulatory policies
H. Inflation
I. Availability of finance

From the responses above it was realised from the **" agree"** responses that alternative A which represents availability and cost of land was the most dominant factor affecting

the supply of office space in central Harare. It was followed by alternative I (availability of finance), alternative G (regulatory policies), alternative B (rent control), alternative H (inflation), alternative E (building materials), alternative F (role of developer). The factors with the lowest response rates were alternative D (change in technology) and alternative C (vacancy factor).

Adopting our bench mark of minimum 50% **"agree"** responses to a factor out of the total number of responses to a question as representing significant level of importance for further consideration, it is realised that seven factors showed up to be of significance as factors affecting supply within the study area with 50% or more responses. Whilst the remaining two factors had little impact on the demand of office space with a response rate below the minimum 50% of the responses to the question. The responses are shown graphically as in figure 4.21below.

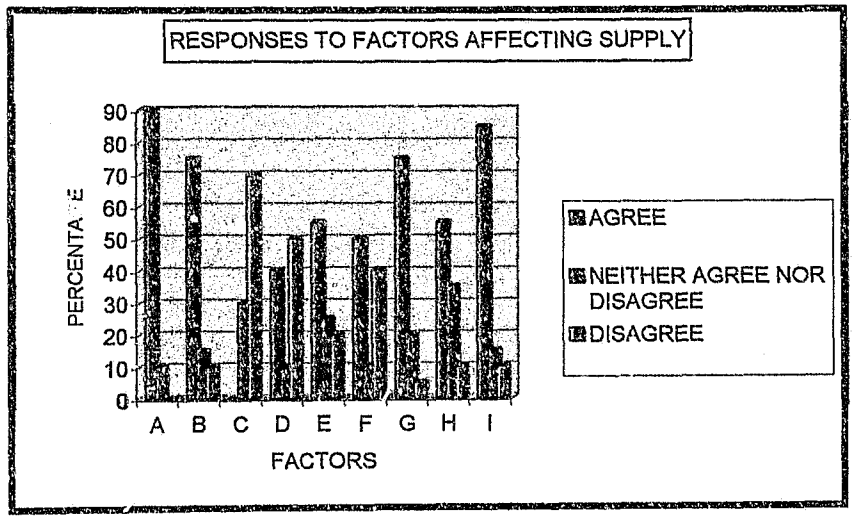


Figure 4.21: Percentage of respondents for each factor of demand within the CBD of Harare.

On the issue of the level of impact of the chosen factors the following responses were obtained. In order to be able to analyse the impact, weights were given to the responses in the following order.

AGREE = 2, NEITHER AGREE NOR DISAGREE = 0, DISAGREE = -2.

Table 4.15: Weighted level of impact of the factors descending order.

FACTOR	AGREE	NEUTRAL	DISAGREE	WEIGHTED EFFECT
A	36	0	0	36
I	34	0	-4	30
G	30	0	-2	28
B	30	0	-4	26
H	22	0	-4	18
E	22	0	-8	14
F	20	0	-16	4
D	16	0	-20	-4
C	0	0	-28	-28

Using our benchmark of a total weighted impact equal to or greater than the maximum number of respondents to a question as representing a factor of significant impact. It is clear from table 4.15 above that respondents do not perceive the impact of the factors C (vacancy factor) and D (change in technology) as of significance. Whilst on the other hand factors A (availability and cost of land) and I (availability of finance) are perceived to have the greatest effect on the supply of office space within the study area.

4(b): Reasons for the decisions taken by respondents.

The following is an analysis of each factor affecting the supply of office space in the CBD of Harare and the reasons given by the respondents as to why it is of great significance or why it is not significant at all.

Availability and cost of land

90% of respondents agreed that there is a critical shortage of land for office development within the study area such that good sites are hard to come by. They a firmed that some undeveloped sites are owned by absentee landlords especially of Asian origin who are keeping them for speculative reasons. The respondents also agreed that due to the shortage of land the cost of land is extremely high within the study area. Some of the average prices of land for each year from 1993 to 1998 are as shown in table 4.16 below.

Table 4.16: Average cost of land.

YEAR	AVERAGE PRICE PER M²
1993	Z$8000
1994	Z$7500
1995	Z$6500
1996	Z$6400
1997	Z$6500
1998	Z$8400

Source: Knight Frank Zimbabwe, Property Report, July 1998

However from the personal interviews carried out with the senior planners of the Harare city council it was revealed that the city planners are aware of the shortage of land within the CBD of Harare and a new development plan, Local Plan 22 was promulgated and became operational in 1995. The new local plan aimed at increasing the amount of office space laterally and vertically. Laterally the CBD will be allowed to expand into its neighbouring areas like the Avenues area were most flats are being converted to office use. Vertically the bulk factors will be increased from their present level this will be discussed in more detail under **"regulatory forces".** Shortage of land for office development is still a major factor affecting the supply of office space within central Harare.

Rent control

From the analysis of its effect on demand it was realised that rental levels within the study area are some of the lowest in the world and that there is an effective rent control system within the study area. 75% of the respondents agreed that the rental controls have a negative effect on the supply of office space, it has a direct effect on the returns from office property investments such that investors prefer to invest in stocks and other forms of investment. This has a negative effect on the supply of office space.

Vacancy factor

70% of the respondents disagreed with the statement that the vacancy factor has an effect on the supply of office space within the study area. They all concurred that there is a very low vacancy rate within the study area averaging 1.2% such that there is an

under supply of office space within the study area. At that average there is no space for those firms that want to expand, relocate or move into the study area.

Change in construction technology

Again 50% of the respondents disagreed with the statement that changes in construction technology have had an effect on the supply of office space within the study area. Changes in technology speed up the rate of construction and reduce costs however this takes place over a long period of time, and between the period 1939 to 1998 this factor was very insignificant in affecting the supply of office space within the study area.

Cost of building materials

55% of respondents agreed that the cost of building materials has an effect on the supply of office space within the study area. They argued that since 1993 the cost of building materials has been increasing since most of the materials are imported from other countries. This had an effect on the supply of office space within the study area.

Role of the developer

50% of the respondents agreed that the developers played a major role in affecting the supply of office space within the study area. Since 1993 there has been speculation that there would be an access of supply over demand of office space in each successive year up to 1998. This has affected the feasibility of office property development as most developers have been sceptical about the situation. This it has been argued by some respondents is the reason why there has been a continually very low vacancy rate within the CBD of Harare. However the yearly increase in the cost of building materials has also had an effect on the financial feasibility studies of a number of projects. Many have been abandoned, as they were considered too costly.

