ASHESI UNIVERSITY COLLEGE

INFLUENCE OF FINANCING METHODS ON THE VALUE OF COMMERCIAL PROPERTIES; A CASE OF AIRPORT CITY

BY

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature:…………………………………………………..

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Date: …………………………………………

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision of thesis laid down by Ashesi University College.

Supervisor's Signature ……………………………………………………………….. Date:…………………

Name:……
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ABSTRACT

The real estate industry is lucrative industry as the developing economy continue to boom. It has being likened to the rise and fall of most economies. In Ghana, the industry is a relatively young one, and has shown signs of growth and expansion. It is a capital intensive industry, where availability of finance is crucial in determining the viability of any development.

In valuing real estate developments, focus is placed on four main factors, that is: location, structural quality, use/purpose and legal ownership. Even though the industry is capital intensive, the mode of financing is considered in the valuation of developments.

The focus of this thesis was thus to investigate how the methods of financing influence the value of commercial properties, using Airport City, Accra, as a study area. It sought to establish a relationship between the methods of financing and the valuation of commercial properties. The research also considered the methods of financing and valuation at Airport City, Accra, and concluded by making recommendations for developers and Valuers.

Having analysed data collected using thematic and narrative analysis, it was found that, for developments within the study area, there is indeed a relationship between the method of financing and the value of commercial properties. It was thus recommended that developers consider what method of financing they adopt in determining the value of their properties.

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CHAPTER 1: INTRODUCTION

1.1 Chapter Overview

Real estate as industry in Ghana has shown a lot of promise, especially with the country showing exemplary signs of economic growth and political stability (Ghana Homes, 2013). This has led to increased business opportunities and as such, a demand for commercial and residential space. However the industry is capital intensive (Standard Bank, 2012), its financing becomes crucial in determining the viability of a real estate development.

In the real estate industry the valuation of properties is limited to four main factors: location, structural quality, use/purpose and legal ownership. Financial information on the industry is excluded, despite how financing is important to making the decision to start a development. By identifying and critically examining the methods of financing and valuation methods of real estate developments at Airport City, Accra, the study sought to understand this phenomenon. This was done by examining how the methods of financing influence the value of commercial properties to establish a relationship between the two variables.

This chapter will give a brief overview of the study. It goes on to describe the background of the study, providing an insight into the aim of the study, its research questions and set objectives. It further states the significance of the study, concluding with a detailed outline of the thesis.

1.2 Background

The real estate industry is described as an essential factor of economic and social wellbeing in global communities (World Economic Forum, 2011). It is described as a global business and as such investors, lenders, occupants and developers worldwide regard it as an important industry (Thoerig, 2011). A report from Zurich Services Corporation (2011) also describes the industry as being closely tied to the rise and fall of the economy, explaining that when the economy is good, people tend to demand more of office space/ retail space, and when the economy goes bad people scale back. This causes a high vacancy rate and consequently a decrease in the rent of properties. The American real estate industry faced similar changes during the 2008 financial crisis, causing a major pummel in their $6 trillion industry. Despite these shortfalls the global real estate industry has picked itself up, identifying new sources of capital and structure for investments. The real estate industry is still considered by the World Economic Forum (2011) as a relatively stable investment option.

Ghana's economy has become buoyant and favourable for investments (Oxford Business Group, 2012), with the IMF (International Monetary Fund) naming Ghana as one of the fastest growing economies. Following a growth of 13.11% in 2011, the country's GDP is expected to increase by an estimated 7.3% (World Economic Forum, 2011). These impressive growth rates are certain to attract and promote huge investment opportunities among investors and multinationals, that are looking to increase their global presence. This will thereby lead to an increase in the

demand for office and retail space, as well as residential space. This has given developers an opportunity to meet the demands for property development, specifically residential, commercial and industrial properties. However, the challenges pertaining to local lending and land ownership in Ghana have made expansion in the industry difficult.

1.2.1 Real Estate Finance

According to Ogedengbe and Adesopo (2003) the property development industry is one that involves huge capital expenditure, thereby making financing an essential input. They explain that the cost of a project and most importantly the availability of funds influence the viability of such projects. For this reason developers must make it one of their priorities to determine the financial viability of their projects, that is, the source and the method of financing. Developers generally source for funds from financial players such as permanent lenders, joint venture partners, construction lenders and long term equity lenders (Miles, et al., 2007). These key financial players can be further categorized under two main sources of capital: equity and debt, which are commonly used when financing real estate developments (Stickney & Weil, 2006). According to Colean (1950) the use of mortgages has also been identified as a common source of financing real estate developments, but in the United States of America they are mostly used to finance residential developments.

1.2.3 Real Estate Valuation

Generally commercial properties are meant to generate cash flows usually from rent and lease payments, which determine the value of a property (Damodaran, 2002). Published authors Wilson and Jantranian (1993), describe the value of a property to be synonymous to the market value of a property. Therefore in valuing a property it is important that all elements involved in the developing of the real estate developments – not only limited to construction – are covered. These elements vary depending on the type of real estate property, be it residential, industrial or commercial. The common elements that cut across are location, the use/purpose, the structural quality and the legal ownership (Mends, 2006).

This paper has so far established the importance of the real estate industry, generally describing and asserting its close ties to the rise and fall of the global economy, especially with the citing of the 2008 economic meltdown as an example. The availability of funds and basically the ability to finance a development, play a huge role in proving the viability of a real estate project. The values of these real estate developments are limited to four main valuation determinants: use/purpose, location, structural quality and legal ownership (Mends, 2006). This study will therefore discuss to what extent the methods of financing influence the value of a property, with a focus on commercial properties located in Airport City in Accra, Ghana.

1.3 Problem Statement

The real estate industry has been recognized to be influential to the global economy. Thoerig (2011) proposes that, the industry should be an important issue for international investors, lenders, occupiers and developers worldwide. Ghana's description as a fast growing economy by the IMF has seen investors being drawn to the country's real estate industry. This is as a result of the huge opportunities the growing economy has created in property development. For every rationale investor there is an expected rate of return on their investment (Bodie, et al., 2009), and the real estate investor/financer is no exception. It is therefore paramount that such investors get a reasonable return on their investments.

Before the construction of any project commences, the viability of the project is determined. The cost and availability of finance for a real estate development can influence the viability of a project (Ogedengbe & Adesopo, 2003). Research on the determinants considered in the valuing of developments or projects showed that, aspects of its financing are rarely included. The determinants that are mainly considered are the location, the purpose, the physical state of the building and the tenure (Mends, 2006). Considering how capital intensive the industry is and how financing is an essential input, the exclusion of financing is questionable. As such aspects of the method of financing should be factored in when determining the value of a commercial property. Given that the availability of finance is regarded as one of the factors that determine the viability of a project (Ogedengbe & Adesopo, 2003).

For these reasons, the absence of financing in the valuation of commercial property has motivated this study. This is highlighting the direct influence the method of financing has on the value of a commercial property, looking at commercial properties located in Airport City.

1.4 Research Questions

The main question this research seeks to answer is to the potential existence of a relationship between the method of financing and the value of a commercial property?

Specifically, it will attempt to answer the following questions:

1. What are the methods of financing commercial real estate properties at Airport City?

2. How are commercial properties valued at Airport City?

3. Is there any relationship between the two?

1.5 Main Objective

The main objective of this study is to investigate how the methods of financing influence the value of a property looking specifically at commercial real estate properties in Airport City, Accra.

1.5.1 Specific Objectives

1. To establish the relationship between the method of financing and the property value from existing literature;

2. To identify the method of financing and valuing of commercial properties within Airport City;

3. To establish a relationship between the method of financing and values of commercial properties within Airport City; and

4. To make recommendations to developers and financers with regards to the relationship between the methods of financing and the value of commercial properties.

1.6 Scope of the Study

This study is establishing a relationship between the method of financing and the value of property, looking at commercial properties in the Airport City area. The scope of Airport City is defined within the boundaries of a section of the Airport City bypass, which connects the Vodafone head office and the Airport roundabout. It continues from the Airport roundabout to the main traffic light on the Liberation Road, then from that traffic light to Silver Star towers. Figure 1.1 shows an aerial view of the study area.

