The determinants of office rents in Accra, Ghana

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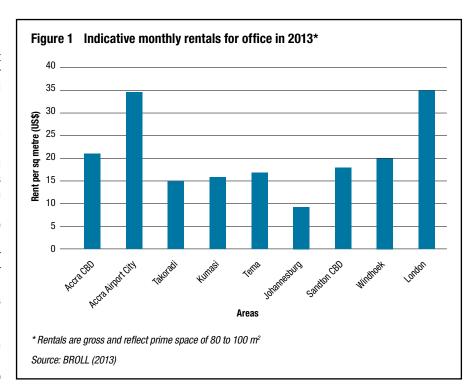
1. Introduction

In Ghana, real estate is one of the largest components of wealth. Housing in particular is a major motivation for household saving and significantly influences household consumption (Karley 2008). The ratio of commercial real estate is also growing gradually within this sector. Many of the office buildings available before the 1980's economic restructuring were state owned. However, these buildings were not able to meet users' demand and in many cases fell short of users' requirements. The increased demand for office space led to sharp increases in rents. In the short term, residential buildings were converted into other uses including offices, retailing and even for industrial purposes. Yet, this did not slow down rising rents, and in some cases the premises posed health and safety hazards for users.

Recognising the long term need for more purpose-built office spaces, both state agencies and the private sector were encouraged to participate in this market by the enabling environment stimulated by the structural reforms. The state entered the market through its agencies such as the Social Security and National Insurance Trust [SSNIT] as investors, mainly in the office sector. The private sector participants were predominantly investors and/or developers in office and other sectors of the property market. Although there has since been a significant level of activities in the market, one would have expected a moderate level of office rents. Yet, rents in Accra are among the highest when compared to other cities in the region and other parts of the world as illustrated in Figure 1.

2. Study approach and methodology

To establish trends and determinants of rental values in Accra, a good set of data and information are needed to draw a clearer picture. However, due to paucity of data required, a modest approach is used in this paper. The



paper employed two methods as outlined here. First, an update of academic literature was carried out. This consisted of a comprehensive and systematic literature review, focusing on the office rent determinants as well as existing information on historical development and pattern of office development in Accra. A review and analysis of official statistical information about the numbers, location, type of investors and users, was undertaken. Secondly, data and information collected through interviews and discussions with stakeholders also formed a key part of the research. The discussions with targeted official representatives in the industry included BROLL (an office management company) and users, e.g. insurance companies etc. to discuss broader issues of office demand, supply and impact on rents.

Before assessing the determinants of office rents in Accra one needs to know what office rent determinants exist in general, and how they manifest in the market.

3. Review of office rent determinants

Determinants of office rent is well researched and documented by several studies with different emphasis (for example Clapp and Giacotto 1992; Dunse and Jones, 1998; Dunse and Jones, 2002; Long, 2012; Baker, 2012). In more recent studies, Long (2012) emphasised the impact of lease terms on commercial rental values and Baker (2012) highlighted the impact of several different factors. According to Baker (2012), different factors prevail in different situations. It is understandable why these studies have identified variable determinants of office rents. If these factors prevail at the same time. a perfect market scenario will occur. Effectively, this will create a major impact of high performance in the affected office market. This is a hypothetical case, which does not happen anywhere in the office market. Indeed, there is no such a perfect market in micro or macroeconomic context.

In general, both micro and macroeconomic factors affect value of office rents. The common factors identified from the literature include location, highest and best use, cyclical demand, marketing time, market driven value, site improvements, lease value, financing, vehicle impact, demographics, competition, taxation issues, zoning, creative sales/leasing methods, multipliers and "rules of thumbs", income (appraisal) approach to value, market (appraisal) approach to value, cost (appraisal) approach to value and net lease value. Jowsey (2011) explains why different attributes must be taken into account in rent determination. Whilst influences on the capital and income structure within a sector, region, city or office grade can be analysed, the individual property's characteristics such as size, age, quality etc. must be assessed. Thus the questions that need to be answered include: Is there demand for this location? How much supply is currently in the area? What is the age of this building? Does it meet current environmental standards? And so on. In a nutshell, variations in the outcome of studies of office rent are caused by attributes of different geographical locations as well as characteristics in relation to the nature of economies; building attributes; varying contractual arrangements; and even government policies. These parameters are now used in reviewing determinants of office rents.