Regulatory policies

Respondents stated that the city of Harare has some of the most stringent development regulatory polices in Africa. 75% of the respondents agreed that the regulatory policies have had an effect on the supply of office space within the study area especially between 1993 and 1995when the new local plan 22 was put into effect. The respondents argued that during the period 1993 to 1995 there was a critical shortage of land for office development due to stringent zoning and bulk factor allowances. However the respondents and the city of Harare town planners who were personally interviewed concurred that controls are essential to prevent the crumbling of the infrastructure services. The implementation of local plan 22 brought relief to office developers mainly due to the fact that it increased the bulk factor within the CBD for each respective zone and thus it allowed for vertical expansion of office space as shown in table 4.17 below.

TABLE 4.17: Local Plan 22 changes in bulk factor.

ZONE	OLD SCHEME BULK FACTOR	LOCAL PLAN 22 BULK FACTOR
1A1	5.0	7.0
1A	4.0	5.0
1B	4.0	5.0

Zones 1A1, 1A and 1B are for commercial use, that is office and shops but office space occupy more than 70% of the total floor area. The increase in bulk factor allowed for an increase in office space supply. However despite the increase in bulk factor in 1995 the shortage in office space is still evident as shown by the responses to question two under section two on the vacancy and occupancy rates within the study area.

Inflation

55% of respondents agreed that the general increase in price levels has had an effect on the supply of office property within the study area. At no point in time between the period 1993 to 1998 was the rate of inflation lower than 20%. There is a direct relationship between the rate of inflation and cost of building materials such that high inflation causes an increase in the cost of construction materials and this affects the feasibility of most office development projects. Not only does the cost of building

materials go up but also the cost of finance or borrowing through increases in interest rates.

Availability of finance

85% of the respondents agreed that the availability of finance is another major factor that has affected the supply of office supply within the study area. Very high interest rates of about 35% are being charged by financial institutions that makes it difficult for small office property developers to be able to achieve reasonable returns on their investments. Hence the respondents agreed that within the study area only pension fund authorities and insurance firms dominate the commercial office development scene. Of the total commercial office space of 211 000m^2 constructed between 1993 and 1998 pension fund authorities and insurance firms contributed 156 250m^2 thus 75% of the total floor area within that period. These have their own sources of funds and do, not have to relay on borrowing from other institutional financiers.

Any other factors

This was the last option out of the multiple choice of factors affecting the supply of office space within the CBD of Harare. The aim was to give respondents the opportunity to generate other factors which affect the supply of office space within the study area and which have not been covered by the suggested factors. Since this was an open ended question, a number of ideas were expressed.

Personal judgement was therefore used to condense these ideas into four unique and discernible categories and the responses have been tabulated in table 4.18 below. All the 20 respondents participated with some respondents giving more than one suggestion.

TABLE 4.18: Suggested factors affecting supply of office space.

FACTORS	NUMBER OF RESPONDENTS
Government macro-economic policies	15
Rates and taxes	14
International economic trends	15
Office space refurbishment	11

Government policies

75% of the respondents agreed that the government macro-economic policies have an indirect effect on the supply of office space within the study area. One such macro-economic policy that was stated by the respondents is the tax on pension fund profits introduced in July of 1997. Respondents concurred that such a tax reduces returns expected from commercial property hence few investors invest their money in commercial property and thus the provision of office space is limited. However the respondents also stated that previously the government had required institutions to invest 55% of their assets in government stocks, public utility stocks, municipal stock and approved loans. The lowering of the prescribed asset ratio by the government from 55% to 45% has increased the funds available for discretionary investment such as commercial office property.

Rates and taxes

70% of the respondents agreed that the rates and taxes charged by the local authority have an effect on the supply of office space. In addition to the rates and taxes Zimbabwe has some of the highest tax rates on both individual income and company income or returns in the world and this discourages investment in general and office space development in particular. It is common practice within the study area and elsewhere that landlords or property investors pass on to the tenant any increase costs due to an increase in rates and taxes. The respondents argued that the resultant increase in rentals reduces the attractiveness of the property and ultimately supply will be reduced.

International / local economic trends.

65% of the respondents agreed that changes in the international and local economic environment have an effect on the office space supply within the study area. Whilst changes in international economic trends had long term indirect effects on the supply of office space within the study area like the current economic problems in Asia and other major economies, changes in the local economy had a direct and short term effect within the period 1993 to 1998. The depreciation of the Zimbabwean dollar against major currencies like the United States Dollar in 1997 had an effect on the cost of imported building materials. This affected the supply of office space within the study area to such an extent that new office developments for that year had a combined total of only 4 000m^2.

Office space refurbishment.

55% of the respondents concurred that due to the high demand for office space within the study area owners of older office properties have began to refurbish their properties so that they can compete with the new high quality properties. Refurbishment has resulted in an increase in A class office space as owners refurbish office space to meet the needs of bigger firms and as small firms expand. Some owners have added on site parking in those building which lacked this facility.

4.5.3 Section three: Current office developments in the CBD of Harare

Question one: current developments the respondents' firm is involved in.

This question was asked to try and project the trend of office space supply within the CBD of Harare. Only three respondents responded to this question and the responses are as shown in table 4.19 below.

TABLE 4.19: Current developments taking place in the CBD of Harare.

Name of developer	Name of development	Street location	Date of commencement	Date of expected completion	Expected lettable space
A. Joina development company.	Joina development	Jason Moyo Avenue	1998	2000	29000m^2
B N/A	Angwa City Centre	Angwa Street	1998	2000	26000m^2
C National social security association.	NSSA Phase two.	Second Street	1997	1999	28000m^2
D Local authority pension fund.	LAPF Centre	Jason Moyo Street	1998	2000	8500m^2

From the table above it can be observed that four major office developments are taking place within central Harare. The high average floor space of the four developments indicates the effects of the increase in bulk factor as a result of the new local plan 22 of 1997 mentioned earlier. Developments A, B, C are for A class office space and development D is for B class office space. Figure 4.22 on page 95 shows the physical locations of the current developments taking place in central Harare.

Question 2: Any planned office developments that the organisations will be involved in.
This question was asked to solicit information on any future office developments that might take place which are currently on the design table. The aim was again to determine the future status of the office market in central Harare. Only one firm out of the twenty firms responded to this question however it should be noted that this question was sensitive to some respondents and some information might accordingly have been withheld.