Research on this study will therefore focus on both developed and developing commercial properties. Commercial properties are described as properties that are for business purposes. These include apartment complexes, malls, office buildings and hotels.
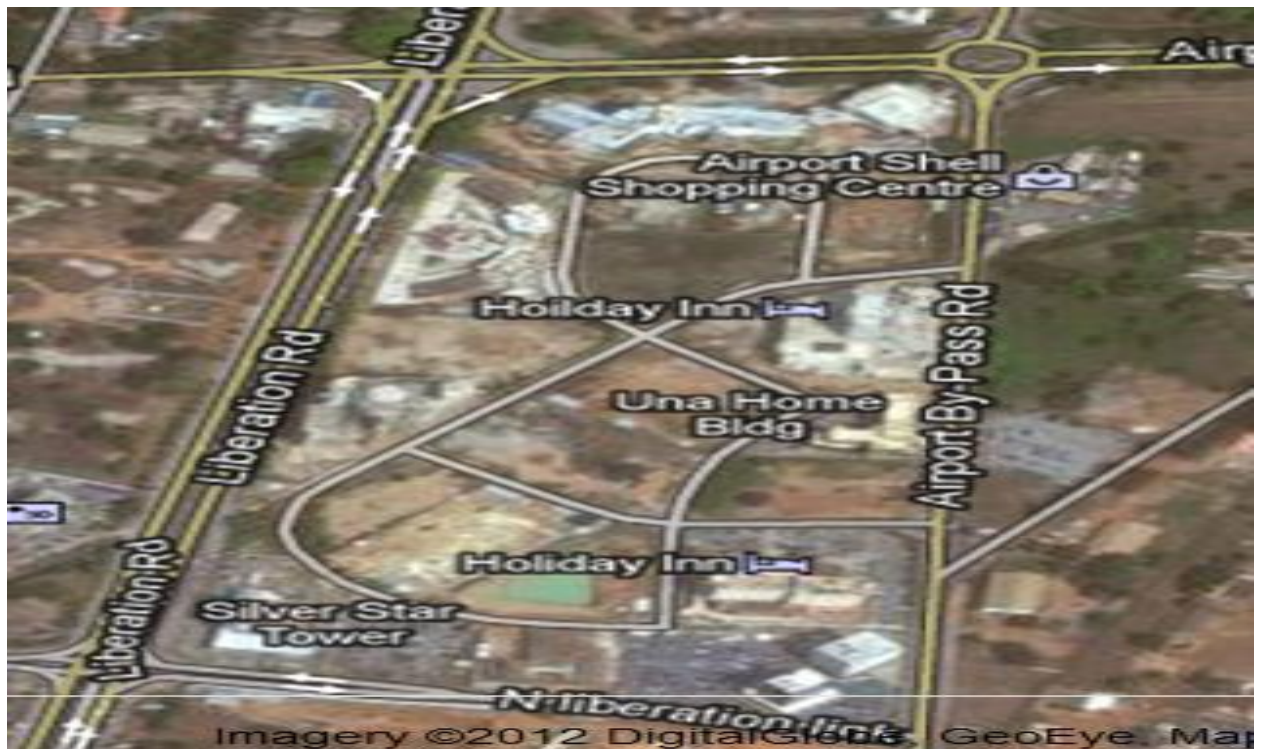
Figure 1.1 Aerial view of Airport City, Accra.
Source: Google maps

1.7 Research Method

A qualitative approach was adopted for this research. This is because, the qualitative approach helps to identify and understand a particular problem/situation. The qualitative aspect of the data collected aided in determining the reason developers choose a particular method for financing commercial properties. This included the sources of funds and the proportion developers used to finance their development. It also helped to determine how these commercial properties are valued. This ultimately aided in investigating how the method of financing influences the value of commercial properties. The data that was gathered were from both primary and secondary sources. The primary sources constituted of interviews with developers of the commercial properties in Airport City as

well as the Valuers and financial head. Secondary data was collected from books, journals articles, published works and credible websites on financing options and valuations. In analyzing the data collected, thematic analysis and narrative analysis were used to draw inductive conclusions.

1.8 Significance of Study

With the real estate industry in Ghana rapidly growing and being recognized as a lucrative industry, this study will be of relevance to both developers and financers/investors. It will provide an insight on how the methods of financing real estate commercial development and the extent to which they influence the value of the property. Given that each method of financing carries a level of risk, the study will help investors to identify and reduce these risks. By clearly identifying a method of financing and its level of riskiness, developers will be able to reduce this risk by knowing what proportion to use to finance their developments.

Identifying how the method of financing has an influence on the value of a commercial property will also be of importance to Valuers. Even though there are set standards of valuing a property, Valuers sometimes value a property based on experience or their own judgement of the given property (Mends, 2006). This study will therefore aid in creating more set standards for valuing a commercial property. Finally, this study will also add to literature, specifically in the areas of financing commercial property and the determination of the values of commercial properties.

1.9 Outline of Dissertation

This is a brief description of what each chapter entails. This will guide and inform readers on how each chapter fits into the research paper.

Chapter 1 is the introductory chapter which gives a broad description of the study and also states the problem. It highlights the key variables of the study as well as the relevance of the study.

Chapter 2 is the literature review. This chapter analyzes other schools of thought on the subject matter, comparing their literature to establish a relationship. This chapter will help to understand how other researchers conceptualize their findings and also act as a guide in conducting the research.

Chapter 3 this is the methodology chapter which provides a detailed overview on how the research will be conducted. This will include the research method adopted the research purpose and the selection of the sample. It also gives an insight on how data will be collected and analyzed; basically justifying the study using relevant gathered data.

Chapter 4 this is the data analysis and discussion section. The chapter shows the results of the data collected and analyzed. Using qualitative data analysis specifically framework analysis, data will be analyzed to answer the set research questions to draw an inductive conclusion.

Chapter 5 is the conclusion and recommendations section of the report. Based on the research findings, conclusions will be drawn on the influence the methods of financing have on the value of commercial properties.

Recommendations will also be made to developers and financers/investors and also for future research on the relationship and other related topics.

CHAPTER 2: LITERATURE REVIEW

2.1 Chapter Overview

This chapter contains an account of existing literature on the sources of funds for real estate projects, the methods of financing commercial properties and the determinants for valuing a commercial property. It also discusses the relationship between the method of financing and the value of commercial properties and goes on to provide the theoretical framework which serves as the backbone of this research.

2.2 Sources of Funds and Methods of Financing

Before any form of financing can be acquired, it is important to identify the source a funding. During the development process, the potential sources of finance are identified at the early stages, specifically the refinement stage (Miles, et al., 2007). According to Berry et al. (1993) the sources of funds, which typically comprise debt and equity, are in themselves the principal methods of financing. They describe the methods of financing as an extension of the sources of funds, in that methods are how funds are acquired from the source. The author goes on to use the sources of funds and methods of funding interchangeably.

Under debt and equity, various options and types of funds exist. For equity, the sources that were identified were private investors, partnership/syndicates, unlisted ownership vehicles and Real Estate Investment Trusts (REITs) (Colonial First State Global Asset Management, 2006). Under the debt financing option, banks were identified to be the main source of funds. Other financial institutions such as the finance

companies, building societies, insurance companies and investments banks, are all recognized as sources of funds under debt financing. Figure 2.1 shows further categorisation of some of these sources of finance.