3.1. Economic factors

In simple microeconomic terms, the determination of office rent rates is about demand and supply. On one hand demand relates to wants and is only limited by peoples' ability and willingness, whilst supply is limited by the resources and technology available (Sloman 2006). On the other hand, rental values are the market price (per annum) of occupying property. Thus, as market price is determined by interaction of demand and supply, so is rental value. Office space as commercial property is a factor of production. Fraser (1993) observed that demand for office space as a factor of production is derived demand. Office buildings are usually occupied by professional, banking, financing, and other administrative and management users. These users require space to help in the provision of services required by other economic entities. So the demand for additional space depends on the demand for goods and services produced when combined with other factors of production. Also a shift in the stage of market and/or industry development could have impact on associated space requirements and rental values. For instance, an economy moving into or dominated by service activities or an industry potentially moving into the growth phase of its business life cycle, would lead to an increase in demand for office space and possibly an increase in rents.

In assessing the impact of economic fundamentals on office demand, Barras (1994) asserted that real GDP is the most appropriate and widely used demand side measurement at an aggregate level. That real GDP gives a broad indicator of office activity, both for manufacturing and service sectors of the economy. The fact is, demand for goods and services are sensitive to changes in disposable income, which is affected by macroeconomic variables such as real wages, interest rates etc. So the level of occupation demand for office is influenced by general economic conditions.

Henneberry and Gardiner (1991) examined determinants of real office rent within standard geographical regions in the UK for the period 1977-84. They found regional GDP to be the most significant of all the demand-side measures included in the analysis. The other variables identified in the study were service sector employment and average income. Similar results were obtained in a study by Giussani and Tsolacos (1993). These views are supported by recent studies in the UK (UBS 2012), which discovered that demand for space in office, retail and logistics sectors slowed down considerably due to the weakening of the UK economy. Capital Economics (2015) highlighted the impact of economic variables such as real consumer spending, employment rate and GDP on the rental values in office sectors. Thus, offices serve all aspects of the economy and so the demand and rents tend to be in line with the economy performance (Fraser, 1993).

Wheaton et al (1997) suggested that the driving factor of office space demand is employment in selected sectors of an economy. This study tracked employment growth in the finance, insurance, business and professional services. With an increase in employment, there is a need for additional office space to accommodate them. This leads to a greater demand for office space and in turn results in higher rental values. This claim is supported by GVA Grimley's Economic and Property Review (2012), which asserts that when employment growth increases it is particularly good news for the property market, especially the office sector.

Given the level of demand, a suitable level of supply is required to bring the market into equilibrium. Supply in the office market is measured by the level of current stock and new property coming onto the market. Supply depends on the resources available in respect of land, labour

and capital. Vacancy being a function of both demand and supply is the amount of empty space that is available for let. Clapp, J. and C. Giacotto (1992) found out that vacancy levels are among the most important drivers of rental rate formation.

In times of high demand (and low availability of supply), vacancy rates should naturally be low leading to a rise in the rental rate. The reverse scenario has the opposite effect in that a high vacancy rate allows a lessee to exert downward pressure on the rental agreement. Also, understanding of the property cycle and the amount of supply scheduled to come onto the market helps in rent determination. For example, if the economy shifts into a boom phase where demand is strong, then the pressure to provide more supply into the market is strong. However, the inelasticity of supply immediately will put upward pressure on the rent rate. An area of land should naturally appreciate in value if it is released or regenerated to provide supply onto the market (Clapp, J. and C. Giacotto (1992). This is particularly true where demand is already high with low supply in the market. However, Wheaton et al (1997) have shown that the timing of the release in the property cycle will impact on the scale of the valuation especially if there is low demand with already sufficient supply in the market.