The details of the proposed development are as follows:

Name of developer:	**Central African Building Society**
Name of office development:	**CABS centre.**
Street location (address):	**Samora Machel Avenue**
Date of commencement:	**1999**
Expected completion date:	**2000**
Expected lettable space:	**11500m^2**

CURRENT OFFICE DEVELOPMENTS WITHIN THE CBD OF HARARE

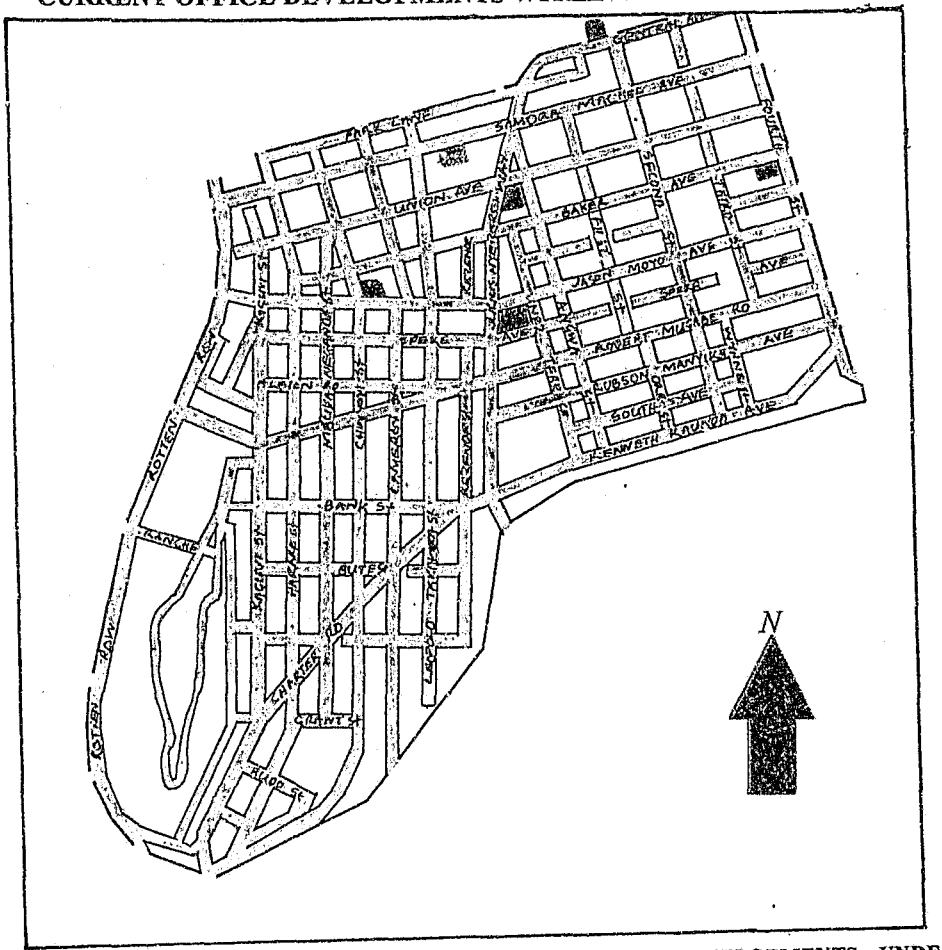


FIGURE 4.22: THE LOCATION OF CURRENT OFFICE DEVELOPMENTS UNDER CONSTRUCTION WITHIN THE CENTRAL BUSINESS DISTRICT OF HARARE

LEGEND

- NATIONAL SOCIAL SECURITY BUILDING
- ANGWA CITY CENTRE
- JOINA DEVELOPMENT
- CENTRAL AFRICA BUILDING SOCIETY CENTRE
- LOCAL AUTHORITY PENSION FUND

Figure 4.23 below shows the total amount of office space developed for each year from 1993 to the year 2000.

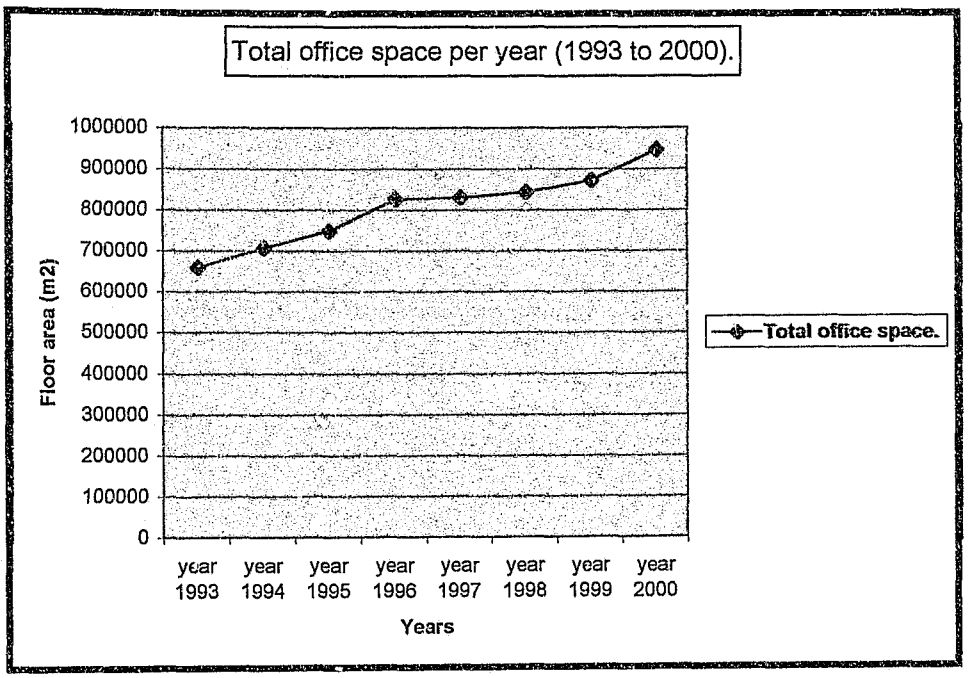


Figure 4.23: The total amount of office space developed per year from 1993 to 2000 (1999 and 2000 projected).

From figure 4.23 above it can be observed that the total lettable office floor area will increase to 948 000m^2 in the year 2000. In 1999 a total of 28 000m^{2}and in the year 2000 a total of 75 000m^2 of office space is expected to be in the market. The supply therefore of commercial office space will increase to a great extent.

Question 3: The expected effects on supply and demand of the current and proposed developments stated in question one and two above.

This question was aimed at verifying the effects after completion of the developments mentioned in question two and three above on the supply and demand of office space within central Harare. Three suggested options were provided and they are that: (a) supply will be higher than demand (b) supply will be equal to demand (c) supply will be lower than demand. All the twenty respondents responded to this question and the results are as shown in figure 4.24 below.