CAPITAL RAISINGS

DEBT	HYBRIDS	EQUITY	
		listed	unlisted

DEBT
•Short–term finance
•Long–term finance
•Options/swaptions
•Collars and caps
•CMBS

HYBRIDS
•Preference shares
•Convertibles
•Income securities
•Reset preference shares

EQUITY listed
•LPTs
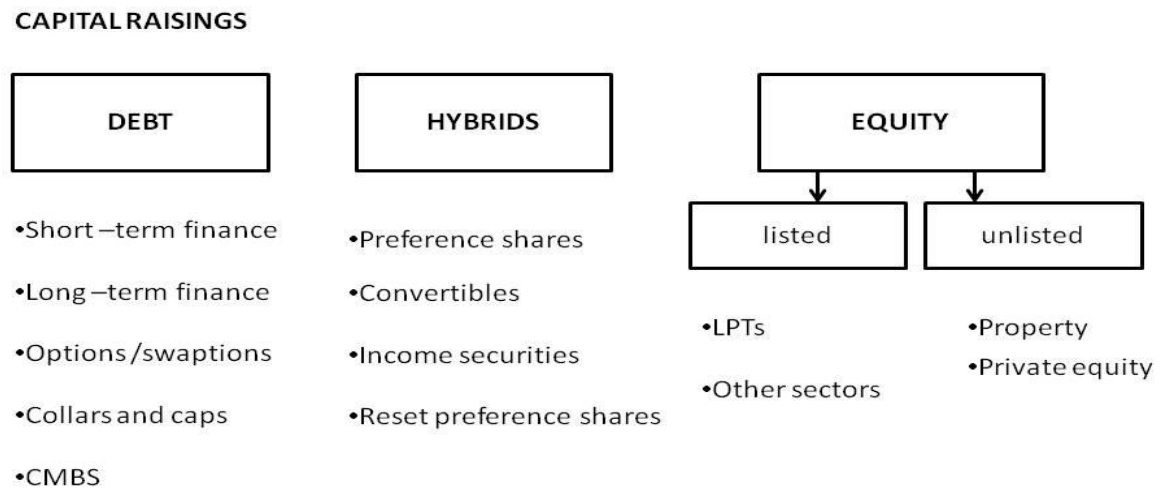•Other sectors

unlisted
•Property
•Private equity

Figure 2.1
Source: Colonial First State Global Asset Management, 2006

From the figure 2.1 above there is an introduction of a third source and method - *hybrids*. The hybrid is also known as the mezzanine, which is a combination of both equity and debt financing. It includes subordinate debt and convertible subordinate debt, which is similar to redeemable preferred stock (Colonial First State Global Asset Management, 2006). According to Calderon (2001) mezzanine financing is considered as one of the unconventional methods of financing real estate developments. The author argues that the conventional methods of financing real estate methods are usually construction loans and permanent lending. According to Miles et al (2007), mezzanine financing was typically meant for speculative developments, where the goal was to sell the development in

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two to three years. They explain that, for a developer who wants funds in place of the usual sources of equity, and requires early equity investments mezzanine should be an ideal option. This will help a developer minimize risk associated to the development.

First level of financing
   - developer gets financing from bank who will loan money over the land, say around 50% of project cost.
   - first rights on assets

Second level of financing
   - mezzanine investor contributes the next 45%, higher returns
   - secondary rights on assets

Final level of financing
   - developer contributes their own equity for the final 5%, high expected returns
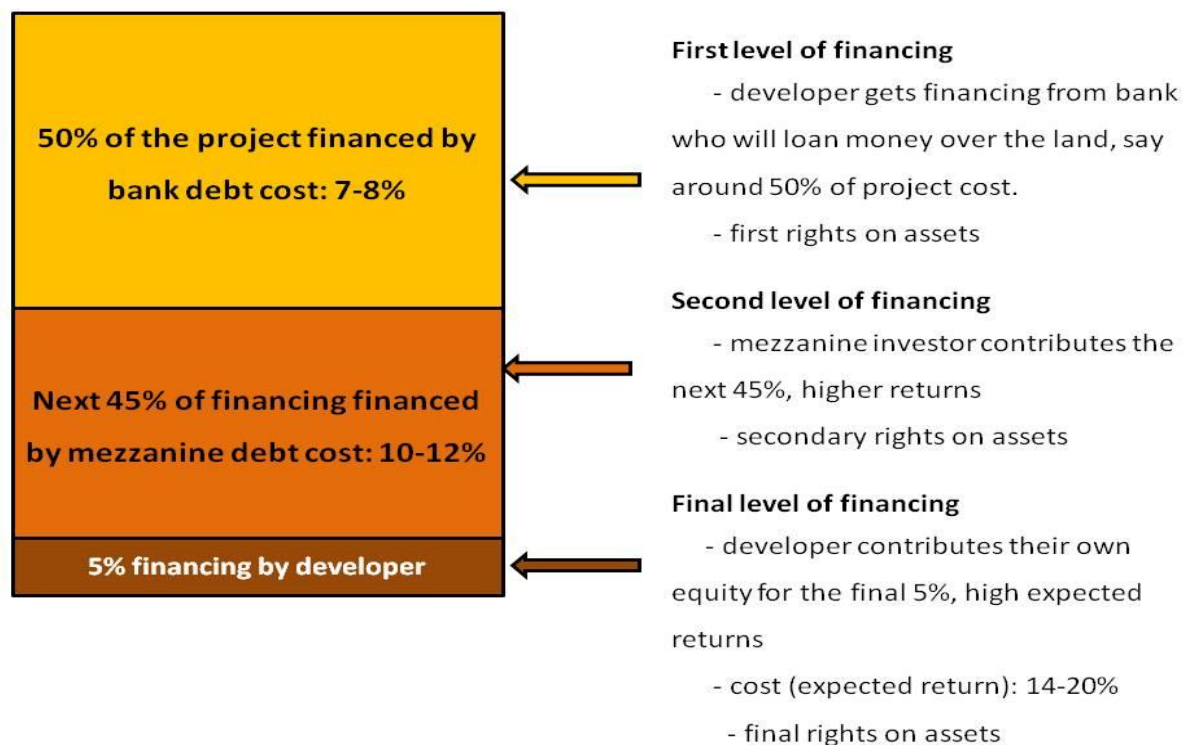   - cost (expected return): 14-20%
   - final rights on assets

Figure 2.2
Source: Colonial First State Global Asset Management, 2006

Figure 2.2 above shows the level of financing and the ideal proportion of debt, mezzanine and equity need to finance a development. The first level of financing is a 50% of the required capital which is ideally financed with bank debt. For the second level of financing, 45% of capital is required and the remaining 5% requires equity to finance the third level. However these levels of financing do not apply to all types of development. The level of financing is usually dependent on the type of development. Each source of financing carries a level of risk; which also applies to every

stage of the development process (Berry, et al., 1993). Therefore identifying the proportion of funds to use for financing developments, aids in managing risk.

A less risky source of fund for property developments are bonds. After the Asian financial recession in the mid-90s, most Asian governments decided to diversify their sources of funds and reduce banking risk (Lam, et al., 2011). They adopted the use of bonds to finance their developments, specifically property development. However this method of financing was not accepted in Hong Kong, where it was observed that bondholders are less sympathetic than banks (Chesterton & Ghose, 1998). This source of funding on the other hand is mostly ideal for developers who are working on large projects; high rise buildings. Given that they usually have excess funds they tend to have good credit ratings and strong balance sheet (Lam, et al., 2011); making it easier for them to tap into the capital markets.

Most developers also prefer direct acquisition of income property from financial institutions and this is considered a popular method in the West (Colean, 1950). Some of these financial institutions include Real Estate Investments Trusts (REITs). These are institutions that provide individuals with an opportunity to own a share in income-producing commercial real estate developments (US Securities and Exchange Commission, 2012). They are also less involved in the construction and issues of development because their returns are from rents and interest payments on mortgage bonds (Zhu, 2002). Another institution that has also capitalised on the real estate opportunity is Standard Bank. Standard Bank has created one

of the largest platforms for international funding of real estate developments in Africa, providing funding options to meet their clients' capital structure (Standard Bank, 2012).

2.2.1 Classifications of financing developments

In addition to the above stated sources of funds, Dearborn Real Estate Education (2003) also identified and classified certain players and institutions as sources of funds for real estate projects. They are categorised as semi fiduciary and non-fiduciary. Under semi-fiduciary, institutions mortgage brokers, mortgage bankers, real estate trust, syndicates, limited partnerships, real estate bonds and endowment funds were listed. Whereas for sources of funds that are the non-fiduciary, private loan companies and individual lenders were listed.

These sources of funds are again classified as short term and long term. Berry et al (1993) explain that, the use of short term and long term financing reflect in the financing of the various stages of the development (Berry, et al., 1993). They argue that every stage of development has an associated risk; hence the requirement of different types of financing. For short term financing it is mostly required during the construction period, because typically construction last for a short period of two to five years (Berry, et al., 1993). For developers using short term financing, they typically borrow from a bank.