Compared to industry, the planning and construction period for offices is the longest (McCann, 2003). Offices have longest supply lag as the development pipeline may contain projects that could add significantly to future supply. In the short term, owing to supply lag, office development is unable to react to changing market demand. As supply is ill-equipped to satisfy the immediate demand it can result in rising rent. In the investment market property is an asset amongst competing assets, and the proportion of a portfolio held in property will be influenced by the values and potential of rival assets, inflation, and the need for portfolio 'balance'. The amount of investment demand and supply activities in the office sector of the property market could impact on the rental rate (Keogh 1994).

Finally, the cost and availability of owner-occupied premises will tend to affect the demand for rented spaces. So firms contemplating buying as an alternative to leasing will take account of the relative cost, particularly the cost and availability of finance (for purchase), expectations for future rental growth, and tax relief on rent and interest payments.

3.2. Location factors

Location for every business is an important decision. A business searches for a property that best serves their needs. The ability to service employees and customers in an efficient manner means that businesses will develop in certain locations to take advantage of certain factors. The classical economists (Ricardian) explanation of land rent assumed land is homogeneous, and the market in equilibrium does not change with supply conditions in the long run (Evans et al. 2004).

Contrary to Ricardian belief decisions of office location are affected by certain location attributes such as transportation and interactions costs, quality of the environment and agglomeration economies (Goddard, 1975; Evans, 1985; Ball et al., 1998). Moreover, as postulated in Von Thunen's model, rent values fluctuate with distance from a main commercial centre, which means the office location could be determined by a "trade off" between transportation cost and distance to the Central Business District [CBD]. Alonso in 1964 also emphasised a negative rent gradient with distance from the urban centre. But Jones and Dunse and Jones (2002) have shown that rents could increase away from the CBD on approach to major highways and motorways. This is a factor of accessibility and relates more to location of industrial warehouses.

In assessing location-specific price determinants. Bollinger et al (1998) find that nearness to concentrations of office workers exerts a positive impact on office rent levels in the Atlanta area. Agglomeration could be enhanced by spatial concentration and composition of population in certain areas. So industries requiring certain skilled labour may agglomerate their businesses into an area which forms an enclave. This shows that agglomeration of industry in a purpose built or business efficient area could result in high demand and so will rent increase. For example, over the past three decades there was a major shift of single professional households and R&D workers towards the South East of England. This created an increase in demand for, hightech office units as well as smaller units of 1/2-bedroom housing in this region. Adjacent effects (externalities and spill over effects) to the geographic location of office property relative to public transportation infrastructure and hub have also been observed (Clapp 2003). Finally, some studies have included the latitude and longitude coordinates as well as heights of buildings in hedonic modeling of office rent. This approach was applied for instance by Clapp (2004). The number of storeys of a building and the availability of panoramic views and the potential landmark status of very tall buildings tend to impact positively on rental rates.

3.3. Building attributes

There is no substitute for land and property in general. For example, an office is not a substitute for a shop; offices without air-conditioning are not regarded as an adequate substitute for air-conditioned premises by most firms in the financial services sector. The capacity to substitute one property for another is confined by the need to match individual characteristics to individual tenant requirements, for example, in terms of size, design and layout, age and technology and amenities. Besides location, office occupiers are sensitive to certain building attributes that they may be willing to pay higher rent for. So property that meets, among others, these requirements would be in high demand and could lead to higher rental values.

It is expected that tenants pay a high premium for the convenience of accessing amenities in the building, which are perceived as good. Building age could be used as proxy for quality. Slade (2000) and Dunse et al (2002) observed that constructed or renovated building had positive impact on rental rates. Ho et al (2005) also reported that functionality, services, and overall amenities are important in assessing office building quality.

Space size is also critical to some tenants. Assessing determinants of rent in the Atlanta office market, Bollinger et al (1998) have shown that large tenants are often willing to pay a rent premium for sizeable units of contiguous office space that enable their internal operations to run more smoothly than a situation with several scattered locations.