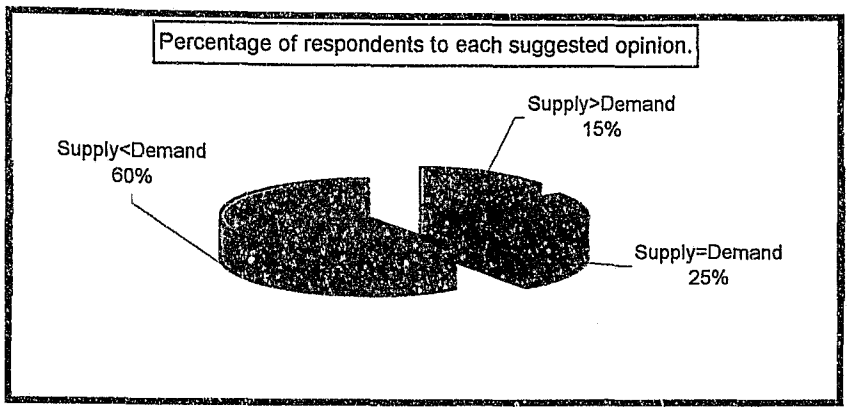


Figure 4.24: Percentage of respondents to each suggested opinion.

60% of the respondents suggested that the supply of office space will still be less than the demand in the year 2000 despite the fact that a projected 75 000m^2 will be available in the market. The shortage of office space currently existing within the study area will therefore continue into the 21st century.

4.6 RESPONSES TO FORMAL AND INFORMAL INTERVIEWS

Role of institutional property investors within the study area

Informal interviews conducted revealed that institutional investors mainly pension funds, insurance and assurance firms dominate commercial office development within the CBD of Harare. It was also noted that building societies, for example the Central African Building Society and Founders Building Society, had some input in commercial office development.

The institutional investors interviewed agreed that changes in the money market interest rates have an effect on office development. They stated that a decline in money market interest rates tends, in the long-run, to cause property values to increase as the cost of capital is reduced and non-institutional players can borrow relatively cheaply plus institutional investors might divert funds to property investments were yields are relatively better. This results in an increase in the supply of office space. This is the kind of situation that prevailed in 1995 and 1996 when there was a lot of office

construction activity with a combined total office floor space for the two years of 120 000m2 being developed. However the investors stated that the reverse is true also if money market interest rates rise, this they argued attracts institutional funds to the money market away from the property market. This kind of situation occurred at the end of 1996 when there was minimal investment in office property in the following year 1997, with only 4 000$m^2$of new office space being developed. However in 1998 13 500$m^2$of office space was available on the market and the projected office space available in the year 2000 is 75 000m^2. Investors project increases in inflation rates so they have invested their money in commercial property as a hedge against the rising inflation.

The institutional investors interviewed acknowledged that following world trends suburban office space development is on the increase within Harare but they argued that the prime areas of the Central Business District of Harare still attract the highest institutional investment in spite of the fact that congestion and to some extent crime are on the increase.

The institutional investors supported the argument that the lowering of the prescribed asset ratio from 55% to 45% in 1997 led to an increase in the amount of office space available on the market. Most of the institutional investors have actually increased their property portfolios from an average of 35% to a new average of 40% of the total assets held. Internationally institutional norms would suggest that property should amount to between 8% and 12% of overall portfolio values (1997 Richard Ellis Property Index - "REPT"). However this desirable ratio is, of course, for institutions or large-scale investors with a much wider choice of asset classes spread over different investment markets. The investors interviewed stated that there is only the money and stock markets with which to compare property within the study area and therefore no investment portfolio of any meaningful size can do without real estate holdings.

The city of Harare town councils' views towards office space development within the study area

One of the senior planners at the Harare city council stated that the city council aimed at insuring the viability and vitality of the city centre and to achieve this goal there was a need to ensure that the centre remains attractive for commercial developments especially office developments. Three major physical plans were formulated in recent years and these are:

1) Harare combination master plan of 1989

The Harare combination master plan, a broad development framework was conceptualised in 1982 and was finally approved by the Minister of Local Government, Rural and Urban Development in 1992. The town planners interviewed stated that the combination master plan includes 11 local authority areas surrounding Harare like for example Ruwa, Mazowe, Norton and Arcturus. Covering an area of 4571 square kilometres it has increased the sphere of influence of Harare and thus of the CBD of Harare. They argued that since Harare is at the centre of these smaller towns there has been a tendency for firms relocating to the CBD of Harare (see Figure 4.25 and 4.26 on pages 100 and 101 respectively) of the area covered by the combination master plan. The CBD is therefore bound to expand laterally and vertically and Local plan 22 discussed on page 102 has already taken this into account in its development guidelines.

2) Local plan 17 of 1990

Local plan 17 adopted in 1990 covers a total area of 68.91 hectares covering 6.47 percent of the central business district. It replaced the phase 2-resubmission schemes that have been operational since 1973. The town planners stated that local plan 17 has tremendous effect on the supply of office space within the CBD of Harare. Two major office developments have already been constructed in the Kopje area bringing 9 000m^2 on to the market in 1994 and 10 000m^2 in 1998.

AREA COVERED BY THE HARARE COMBINATION MASTER PLAN (HCMP)

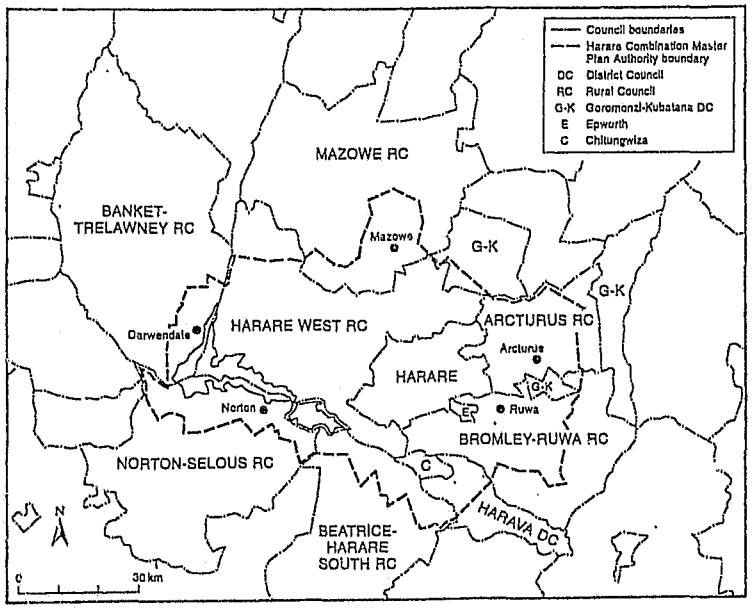


FIGURE 4.25: THE HCHPA COUNCIL BOUNDARIES FROM SURVEYOR GENERAL 1988

SOURCE: HCMP PREPARATION AUTHORITY (1991)