The long term loan is sometimes referred to as permanent loan .The long term financing is secured on the completion of the building (Berry, et al., 1993), usually to pay off any outstanding debt. Since the loan is secured

after the completion of the development, there is minimal risk. Financing with permanent loans is mostly provided by institutions with longer investment horizons than banks; insurance companies, pension funds and REITs (Comptroller Handbook, 1998).

2.2.2 Tax Advantage

The corporate tax advantage that debt financing provides, encourages developer to use more of debt than equity. With the tax advantage, when debt is acquired interest payments are made thereby reducing the amount of taxable income; which consequently reduces a developer's tax liability (Graham, 2000). In 2002, real estate projects in India were mostly financed using debt and advanced sales (Shah, 2010). Colean (1950) argues that equity as a method of finance has very little impact on financing real estate projects, especially through the use of stocks. In view of this some developers are more attracted to debt financing than equity financing, because of the advantage it offers.

2.2.3 Innovative Methods of Financing Commercial Properties

The growing need for financing options has called for some innovative methods of financing real estate developments, with the public debt market introducing the Commercial Mortgage Backed Securities (CMBS) (Zhu, 2002). This is a type of fixed income investment is backed by commercial loans. It puts interest payments on a portfolio of commercial real estate loans which is then publicly traded. One of the benefits of the CMBS offered to developers includes a new found way to finely structure their risk. A report by the Prudential Investment Management (2010)

explains that the securitization of the CMBS placed them in different "risk tiers". This therefore enables a developer to purchase the type and degree of risk they want to assume. This method is commonly used in the United States of America to finance commercial real estate developments (Horbacz, 2010).

2.3 Valuing Properties

The valuing of real estate properties differs based on the purpose of the building; be it residential or commercial. According to Lee-Wen and Drummand (2010) the values of residential properties are typically driven by supply and demand but also the buyer's sentiments towards the property. They also explain that, commercial properties on the other hand focus on the income that can be generated and are less subjective.

Ishaya et al (2012) also argue that, developers manipulate the value of a property not because of their sentiments, but because they want to cover their debt payments.

Generally the factors that influence the value of properties, regardless of the type of product, are location, use, physical state and tenure (Mends, 2006). Financing, sale and leaseback agreements and any other special considerations or concessions are all excluded in estimating the value of a property. The estimated value of the property is referred to as the open market value. The open market value is defined as "the estimated amount for which a property should be exchanged on the date of valuation between a willing buyer and a willing seller in an arm's length transaction

after proper marketing decision wherein the parties had each acted knowledgeably, prudently and without compulsion" (Mends, 2006).

Apart from identifying the determinants for valuation, the method of valuing contributes to determining the final value of a real estate development. According to Mends (2006) to determine the open market value of a property, the comparative method is usually used. This method considers the unique location and compares similar properties in the neighbourhood of the subject property to be valued (Mends, 2006). However Mends (2006) argues that in Ghana this method of valuation is complicated, since there are variations between the neighbourhoods and buildings.

Mostly commercial properties are usually valued using the Net Operating Income (NOI) (Lee-Wen & Drummand, 2010). Given that the values of real estate projects are determined by the cash flows they generate. When determining the value of a commercial property using the NOI, all expenses are subtracted from the expected revenue, except the mortgage payments or loans. It also includes the exemption of non - recurring capital expenses and reserves. This method of valuation is an appropriate tool for valuing commercial properties using cash flows from rents and lease payments as expected revenue.

2.4 The Relationship between the Methods of Financing and the Value of the Property

Existing literature shows that in valuing property, specific determinants cut across the various types. The four major determinants identified were the location, purpose/use of the property, the structural quality and the

legal ownership (Mends, 2006). According to Mends (2006), in estimating the value of a property its financing is excluded, where financing includes the source and the method used. Catalano (2007) on the other hand argues that, in valuing commercial properties financial information and supporting market data are used to assess the property to determine the value. The price and the value of most commercial properties are closely tied to the income generated from commercial properties (Lee-Wen & Drummand, 2010); rent and lease payments.

Drawing from the field of corporate finance, the Modigliani and Miller theory (1988) argues that the financing decision of a firm/development is independent of the value of the firm or development (Lam, et al., 2011). The theorem explains that the market value of a firm/development depends only on the income stream that can be generated (Villamil, 2008). It goes on to argue that the value of a property should not be influenced by the proportion of debt and equity used to finance the development. Therefore Modigliani and Miller (1988) are of the view that the only way to determine the value of a development is from the cash flows that the development can generate. This is similar to the (Net Operating Income) NOI method of valuing a property, where the value of a development is determined by the expected income that can be generated from it. Besides measuring the productivity of the development, it also aids in identifying the source of the lenders and equity holders' returns (Miles, et al., 2007).

Research on existing literature has shown that there is inadequate information available on the amount of funding needed, the method of

financing and the ideal individual/institution that should finance a real estate project (Ogedengbe & Adesopo, 2003). Thus a relationship between the method of financing and the value of a commercial property has not been explicably established. Considering that there is limited literature on this relationship.

2.5 Chapter Conclusion

Literature from Ogedengbe and Adesopo (2003), establish that the methods of financing have a degree of influence on the value of commercial property. Conversely, Mends (2006) suggest the exclusion of any financial information in the valuation of commercial properties; whiles the Modigliani and Miller theory argue that the method of financing and the value of a development have no relationship. This study seeks to establish which of these opinions hold in respective to the study area Airport City, Accra. By identifying and understanding the methods of financing and valuations used, an opinion will hold and be established at Airport City, Accra.

CHAPTER 3 : METHODOLOGY

3.1 Chapter Overview

This study aims to measure the degree of influence the methods of financing have on the value of commercial properties. Information will therefore be gathered from the developers and appraisers of commercial developments in Airport City, Accra. The information that will be gathered will be on the methods of financing real estate developments specifically commercial properties. This will include how the values of these properties are determined. The main aim of this chapter is to give a detailed description of the various research and sampling methods that will be adopted in gathering information and ultimately how the research will aid in achieving the set objectives.

3.2 Operational Definition of Variables
3.2.1 Sources of Funds

The main sources of funds are equity and debt (Stickney & Weil, 2006). These sources are being described as the suppliers of funds for a developer. In that, if a developer is raising money for a development they are the main means of acquiring these funds. This includes, for equity, private investors, and partnerships/syndicates for debt, these are mostly financial institutions, banks and insurance companies.

3.2.2 Methods of Financing

According to Berry et al (1993) the sources of funds are in themselves methods of financing, and they describe the methods of financing as the

means of acquiring funds. In the context of this research, the methods of financing are described as the combination of the various sources of funds to finance the development of a property. Therefore, the operational definition of the methods of financing for the purpose of this research is the combination of the various sources of financing commercial real estate properties.

3.2.3 Value of a Property

The value of a property is the market value of a property. According to Mends (2006) the open market value of a property is defined as "the estimated amount for which a property should be exchanged on the date of valuation between a willingly buyer and a willingly seller in an arm's length transaction after proper marketing decision wherein the parties had each acted knowledgeably, prudently and without compulsion". Therefore the value of a property is synonyms to the open market value of a property. So, the value of a property as used in this research is the market value at which a willingly buyer and seller agree to transfer ownership of the said property.

3.3 Research Strategy

The various research strategies include, explanatory, descriptive and exploratory (Blanche et al, 2006). For explanatory research, it is aimed at explaining the social relations or events (Sarantakos, 2005). It further seeks to build theories that can predict and explain natural and social events (McNabb, 2008). It mainly explains the cause and effects between two or more variables. The descriptive research is aimed at describing

social systems, relations or social events (Sarantakos, 2005). They are done through narrative descriptions (Blanche et al, 2006).

Exploratory research is ideally used when there is insufficient data on the research topic. The benefit of this research strategy is that it helps to prove the feasibility of a study; that is, whether the study is worthwhile. Also, it aids in generating new ideas, views and opinions about the research topic (Sarantakos, 2005). Finally it shows whether the variables are related and in what way; direction or degree.