Technological factors play important role in the nature of business activity and demand for space. For example, the introduction of microcomputers into most office-based activities in the UK since the 1980s had an effect on office floorspace demand (Fraser, 1993). This led to an increase in demand for offices able to accommodate suspended ceilings and raised flooring, behind which cabling and services are housed. Offices without such facilities have become functionally obsolete.

3.4. Contractual and policy factors

Lease terms associated with commercial property space are important to the tenant. Hendershott, et al (1999) highlighted a number of key characteristics of the office rental

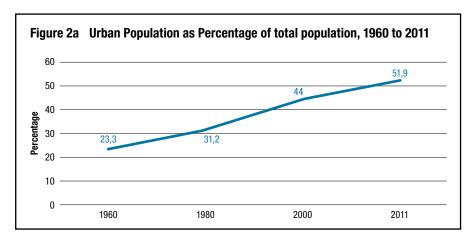
contract in the UK, which include long term, an upwardly only rent escalation clause and other onerous tenant responsibilities. Businesses would always seek tenancy agreements that suit their business needs but during periods of economic uncertainty, costly clauses perceived as onerous are likely to discourage potential tenants and as such this could have negative impact on rent rates.

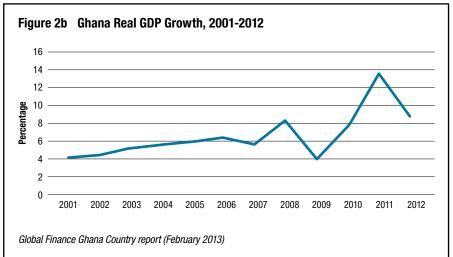
Government policies may have impact on office rents via a number of routes. Starting with urban land planning and use policies, policies that restrict release of land, such as green belt etc. may affect supply of land development. If the government has no proposal to allow new offices to be constructed through the availability of licences for land development, then this will lead to a decrease in supply. If this remains in place, for example, in an expanding economy, it will lead to a rise in office rents. However, a release of further supply through capital expenditure for refurbishment of current dwellings to compete with new supply could lead to moderation in rents. Red tape associated with planning permission and development permits could also affect the time of delivery of required office space. Consequently, the associated costs are passed on to the end user in the form of higher rents/prices, densities, and smaller lot sizes.

The effect of tax relief policy on office rent cannot be overemphasised. When industries are provided incentives, rebates or subsidies for the production of goods or services, it affects the profitability of the business. For that reason, firms may consider tax relief on rent and interest payment when deciding on building space usage – that is, they may consider whether to be an owner occupier or a tenant. This affects the desire or not for office space supply to increase. At the same time, the requirement for more or less office space as part of a firm's portfolio and/or balance sheet affects office space supply. Thus, the way the regulatory and tax regimes for an industry are applied may affect how rents are set.

4. Growth trend and impact on demand for office space in Ghana

Ghana is a developing country with an estimated population of 25 million in 2013, up from a population of 6 million in the 1960s. There is an increasing trend towards an urban population as depicted in Figure 2(a), which presents the Urban Population as percentage of total population.





The country is well known for its commodities: gold and cocoa production. In addition, oil has recently been discovered by drilling off the shores of the country in the Atlantic Ocean, which begun during 2010. The country is perceived as relatively stable politically and socially compared to others in the sub-Sahara Africa region [SSA]. Ghana's economy has improved dramatically; well-endowed with natural resources, a competitive business environment and sustained reductions in poverty levels and with a rising trend in per capita income which reached over US\$1600 in 2011. Ghana is now recognised as the world's 16th fastest growing economy on the IMF's World Economic Outlook (2013). Some are even going as far as to describing Ghana as the 'Switzerland of Africa'. Figure 2(b) shows the real GDP growth data for the past decade. Macroeconomic developments since 2001 suggests significant gains have been made in the economy, with economic growth currently at 8.8% and inflation coming down to single digits at 9.8%.