THE HARARE COMBINATION MASTER PLAN

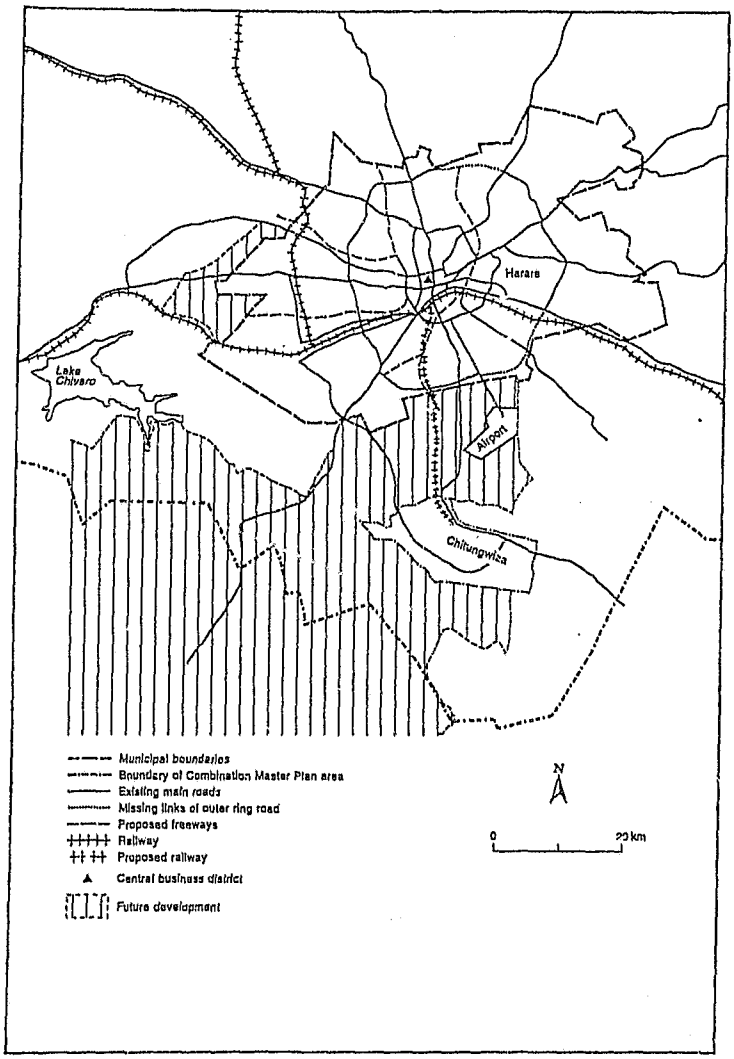


FIGURE 4.26: THE HCMP AREA; KEY PROPOSALS

SOURCE: HCMP PREPARATION AUTHORITY (*1991*)

Commercial office developers once neglected this area preferring the North-eastern side of the CBD especially the area around First Street. But this is now changing as developers focus their attention on the Kopje area, the area that marked the beginning of the CBD of Harare. This has increased the amount of office space available.

3) Local Plan 22 of 1995

Local plan 22 adopted in 1995 covers a total area of 996,90 hectares covering 93,23% of the CBD land of Harare, it replaced the phase 1 second resubmission schemes which have been operational since 1973. However objections have been raised by commercial property developers who have argued that the local plan 22 is too rigid, unresponsive and a hindrance

However objections have been raised by commercial property developers who have argued that the local plan 22 is too rigid, unresponsive and a hindrance to the aspirations of commercial property developers. The changes and adjustments by LP 22 are:

- Increase in Bulk factor, which advocates for concentration and densification of development and means that Harare, should develop going upwards. Bulk factor or the floor area factor is the proportion of the stand area that can be developed into floor space. For example a stand in Zone 1A1 which had been raised from a bulk factor of 5.0 to 7.0 means that a stand of 5 000m^2 can have 5 000* 7.0= 35 000m^2.

- Full development potential rating system, which stipulates that land not fully developed, will be rated in the same way as fully developed stands. A landowner whose stand is not developed would pay the same rates as a fully developed stand. The city planners argued that there is only 60% of bulk factor utilisation in the CBD yet some possible office and shop tenants were failing to find suitable accommodation. LP22 is meant to discourage sitting on land for speculative reasons and not developing the land to its full potential so as to create an artificial shortage of office and shop space in the CBD.

- Conversion of residential flat ground floors within the transitional zone of the Avenues area to the north of the CBD to office use.

- Pedestrianisation (creating a pedestrian only street) has the effect of attracting commercial developments into the city. Planning authorities are proposing to pedestrianise George Silundika Avenue, which forms a cross-junction with the first street mall (see Figure 4.20, page 81). The town planners argued that the pedestrianisation would curb any Northward growth of the CBD and form an almost permanent commercial office hub of the Central Business District of Harare.

CHAPTER FIVE

OBSERVATIONS

5.1 HOW THE OBJECTIVE AND AIMS OF THE RESEARCH HAVE BEEN MET

The main objective of this research was to analyse the various factors affecting the demand and supply of office space as pertains to other parts of the world especially South Africa, Europe and North America and compare them with the factors affecting demand and supply in the central business district of Harare to see if the factors are similar and to identify and highlight any new or unique factors that may be identified from the study area. The research identified and discussed thirteen factors that affect the demand of office space and nine factors that affect the supply of office space.

The aims of the research were to examine: the role of institutional investors in office property development within the CBD of Harare, why investors chose to invest in office property in the CBD of Harare and also why office tenants prefer the CBD, if the supply of office space meets the demand, the city of Harare town council's policies on commercial office developments in the CBD of Harare and to assess whether or not these relate to the objective of the private sector.

5.1.1 Personal data of the respondents

Analysis of the personal data of the respondents who answered the questionnaire on behalf of their respective organisations indicated that they are people who hold significant positions in their companies and are likely to be aware of the effect of the various factors affecting the supply and demand of office space within the CBD of Harare. Also their levels of experience were high enough to enable them to express informed opinions about the state of office property market in the CBD of Harare.