For these reason, the research strategy that was adopted to examine how the methods of financing influence the value of commercial property was exploratory research. This is because there is insufficient information on the relationship between the method of financing and the value of commercial properties. Therefore the exploratory research helped to establish if there is a relationship between these two variables, and generate new opinions and views.

3.3.1 Research Approach

Generally they are two approaches to research: the quantitative and qualitative approaches. The quantitative approach is perceived to be objective, simple and fixed (Sarantakos, 2005). Qualitative approach, on the other hand is said to be more subjective, constructed, multiple and diverse (ref). The research approach that will be used is the qualitative approach.

The qualitative research method is being used because, it aids in identifying and understanding the reason for a particular

problem/situation. It does not require numeric data to understand the phenomenon, thereby making the researcher's interpretations a part of the research process (Key, 1997). Also, it does not focus only on the knowledge from experiences, but in addition emphasizes on the meanings and interpretations from the interviews conducted as well (Sarantakos, 2005).

3.3.2 Research Design

Research design primarily entails two stages; the first is the planning stage and the second is the execution stage (Sarantakos, 2005). The research design for assessing how the methods of financing influences the value of commercial properties was qualitative in nature. The conclusions made were inductive, that is, conclusions were drawn by expounding a specific view to a general one. Thus conclusions drawn from the relationship between the methods of financing and the value of the commercial property at Airport City were used to draw general conclusions about the study area. This was achieved using surveys, specifically interviews, as the data collection method.

3.4 Sampling Strategy

The sampling strategy that was implemented in this research study was non- probabilistic. According to Ritche and Lewis (2003), non-probabilistic sample units are deliberately chosen to reflect particular features of the population, and not to have a statistical representation. Also, this strategy was adopted due to the fact that non probability sampling is mostly used in exploratory and qualitative research (Sarantakos, 2005). It also offers a

range of sampling techniques for qualitative research (Ritche & Lewis, 2003) which includes purposive sampling; which was taken on for this study.

The purposive sampling technique is described as a technique for sampling with a purpose in mind, with regards to a particular respondent or variable (Trochim 2005). This approach is appropriate to target a sample quickly.   This sampling approach was used to select the developments, developers, financial head of development and the valuers within Airport City. These respondents were chosen because they have knowledge about the development, particularly how it was financed and valued.

3.4.1 Population

The scope of the research has been clearly defined in Section 1.5 as commercial properties within Airport City. This includes both developed and developing properties. The population of the research study is therefore all developed and developing commercial properties within this area, which are 20 developments. From this population a sample size was drawn.

3.4.2 Sample Size

Ritchie and Lewis (2003) propose that for qualitative samples sizes, it should be ideally relatively small. They argue that a qualitative study is rich in detail and respondents are more likely to give more than necessary information. Hence it is important to keep the size small to enable the

researcher to effectively analyze the data. Using the rule of thumb of an appropriate sample size of 25% proposed by Trochim (2005), the sample size of the study was 6 developments.

3.5 Data Collection
3.5.1 Sources of data

For this research study, both primary and secondary data were used. The primary data was collected prior to conducting interviews with sample developments. This involved interviewing knowledgeable experts on the study area. Primary data on the sample drew from the interviews that were conducted with selected developers, financial head and Valuers. They provided information on their methods used for financing and how they valued their developments and the relationship between the two variables. Secondary data was collected from journal articles, books, credible internet sources and other published works. The information that was gathered from these sources helped to identify from existing literature, whether the methods of financing have an influence on the value of a commercial property.

3.5.1 Data Collections Tools

In collecting data surveys were conducted, specifically interviews. This involved speaking to individuals who have knowledge about the methods of financing and the valuation of these developments. According to Sarantakos (2005) interviews typically have different structures. These include structured interviews which require the interviewer to adhere strictly to the order and wording of the questions. The unstructured

format uses open-ended questions and does not follow the exact wording or order of the interview questions. Semi-structured interviews are a combination of both the structured and the unstructured. The dominance of one type over the other depends on the research topic and the purpose.

For this particular research, the interviews conducted during data collection were semi-structured; with the unstructured format being dominant. This allowed for neutral probing, especially since data collected was concerned with the financial information of the developments.

3.5.2 Data Analysis

In analyzing data collected, two methods of qualitative analysis were used; namely narrative analysis and thematic analysis. According to Sarantakos (2005), the narrative analysis is sometimes referred to as conversation analysis. In that, focus is placed on the conversation/ the text documented and not on the interview itself. Given that, for this particular research, certain statements from respondents were highlighted in analysing the data to capture the method of financing and how these methods of financing influence the value of commercial properties.

In establishing new themes, the thematic analysis method is the appropriate analytical tool. Thematic analysis offers an accessible and theoretically flexible approach to analysing qualitative data (Braun & Clarke, 2006). This method also describes data in detail by, identifying, analyzing and reporting a pattern/theme within the data. For this research data collected identified the methods of financing and valuation of

developments at Airport City, Accra; and analyzed the data to establish how the method of financing influences the value of commercial properties at the study area.

3.6 Chapter Conclusion

This research was exploratory in nature, with data collected through conducted interviews with respondents from the six developments. The qualitative data collected was analysed using the narrative analysis and the thematic analysis method. Interviews with respondents did not completely allow neutral probing into the financial aspects of the developments, however substantial information was still attained.

CHAPTER FOUR: DATA ANALYSIS

4.1 Chapter Overview

Primary data from developers and/or Valuers of both developed and developing properties within Airport City, Accra, was collected for the purposes of this research. This was done through a survey using semi-structured interviews, to aid accomplish the main and specific objectives of the study. The main objective of the study is to investigate how the methods of financing influence the value of commercial properties, by interpreting the data collected on the field.

This chapter presents the findings gathered during the survey, describing the developments with their corresponding respondents. Statements made by respondents during interviews are quoted verbatim, for the narrative analysis. The chapter goes on to compare the data gathered with reviewed literature to establish a correlation between what was found on the field and what exist in literature.

4.2 Profile of Interviewees

The population of the study area was 20 developments. Using Trochim's (2005) rule of thumb, which states that 30% of a population is a representative sample, 6 developments, making 30% of the population, were selected for the study. Table 4.1, shows the properties that were used, the type of development and the stage of development;

Table 4.1: Characteristics of Developments

NAME OF DEVELOPMENT	RESPONDENT OF DEVELOPMENT	TYPE OF DEVELOPMENT	DEVELOPED/ DEVELOPING
Development 101	Respondent 101	Hotel	Developed
Development 102	Respondent 102	Retail	Developed
Development 103	Respondent 103	Office and retail space	Developing
Development 104	Respondent 104	Hotel	Developing
Development 105	Respondent 105	Office space	Developed
Development 106	Respondent 106	Office space	Developed

Source: Field Data

The interviewees for this research were developers, financial head of a development and Valuers of the sample developments. The different respondents were used for this research primarily because they were available when the interviews were conducted.

Development 101: Is a developed hotel. It was initially designed as a five storey building which was later modified to a seven storey. The development was financed with 70% debt and 30% equity. Equity raised was from personal savings, shares and monies from relatives and friends.

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Debt was from a commercial bank in Ghana. Funds for the development were raised as the building was being developed. For this development the interview conducted was with the developer.

Development 102: Is a developed retail building. It was originally meant to be a hotel but upon further market research, it was reconsidered as retail space. The development was financed using debt from a private financial institution and certain amounts of equity. Airport City was the prime location from the onset, no other alternatives were considered. For this development the interview conducted was with the Valuer of the development.

Development 103: Is a developing mixed-purpose building; it is providing office and retail space. The development was financed with 50% debt from a private equity firm and 50% debt. Funds for the development were raised as the building was being developed. For this development the interview conducted was with the Valuer.

Development 104: Is a developing hotel. There has not been any modification to the initial plan to build a hotel. The development was financed with 60% debt and 40% equity. Airport City was chosen primarily because of the strong partnership that was established between the development and the authorities of Airport City, Ghana Civil Aviation Authority (GCAA). For this development the interview conducted was with the Valuer.

Development 105: Is a developed building providing office space. It was first considered as a showroom for an automobile company. Market research was conducted, which led to the development being modified to

provide office space. Additional market research was conducted which gave room for more modifications from a formerly six storey to a ten storey. Funds were raised as and when they were needed at the various stages of the development. For this development the interview conducted was with the financial head.

Development 106: it is a developed building providing office space. The original plan to build office space has not changed. The initial development was designed as twelve storeys but was later modified to an eight storey to reduce cost. For this development the interview conducted was with the developer.

4.3 Findings
4.3.1 Financing of developments in Airport City

From field data gathered, the predominant methods of financing within the study area are equity and debt. Equity used for financing was not limited to the developer's personal savings and but also included funds from friends and family and private equity firms. Development 101 is an example of a development, where equity was raised was not only from the developer's coffers, but also from relatives and friends. Development 103 also raised its equity financing from a private equity firm. Four out of the six developments used debt financing from banks, specifically commercial banks. However Development 105 used debt financing from an investment institution. None of the developments used only one method of financing, that is, only equity or only debt. They all employed a capital structure that used both methods. Their reasons for choosing debt financing, was primarily because of the accessibility and the reduced cost

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of using this method. That is, the interest payment for this method is comparably lower than the other lending options.

Debt financing made a minimum of 40% contribution to total capital used and a maximum of 70%. Concurrently, equity made up 30% to 60% of the total capital raised to finance the developments. Figure 4.1, this chart showing the percentage of equity and debt used by each development.
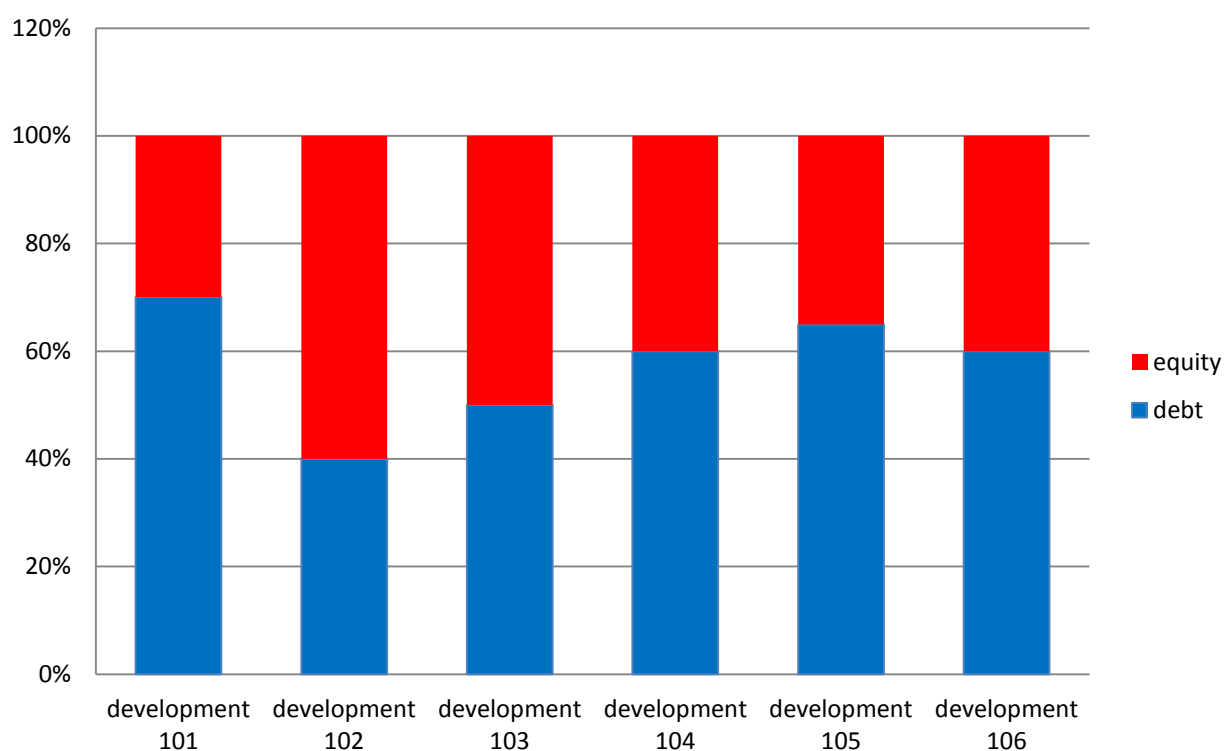

Figure 4.1Capital Structure of Developments at Airport City, Accra
Source: Field data

4.3.2 Valuation of developments in Airport City

Properties are generally valued for different reasons such as sale, compensation, investment and insurance. With regards to the developments used, focus was placed on properties valued on the basis of sale. The type of development: either a commercial or residential property, determines the valuation process and ultimately the value. The

scope of this research was however commercial properties within a particular locality: Airport City, so that factors such as use and location will remain constant.

In the valuation of properties, the stage of development influences the value. The scope of the study included both developed and developing properties. For the four developed properties that were sampled, three of them were valued using the net operating income. During data collection, Development 102 had not been valued, though it had been recently completed and has already leased out retail space.

For the two developing properties, valuation was being done alongside construction. Nonetheless the net operating income method of valuation was used for valuing them. The value that is derived at the various stages of the development is an estimation of the final value. After completion, the new and appropriately valued property is usually higher than the estimations made during the stages of development. There is a variation because as development moves from stage to stage, some modifications are made. Also, due to unpredictable market conditions the value of the properties varies.

4.3.3 Relationship between the method of financing and value of the commercial property

As stated in Section 4.2, the interviewees were developers, financial head of the development and Valuers. Among these groups of people, a developer was of the opinion that, the method of financing had no bearing on the value of the commercial property. His reasoning was based on his personal ownership of the property. He explained that, since the

development belongs to him and it is his personal property, he can choose to place any value on the property without regarding the method of financing.

However the Valuers and financial head of other developments identified an indirect relationship between the method of financing and the value of the property. One respondent noted that:

> "*More funding will increase affordability and lead to an increase in effective demand and supply. Less funding will make developments unaffordable, creating less effective demand*" (Respondent 103)

Respondent 103 drew from the simple economic theory of demand and supply, to describe how financing influences the value of properties. Referring to how demand and supply control the open market value of properties. If people demand more, value goes up and if people demand less value goes down. Conversely, if supply is high, value goes down and if supply is low value goes up.

Another respondent also highlighted an indirect influence the method of financing has on the value through leverage. In financing a development too much leverage can influence the value of the property; according to Respondent 104, this can also be referred to as over-financing. The respondent of Development 104 noted that:

> "*Too much financial leverage can affect the value of the property, leading to over-financing. A positive financial leverage will mean high returns for an equity holder.*" (Respondent 104)

According to this respondent, debt financing should range between 40% and 60%, to reduce or eliminate over-financing.

4.3.4 Raising Funding

From data gathered in the survey, developments from the study area share the same funding process. Capital for financing all the developments were raised before construction commenced, this included both equity and debt. Before the developers' sought after debt financing, it was imperative to secure some amount of equity. This, amongst other reasons, reassures the lending institutions that the project/development is a viable one and helps develop some form of trust between the developer and the lender.

In the acquiring of funding for development, some developers sourced for funding from other countries besides Ghana. Development 103 acquired equity from a multinational private equity firm. Development 102 and Development 104 both sought loans from corporations in the USA and South Africa respectively. The debt funding for both Development 101 and Development 106 were all raised from financial institutions in Ghana.

4.3.5 Other Methods of Financing Developments

Besides the methods of financing that is being used at Airport City – equity and debt – there are other financing options. From the field data, one respondent noted that:

> "….mezzanine is an expensive method of financing developments, in that, the mezzanine lenders tend to charge high interest rates on their loans. This is because of the higher

risk they incur compared to the commercial banks. In an event where the developer is unable to pay the bank, when the bank seizes the building it auctions the property to cover mainly the amount owed to them. This leaves the mezzanine lender with little or no compensation." (Respondent 104)

Mezzanine is an expensive method of financing, given that the interest rate charged is higher than that of the commercial banks. This is because mezzanine lenders incur more risk, since they are part equity holders and lender. For this reason most developers avoid using this particular method. For Airport City, Accra, it is not surprising that none of the developments used this method or considered using it.