5.1.2 Classes and total sizes of office space under the respondents' responsibility

The study has revealed that the predominant class of office space within the CBD is class A with an estimated total lettable office floor space of 329 400m^2 out of a estimated total lettable office floor space of 845 000m^2, which indicates that most buildings within the CBD have been recently constructed. The study has also revealed that office development activity is concentrated within the CBD of Harare and that there are very few office development activities outside the CBD Harare. It was noted that the estimated total lettable office space outside the CBD constitutes less than 10% of the estimated total lettable office space within the whole of Harare. It has been observed that three firms out of the twenty interviewed manage almost three-quarters of the total lettable office space within the study area.

5.1.3 Opinion on the current availability of office space.

Through this study it has been realised that the reported access of demand over supply of office space is actually a reality. The majority of respondents indicated that there is a shortage of office space within the study area this has been the trend since 1993 as shown by the fact that all new office buildings were pre-let before completion. With an average vacancy rate of about 1% and an average occupancy rate of 99% between 1993 and 1998 the vacancy and occupancy figures also support the fact that the demand for office space is greater than supply within the study area.

5.1.4 Factors affecting the demand of office space within the CBD of Harare.

The respondents saw eight out of the thirteen factors identified as factors affecting the demand of office space as being of relevance in the study area. The greatest effect on demand was brought about by shortage of parking space within the study area. Other factors affecting the demand of office space within the study area which were considered to be and of importance were:

- Government policy

  The policy of 'indegenisation' of the Zimbabwean economy introduced in 1992 encourages the growth of small enterprises through the provision of loan facilities.

Its main aim is to enable Zimbabwean companies owned by Zimbabweans to compete with international companies operating in Zimbabwe. The research has revealed that its implication on office space demand is that it has increased the number of office-related activities and thus the demand for office space. However it was revealed that the increase in demand is only for smaller office space of about $200m^2$ and that the policy has negatively affected international investor confidence leading to capital flight out of the study area and Zimbabwe as a whole. It was noted that international investors look at the policy as a plan by the government to take over private firms since most of the people who get the loan facilities are relatives of the government ministers.

- Social problems

The research revealed that before 1990 there was no problem of street kids in Harare. With the introduction of the economic structural adjustment programme in 1990 the gap between the rich and the poor increased within the study area and Zimbabwe as a whole. The number of street kids and vendors increased and reached its peak between 1993 and 1995. During this period the CBD of Harare deteriorated in terms of cleanliness and general order as a result of neglect from the city local authority which was involved in internal power struggles. The research revealed that new laws were promulgated in 1996 to curb the street kids and vendor problems and these came in the form of registration of all street vendors and the issuing of permits to each vendor. All street kids were encouraged to go to special schools for training in technical subjects.

- Infrastructure

The research revealed that there is a problem of infrastructure provision within the CBD of Harare. Like in most CBDs in cities within third world countries the study revealed that Harare's CBD has no adequate provision of water (see Figure 27, page 107) and sewerage reticulation systems and the road network is inadequate. The infrastructure provision is not coping up with the rapid construction activities going on within the CBD. The study revealed that lack of these infrastructure activities has an influence on the demand for office space within the study area.

WATER CRISIS IN HARARE

THE CARTOON ILLUSTRATES THE CURRENT SITUATION IN HARARE, HIGH CORRUPTION LEVELS BY THE EXECUTIVE MAYOR SOLOMON TAWENGWA



FIGURE 5.1: WHILST THE WATER RETICULATION SYSTEM IS DETERIORATING IN HARARE DUE TO THE AGEING OF WATER PIPES. THE CITY COUNCIL IS BUSY CONSTRUCTING A Z$ 30MILLION (APPROXIMATELY) HOUSE FOR THE CITY'S EXECUTIVE MAYOR SOLOMON TAWENGWA

SOURCE: THE HERALD, OCTOBER 21 1998

Of these three factors factor A (government policies) was considered to have the highest impact on the demand of office space within the study area.

5.1.5 Factors affecting the supply of office space within the CBD of Harare.

The analysis of the factors affecting the supply of office space within the CBD of Harare shows that seven out of the nine factors affecting the supply of office space identified were of importance. The most important effect on supply was brought about by the shortage of land for office developments within the CBD. Other factors affecting the supply of office space that were considered to be of importance were:

- Government macro-economic policies

  The research revealed that government macro-economic policies like the tax on pension fund profits introduced in July of 1997 have a negative effect on the supply of office space within the CBD of Harare. Such a tax it was noted reduces returns expected from commercial property and this discourages institutional investors to invest in office property. Under such stringent government policies most investors would prefer to invest their money in the money market were the returns are higher and money can be pulled out easily. Government policies therefore have a negative effect on the supply of office space within the study area. The research also revealed that government policies have reduced investor confidence in the economy and this is discouraging long term investment in property by international investors.

- Rates and taxes

  It was noted that the high rates and taxes charged by the local authority have a negative effect on the supply of office space within the study area due to the fact that the returns from commercial property investments are reduced. It was revealed that Zimbabwe has some of the highest rates and taxes (on both individual income and company income) in the world and this is discouraging local and international investors.

- Office space refurbishment

  The research revealed that there is a high demand for office space such that owners of older office properties have began to refurbish their properties so that they can compete with the new high quality properties. The research also revealed that refurbishment has resulted in an increase in A class office space. Unlike in other third world cities were office developments within the central business districts are being abandoned as developers move to out of town office parks, Harare's office developers refurbishing their properties to attract tenants.

- International/ local economic trends

  It was observed that international economic trends have long term indirect effect on the supply of office space within the study area. Local economic trends on the other hand like the depreciation of the Zimbabwean dollar due to lack of investor confidence in the economy have a direct and short-term effect on the supply of office space within the study area. The depreciation of the Zimbabwean dollar increases the cost of imported construction materials and thus negatively affecting the financial feasibility of any commercial office development. The research revealed that government corruption is the main factor that is causing the low investor confidence in the economy and this it should be noted is a common feature in most third world countries.

Out of these four factors factor A (government macro-economic policies) was considered to have the most impact

5.1.6 Current and future office developments within the study area

It was discovered that currently there are only four major commercial office developments proposed to take place within the study area with a combined total floor area of 91500m^2 after completion and there is only one planned development which is expected to have a total floor area of 11 500m^2. In 1999 there will be an addition of 28 000m^2 of office space and in the year 2 000 it is expected that there will be an addition of 75 000m^2 of office space in Harare central.

The study has also revealed that the situation of a shortage of office space as stated in section 5.3 is expected to continue into the 21st century despite the huge amounts of office space that will be on the market.

5.1.7 The role of institutional investors in office property development within the study area

The study revealed that institutional investors are the major players in the development of office space within the study area and these are mainly the pension funds, assurance and insurance firms. The institutional investors interviewed revealed that office property constitutes about 35% to about 40% of their total investment holdings. The reason for having such a high proportion of office investment to total investment is that there are very few alternative forms of investment since the Zimbabwean investment market is small and limited.

5.1.8 City of Harare town council's policies on commercial office space development

It has been observed that the city of Harare has already prepared two local plans (LP17 and LP22) and one master plan (Harare combination master plan) which are already operational within the CBD of Harare. These plans are there to guide the development of commercial properties within the central business district of Harare. The city planning authorities realised that there was a shortage of office space within the CBD of Harare and made provisions to allow for an increase in office space through the local plans. However it has been observed that the expected effect of increasing office space has been minimal since the implementation in 1990 as for local plan 17 and 1995 as for local plan 22.

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CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

In line with the main objective of this research work i.e. (to determine the factors affecting the demand and supply of office space within CBDs of cities in Europe, South Africa and North America through literature review and use them as a basis for comparison to the actual factors affecting demand and supply within the study area), it has been established that the factors affecting the demand and supply of office space in the study area are not different from the factors affecting demand and supply of office space in Europe, North America and South Africa which were identified in the literature. It is important to note that, it is the factors that were identified in the literature that were largely seen by respondents as affecting the demand and supply of office space within the study area. It also emerged from the research that there is a critical shortage of office space within the study area with an average void rate or vacancy rate of 2%. Office tenants have very little choice of which office space to occupy because the supply is limited.

Of the thirteen factors affecting the demand for commercial office space identified in the literature review eight were considered by the respondents to be of importance as factors affecting the demand of office space within the study area. These factors can be prioritised according to effect and impact on office demand within the study area: availability of parking, accessibility and communication, proximity of complementary activities, increase in the size of the tertiary sector, availability of finance, external and internal appearance of building, high inflation, demographic (increase in population and immigration). Five of the factors identified were of little significance in terms of impact and effect on demand of office space within the study area and these were: international economic trends, increase in professional expertise employed, rent levels, efficiency of building.

The research facilitated the identification of other factors affecting the demand of office space which are unique to the study area and these were according to their impact and effect on demand: government policy, social problems and infrastructure provision problems. The main factor affecting the demand of office space within the study area is the shortage or unavailability of parking space.

Of the nine factors that were identified in the literature review as factors of great significance in affecting the supply of office space, seven have been identified by the respondents as factors of significance in affecting the supply of office space within the study area. These factors can be prioritised according to their impact and effect on office space supply and are as follows: availability and cost of land, availability of finance, regulatory policies, rent control, high costs of building materials, inflation, the role of the developer. Those factors that were considered to be of little significance in the study area were change in technology and the high vacancy factor.

Other factors affecting the supply of office space within the study area were also identified and these can be ranked according to their impact and effect on supply of office space as follows: government macro-economic policies, high rates and taxes, office space refurbishment and international economic trends. Of all the factors affecting supply of office space identified in the research, shortage and high costs of land is the main factor affecting supply of office space.

Another significant outcome of the survey is the sharp contrast between the significance of factors in the literature and those established in the survey. It was noted in the literature review that a high vacancy factor is an important factor affecting the supply of office space however within the study area this factor is of very little significance due to the very low average vacancy rate of 2% identified in the study area. Rentals were considered to be of great significance as a factor affecting demand in the literature but in the study area rentals are not that significant in affecting the demand of office space since they are controlled by the Rent Board. Government policies and their effect on demand and supply of office space were considered in the literature review as of little significance but in the study area government policies have had tremendous effect on

the demand through the indegenisation policy and supply through the taxing of pension funds and lowering of the prescribed asset ratio.

In line with the aim of identifying possible steps that need to be taken to alleviate the shortage of office space within the study area the following recommendations have been made.

6.2 RECOMMENDATIONS

The research generated so far confirms the notion that there are a number of factors affecting the demand and supply of office space within the study area and that there is a shortage of office space within the CBD of Harare. In order to alleviate this shortage a holistic approach that includes all the stakeholders in the built environment for example the town planners, property developers, institutional investors and real estate institute agents is necessary. However it should be noted that the recommendations should be implemented in the context of the whole economic framework.

Currently the infrastructure of the city of Harare is failing to cope with the demand from commercial developments. The water system is at the moment inadequate, but a new dam proposed to the north east of the city near Murehwa growth point should alleviate the problem. However it is believed that if Harare's long-term water needs are to be addressed use of the Zambezi water is the long-term answer.

Since the early 90s there has been growing levels of congestion within the study area such that there is a need for improvement in the road system. The reason why the road network is overloaded in the study area is that there are no ring roads or bypass roads around central Harare all the traffic to the various parts of the country passes through the city centre. There is a need to provide freeways and more dual carriageways in Harare as a whole. Provision of one way streets as what has been done in most cities in the world like Johannesburg will increase traffic flow and thus reduce congestion. This is one objective of the Harare combination master plan mentioned earlier but up to now nothing has been done. The traffic noise within the study area has been a major problem to the tenants and the vibrations are damaging office properties.

Whilst the local plan 22 of 1995 focuses on an vertical and lateral form of development it is recommended that a more lateral approach to development could be of an advantage taking into account the fact that the infrastructure in central Harare cannot cope with the current commercial developments. Invasion of neighbouring areas to the CBD could also reduce the level of congestion within the CBD as commercial office and shop activities are spread over a wide area. Densification will worsen the current situation of congestion. It has been realised that office developers cannot fully utilise the maximum theoretical office development space because of the infrastructural problems.

The city centre's parking problem has been noted as a major factor affecting the supply of office space within the study area. There is therefore a need to provide multi-storey car parks or parkades whilst there is scarcity of land within the CBD for such developments the local authority should utilise the little space available. For example the Speke Avenue open car park could be turned into a multi storey car park and Angwa street bus terminus which is under-utilised at the moment could also be turned into a multi-storey car park. The advantage will be that all these locations are within the CBD. One question that immediately comes into mind is the question of capital resources. It is recommended that these parking facilities should be developed jointly by the city council and the private sector or by the private sector alone.

It is also recommended that the local authority should stipulate that any new office development should have provision for parking at the rate of one parking bay per hundred square metres of gross floor area of office space. Provision of parking space should not be seen only as a role of the public sector only as has been the case, the private sector should also play a major role. This has been done in other major cities of the world like Johannesburg and New York.