Debt financing, as is employed in the study area, are construction loans. These loans are mainly used during the construction period. Permanent loans were not used for any of the developments. One respondent gave the reason as:

"……the banks in Ghana do not have the capacity to give out permanent or long term loans. The payback period for such loans is usually between 7 to 10 years. For this reason most developers seek lending from international lending companies for long term loans" (Respondent 104)

This justifies why developers in the study area do not use permanent or long term loans: the local banks are not capable of providing these. This describes an unavailability of permanent loan or long term loans in Ghana, thereby eliminating the use of permanent loan or long term loan for

financing developments. However, if developer requires permanent loan/ long term loan, international sources are available.

4.4 Interpretation of Data
4.4.1 Financing of developments

Data collected was critically analysed using the thematic analysis to determine how the method of financing influences the value of commercial properties. According to Berry et al. (1993) the main sources of funds are typically equity and debt; these are in themselves methods of financing. The data findings show all the developments used equity and debt to finance the developments. The equity used for financing were mainly from property and private equity firms, which is described as 'unlisted equity' by the Colonial First State Global Asset Management (2006) report. According to Colean (1950), using financial institutions to finance developments is a very popular method of financing.

From the field data, it was also established that, generally developers in Sub Saharan African countries rely on debt financing more. This held for Airport City, Accra, where developers sought higher percentages of debt financing. From field survey, developers used debt financing which ranged between 40% and 70%. The debt financing used was short term – purposely for construction – because the payback period is usually between 5years and 7years; whereas construction takes 2years to 5 years.

From the responses, mezzanine, as a method of financing, is perceived as an expensive method especially for properties within Airport City, Accra. This unconventional method of financing (Calderon, 2001), according to

Miles et al (2007) is typically for speculative developments. This refers to properties that are being developed to be sold within 2 or 3 years. Properties in Airport City are generally not developed to be sold within 2 to 3years. From interviews with experts knowledgeable about the study area, developments at Airport City are mainly for commercial purposes such as hotels, retail or office space.

4.4.2 Valuation of properties

The Valuers that were interviewed for this study explained that, when valuing a development, three main aspects have to be identified; the purpose, basis and method of valuation. The three are interconnected and must follow each other sequentially. For the sample developments, the purpose for valuing was for sale or leasing, which is directly linked to the open market value. The purpose of the valuation informs the method to be used, since the developments will generate cash flows through rent and lease payment; the ideal method is the net operating method. Also, given that the developments were all commercial properties the net operating method is an appropriate method for valuation.

In using the net operating income for valuing, all expenses are subtracted from the expected revenue except the mortgage payments and loan (Lee-Wen & Drummand, 2010). These exemptions are fundamentally financial expenditure, which includes principal payments and interest payments. Figure 4.2 below, shows the variables that make up the net operating income valuation method.

Potential Gross Income

(Vacancy Allowance)

Effective Gross Income

(Operating Expenses)

Net Operating Income

Figure 4.2: Formulae for calculating the Net Operating Income of a
property
Source: Miles et al 2007

Notice that, the financial expenditure that is, principal payments and
interest payments were not subtracted. It can therefore be deduced that,
in using the net operating income to determine the value of a
development, the debt financing used is reflective in the final value of the
development. The point being established here is that, since debt
financing is not excluded from the net operating income computation,
then, the value derived has elements of debt present. Therefore, debt, a
method of financing has influenced the value derived using the net
operating income.

**4.4.3 Method of financing influences the value of commercial
properties**

From reviewed literature, Mends (2006) is of the view that, in estimating
the value of a property, it's financing is excluded. In this context, the
financing is described as the source and method used. Catalano (2007)
opposes this and is of the view that, the value of a property must reflect
its financial information and market data. The argument is an attempt to
reduce the subjectivity Valuers use to appraise properties. An analysis of

collected data shows that, there is an indirect influence of the method of financing on the value of the property.

From the field data, it w can be inferred that, the method of financing indirectly influences the value of the property by means of its accessibility. If debt and equity are easily accessible to a developer, then developments are easily and quickly completed to meet effective demand and subsequently increase demand. From field data, the open market value is controlled by the demand and supply. For that reason, a developer's ability to easily access a particular method of financing can increase their capacity to effectively supply developments to meet effective demand. Drawing from the simple theory of demand and supply, Samuelson and Nordhaus state " when changes in the factors other than a good's own price affect the quantity demanded. Demand increases (decreases) when the quantity demand at each price increases (decreases)" likewise for supply "when changes in the factors other than a good's own price affect the quantity supplied. Supply increases (decreases) when the amount supplied at each price increases (decreases)". This simply means given other factors (e.g. accessibility to funds), when quantity demanded increases (decrease) demand increases (decrease) and when amount supplied increases (decreases) supply increase (decrease). In this context, when there is high supply of properties and demand is relatively less it makes the properties affordable. Affordability in the long run will influence the quantity demand to rise, if supply is not able to meet the new effective demand the value goes up.

Figure 4.3, shows how the shifts in demand and supply curves, justify the accessibility of funds. With market equilibrium initially at E and price P, accessibility to funding will cause the supply curve to shift outward from S to S1, creating a new equilibrium at E1 and price P1. With an increase in affordability, quantity demanded will increase causing the demand curve to now move outward to create a new equilibrium at E2 and P2. This shows that in the short run value at P1 is not at the ideal level for a developer, but in the long run it moves from P1 to P2, giving a higher value than P1 and P.
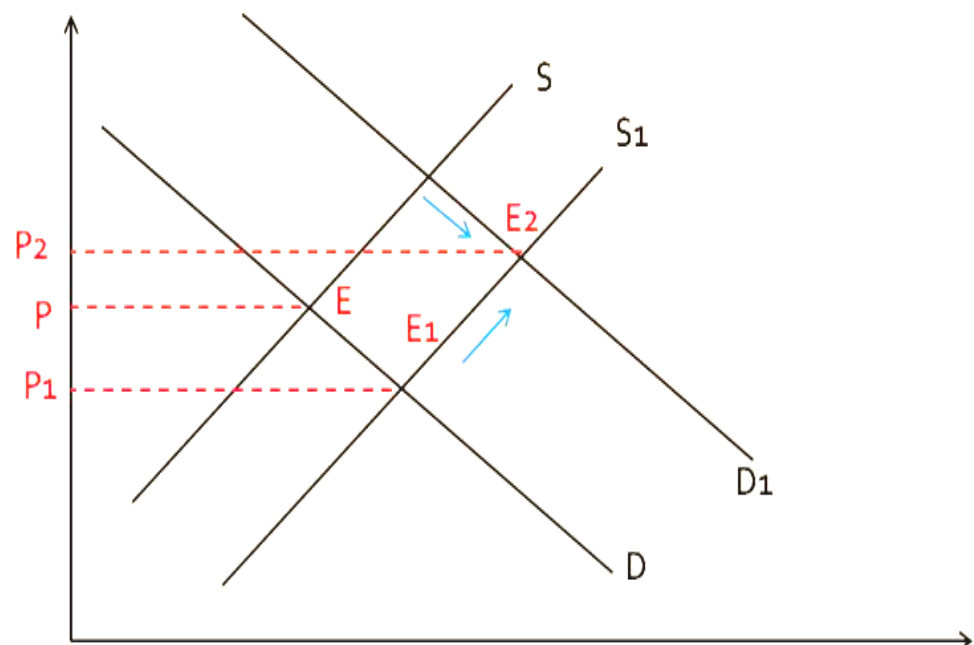

Figure 4.3: Shifts in demand and supply
Source: Samuelson and Nordhaus (2005)

Colean (1950) is of the viewpoint that, equity as a method of financing has very little impact on financing real estate developments, subsequently the value of the development. The author further indicates that,

developers are more attracted to debt financing than equity financing, because of the associated tax benefit. Graham (2000) describes this tax advantage as a reduction in the developer's tax liability. Where interest payments made to cover debt, reduce taxable income; as a result reducing tax liability. For these reasons, a developer uses more debt financing than equity, creating an indirect influence on the value of a commercial property.