It was observed in the research that social problems had an effect on the demand of office space within the study area from 1993 to 1995 and that after this period the problem was reduced to very low levels. There is a need to ensure that the current situation of having vendors operating in one location and not in the streets is sustained and the programme of training streets k[illegible] also be supported with more funding

from the government and the donor community. It is recommended that there is a need to establish a department within the Ministry of Local Government Rural and Urban Development that specialises on the problem of street kids and vendor issues. The Harare city council has its own department but there is a need to have a broad national organisation framework.

6.3 AREAS OF FUTURE RESEARCH

Having established a number of major factors that have affected the demand and supply of office space within the central business district of Harare from 1993 to 1998 and that there has been a continual shortage of good quality office space within central Harare with demand exceeding supply. The impact of the various factors as well as scientific calculation of the losses or gains arising from under supply of office space to investors, local and national government as well as to society could be researched. Research could also be directed to the factors affecting supply and demand of commercial use thus offices and shops combined since the two uses could be housed in one building with offices at the top and shops at the ground floor. Research can also be directed at the factors affecting the supply and demand of other property sectors for example industrial properties. Having established that there is a shortage of office space research on how this can be alleviated can also be undertaken.

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APPENDIX A

COVER LETTER TO RESPONDENTS.

Date

Dear Sir/Madam

FACTORS THAT HAVE AFFECTED THE DEMAND AND SUPPLY PATTERN OF COMMERCIAL OFFICE SPACE IN THE CENTRAL BUSINESS DISTRICT OF HARARE FROM 1993-1998.

Stephen .N. Hove is a postgraduate student (Student number 9608832f) who is registered in the Department of Building and Quantity Surveying. He is conducting an investigation into the above-mentioned topic for his research project for a Masters Degree in Property Development and Management.

The office property market can be defined simply as the arrangement by which buyers and sellers of office property are brought together to determine a price at which a particular property can be exchanged. A number of factors therefore affect the demand and supply of office space. The purpose of this research is to obtain information on the factors that have affected the demand and supply of commercial office property space in the Central Business District of Harare.

You are assured that the information acquired will be treated in full confidentiality and used solely for the purpose of the research. The Department of Building and Quantity Surveying would be most grateful if you could complete the questionnaire, which is estimated to take approximately 15 minutes. The questionnaire will be left in your possession for a week after which the student will come and collect the completed questionnaire.

Thank you for the courtesy of your assistance.

Yours faithfully

Prof.R I Schloss.
Head of the Department
(Supervisor)

.....

Stephen N Hove
Postgraduate Student
(Researcher)

.....

APPENDIX B

QUESTIONNAIRE TO RESPONDENTS

GUIDELINES FOR THE COMPLETION OF THE QUESTIONNAIRE

The questionnaire has been divided into three sections. In each section, kindly tick the column that corresponds to your opinion on the question or write your opinion in the spaces provided.

SECTION ONE

Personal Data

1. Please state your position in your company?

.....

2. Please indicate how long you have been in the office property business in the order shown below?

(a) Less than 2years ☐

(b) 2-4 years ☐

(c) 4-6 years ☐

(d) 6-8 years ☐

(e) 8-10 years ☐

(f) 10 years and above ☐

3. What are the main functions of your organisation?

(a)	Property Management	
(b)	Property Valuation	
(c)	Estate Agency	
(d)	Property Development	
(e)	A combination of (please state)	
(f)	Others (please state)	

3. Please state the class of office property you deal with in the Harare Central Business District, as well as the total floor area of each category (Class is determined by construction quality, condition and appeal)

Office Property Class	Floor Area in Square Meters (HCBD)
Class A	
Class B	
Class C	
Total (all classes)	

4. Please state the size of your office portfolio holdings in the whole of Harare?

Office Property Class	Floor area in Square Meters
Class A	
Class B	
Class C	
Total (all classes)	

SECTION TWO

Demand/Supply of office space.

1. What is your opinion on the current availability of office space in the C.B.D of Harare? Is it:

   (a) Abundant in supply ☐

   (b) A balance of supply to Demand ☐

   (c) A critical shortage ☐

   (g) Other,please specify.....
   .....

2. Please enter in the boxes below the average vacancy rates and the average occupancy rates of your office property portfolio in the H.C.B.D from 1993 to 1998?

Year	Occupancy Rate(%)	Vacancy Rate(%)
1993		
1994		
1995		
1996		
1997		
1998		

3 (a) The flowing are the major factors that are believed to have affected the demand of office accommodation in the CBD of Harare. Please indicate the extent to which you agree or disagree with each.

Factors	Agree Strongly	Neither Agree nor Disagree	Disagree Strongly
a) Demographic factors			
b) Professional expertise			
c) Size of tertiary sector			
d) International economic trends			
e) Turnover			
f) Inflation levels			
g) Availability of finance			
h) Proximity of complementary activities			
i) Rental levels			
j) Accessibility & communication			
k) Availability of parking			
l) External & internal appearance of building			
m) Efficiency of building			
n) Any other 1. 2. 3.			

(b) Give reasons for your answers above...

.....

.....

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3 (b) The following are the factors that are believed to have affected the supply of office accommodation in the CBD of Harare. Please indicate the extent to which you agree or disagree with each.

Factors	Agree Strongly	Neither Agree nor Disagree	Disagree Strongly
a) Availability & cost of land			
b) Rental levels			
c) Vacancy factor			
d) Change in technology			
e) Cost of building materials.			
f) Role of the developer			
g) Regulatory policies			
h) Inflation levels			
i) Availability of finance			
j) Any other 1. 2. 3.			

(b) Give reasons for your answers above...

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SECTION THREE.

Office developments.

1. Is your organisation currently involved in any office development(s) in Harare's Central Business District? If the answer is NO proceed to Question 2, if YES could you please fill in the details of the property (ies) in the boxes below.

	Name of developer	Name of office development	Street location (address)	Date of commencement	Date of expected completion	Expected lettable space
(a)						
(b)						
(c)						

2. Are there any planned office developments that your organisation will be involved in. Please fill the details of the property(ies) in the boxes below.

	Name of developer	Name of office development	Street Location (address)	Date of expected commencement	Date of expected completion	Expected lettable space
(a)						
(b)						
(c)						

3. In your opinion, what are the expected effects of the developments stated in Question (3) and (4) above on office space supply and demand? Please tick in the appropriate box below.

(a) Supply will be higher than Demand ☐

(b) Supply will be equal to Demand ☐

(c) Supply will be lower than Demand ☐

Author Hove S N
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