Although debt financing is a more attractive method of financing, it can sometimes be misleading. As mentioned earlier, debt financing influences the value of the net operating income to derive the value of a development. If a development is over-financed, there is a likelihood the interest payments will outweigh the income that is generated. In that occurrence, the net operating income will be relatively high because of the exemption of the financial expenditure; however this will not necessarily mean high returns to the developer. In that, since interest payments outweigh the income being generated, taxable income will consequently be low. This will have a rippling effect on the return on investment (ROI), that is, a relatively low ROI. It is however important to note that, a high net operation income/value does not guarantee high returns for the developer. To reduce or eliminate the likelihood of over-financing a development, the ideal amount of debt financing that must be used should range between 40% and 60%.

4.5 Chapter Conclusion

This chapter looked at data collected from developments within Airport City, to investigate how the method of financing influences the value of the commercial properties.

The section highlighted the method of financing that was most used by developers in this area, and was found to be equity and debt. Among the valuation methods for valuing commercial properties, the common method used by the developments at Airport City, Accra is the net operating income method.

Finally, upon critical analysis and inferences, it was established that the method of financing has an influence on the value of commercial properties. This is by means of the funds accessible to the developer, the inclusion of financial expenditure in the valuation and using the right amount of leverage in debt financing.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Chapter Overview

This final chapter provides a summary of the entire study. This includes a summary of the objectives, the methods adopted, the analyzed findings, how each objective was achieved and research question was answered.

This chapter also gives recommendations on financing developments and for future researchers in the field of finance and real estate to make up for the limitations faced in undertaking this research, which is also discussed.

5.2 Conclusion of Research

Data that was collected throughout the research was critically analysed using the thematic analysis and narrative analysis method to arrive at a conclusion. In concluding this research it was important that the objectives that were mentioned in chapter one were achieved. Below, Table 5.1 shows a summary of how the set objectives were achieved, highlighting the method, findings and the conclusion that were drawn.

Table 5.1 Summary of Conclusion

Objective	Method	Findings	Conclusion
1. To identify the method of finance and valuing commercial properties at Airport City	Field survey	• All the properties use debt and equity to finance the developments • The net operating income method is used for valuing	The common method of financing at Airport City, Accra is the equity and debt. Commercial properties at Airport City, Accra are valued using net operating income.
2. To establish a	Literature	• Value of a property	For Airport City

Objective	Method	Findings	Conclusion
relationship between the method of financing and the value of commercial properties	review	is independent of the method of financing • Method of financing to some extent has an influence on the value of a property	Accra, methods of financing can have an influence on value, given that some literature have established there is a relationship to some extent.
3. To investigate how methods of financing influence the value of commercial property. [main objective]	Field survey	• Accessibility to funds • Financial leverage • Method of valuation ; net operating income	The method of financing has an indirect influence on the value of commercial properties.
4. To make recommendations to developers and financers with regards to the relationship between the methods of financing and the value of commercial properties	Analysed data	• Use of accessible funds. • Debt financing should range between 40% and 60% of capital structure. • Valuers using the net operating income method should consider the financing method.	The suggested recommendations are addressing the identified problem statement and the gaps in literature.

5.2.1 Method of Financing and Valuation Method Used at Airport City

This objective was primarily to identify which method of financing and valuation is applicable to Airport City and determine if it should be considered in determining the value of these developments. From literature, the methods of financing that were identified equity, debt, mezzanine, bonds, REITs, semi-fiduciary and non-fiduciary. From these options, only two methods of financing were used at Airport City: equity

and debt. It was also gathered that, among the various options, these were the cheapest and easily available options.

The type of development alongside the basis and purpose of the valuation of a property, inform the valuation method that should be used. In literature, the ideal method for valuing commercial properties is the net operating method (NOI). This was evident at Airport City, where the sample properties used valuated using the net operating income (NOI).

5.2.2 The Relationship between the Method of Financing and the Value of Commercial Properties.

The theory and opinion that grounded this work were that of, Modigliani and Miller (1958) theory and Ogedengbe and Adesopo (2003). According to Modigliani and Miller (1958), the financing decision of a firm/development is independent of the value of the firm/development; in short there is no relationship. In opposition, Ogedengbe and Adesopo (2003) argued that to some extent there is a relationship between the two variables; the method of financing and the value of a property. Making inferences from data collected and analysed with regards to Airport City, Accra, it can be established that there is a relationship between the method of financing and the value of commercial properties.

5.2.3 How the Method of Financing Influence the Value of properties.

Having established that there is a relationship between the method of financing and value of properties, it was essential to investigate the modalities of this relationship. It was discovered that, a developers' accessibility to funds can influence the value. In that, when a developer is able to access funds easily, this will lead to an increase in supply creating affordability. This will generate and increase effective demand, which in the long run will lead to a rise in value.

The use of the net operating method (NOI) to value properties at Airport City, Accra showed a relationship between method of financing and value of a property. This was illustrated using the formulae for valuation – the net operating income – where financial expenditure (principal payments and interest payments) is not deducted along with the other expenses (vacancy allowance and operating expenses) deducted. This means that, the value derived from using this method is reflective of the debt financing – a method of financing – this firmly establishes a relationship between the method of financing and the value of commercial properties.

5.3 Recommendations

From the problem statement described in Section 1.3 and the gaps identified during the literature review in chapter two, the following recommendations have been made. The recommendations made were mainly for developers and valuers.

1. To increase the value of the property in the long run, accessibility to funds is essential. Having easy access to funds enables a developer/supplier to easily meet effective demand. By doing so, quantity demanded will rise and eventually cause value to go up. From the data collected it was established that equity and debt are the funds that are easily accessible, hence developers should continue to use these methods, whiles exploring easily accessible options.

2. Developers using debt financing stand the risk of over-financing their developments. In that, developers are likely to use more debt to finance their developments and as a result create high financial leverage. To ensure that this does not occur, developers should use debt financing between 40% and 60% to finance their developments.

3. In the valuation of properties within Airport City, Accra, the method of valuation is the net operating income (NOI). It is recommended to valuers, to include the method of financing in their valuation, especially if the development was financed with debt financing. Since the value derived using the NOI method is reflective of the debt financing used.

5.4 Limitations

The major limitations faced during this research were;

1. Very little literature on the relationship between the method of financing and the value of commercial properties exist. As such,

secondary data to develop the theoretical framework of this research was difficult to find.

2. In collecting data, a few developments did not disclose certain financial information that was imperative to establishing if a relationship between the method of financing and the value of commercial properties existed.

5.5 Recommendations for Future Research

Due to the inadequate amount of literature on the topic, future researchers in the field of real estate finance should consider external literature databases to that available to the University.

Since this study will probe into certain confidential aspects of a development, such as their finances, future research should first investigate what will provide the respondents with confidentiality before the survey is conducted.

5.6 Chapter Conclusion

This chapter summarised the findings of the study, identified how the methods of financing influence the value of commercial properties and discussed the limitations of doing this research.

A relationship does exist between the method of financing and the value of commercial properties in the study area, Airport City. As such if developers apply the recommendations made in section 5.3 of this study,

they will be able to maximize the value of their developments and reduce their financial leverage.

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APPENDIX

Appendix 1: Data collection tool: semi-structured interview questions

1. What is the name of the development?

2. What is the purpose of the development?

3. Is this the first development of its kind or there have been subsequent developments?

4. Why Airport City?

5. How much did the project cost?

6. What sources and methods of financing are available to you in Ghana?

7. What is your opinion on each of these sources and methods of financing?

8. Which methods of financing are you more inclined to use?

9. Which exact method of financing was used for this development?

10. How many methods were used to finance the development?

11. What proportion of each method constitutes the full funding of the development?

12. At which point of the development were the funds raised?

13. Was value of the development estimated before, during or after construction?

14. Who valued the development at the mentioned stage?

15. How was it valued?

16. Is the final value of the development same as the estimated value?

17. If (yes) what influenced the difference?

18. If (no) why did the value not vary?

19. Did the value of the development influence the source and

proportion of the funding?

20. If (yes) how?   If (no) why was it not considered in

determining the value of the development?

21. Do you think the source and proportion of financing should be

considered in the value of the development?