Economic growth in Ghana was above 10% in 2014, though this is far from the almost 14% achieved in 2010. This is well above the

predicted growth rates of most economies in the region. The peaceful general elections in December 2012 also highlighted the country's potential and prompted further economic growth. So much so in fact, that many advanced-nation businesses are currently looking to Ghana for investment opportunities, the Canadian Business Delegation being the most recent.

It is important to highlight the impact of the modernisation process that accompanied Ghana's structural adjustment programmes [SAP] three decades ago. These reforms brought about financial assistance from the IMF, World Bank and other international finance corporations. The reforms caused an upturn in industrial output, investment and service sector growth. From a predominantly agricultural based economy after independence in 1957. Ghana's tertiary sector has now achieved significant growth (World Bank 2013). For example, accounting for only a third of GDP in 2000, the service/tertiary sector now accounts for over 50% of GDP as portrayed in Figure 3. During the years immediately after 2000, agriculture had the largest percentage share of GDP. However, by 2012,

the service sector contribution to GDP had exceeded 50% and is set to continue growing. Analysis of the working age population by industry reveals a generally increasing trend in employment opportunities in the service sector, which tends to require office spaces. Over two thirds of increases are noted to be in the greater Accra region GSS 2013).

It is interesting to note that Accra's ranking in terms of number of service firms in sub-Sahara Africa appears to be rather respectable with a continuing rise in the number of Foreign Direct Investment [FDI] firms in the service sector. In the midst of volatile political and economic environments in neighbouring countries, Ghana continues to stand out as a stable country and probably the preferred choice for service generating companies.

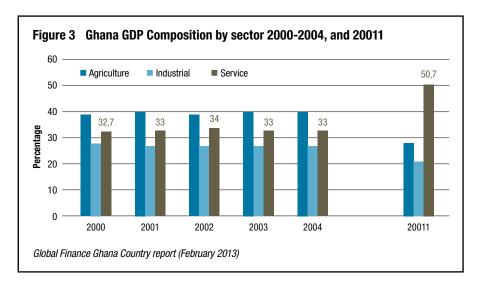
In view of these factors Ghana (and in particular its major cities such as Accra, the seat of government, Kumasi, Tema and Takoradi) has become an attractive location in the region for international organisations and businesses. Among the cities, the capital, Accra is highly sought after, because of being centrally placed in relation to other major cities mentioned above and having relatively better infrastructure. These facts, among others discussed later, have led to further increases in economic activities and the use of purpose built office spaces. Yet, the cost of doing business in Accra is very high. According to the Mercer Index, Accra ranks 86th (2011) compared to 214 other cities over the world in terms of the cost of living.

5. The nature of demand and supply of office space in Accra

5.1. Factors contributing to demand for office space

Demand for office space in Accra appears to be strongly affected by activities of the service sector especially finance, business and services employment. The service sector covers a range of tertiary economic activities which are categorised in Ghana under the following main activities: finance; insurance, real estate and business services; restaurants and hotels; transport storage and communication; wholesale and retail trade; government services; and community, social and personal services and producers of private non-profit services.

Considering the finance sector for example, there were less than 20 banks (mainly pubic owned) in Ghana during the 1980s. However,



with the development of the banking sector, there was a need for the appropriate office spaces. After the structural adjustment programme private banks entered the sector and the number of banks increased to the extent that by 2004 there were 115 banking institutions and by 2013 there were nearly 200 private banks in Ghana. All these banks have their head offices located in Accra. In addition, numerous branch offices are located in Accra and other major cities. All of these banks now use sophisticated IT facilities requiring the appropriate state of the art office spaces fitted with suitable equipment.

Furthermore, the number of non-bank financial institutions requiring office spaces has increased since the mid-1990s. Non-bank financial institutions were established in Ghana to provide services to sectors of the economy believed to have been denied access to credit by the commercial banks. This sector was given a significant boost in 1995, when the Ghana government received support from International Development Association [IDA] credit in the sum of US\$25millions that was used to develop various programmes to enhance the capacity of the non-bank financial sector. In particular, the following sets of institutions were developed;

- The capital market institutions (Ghana Stock Exchange, Securities Exchange Commission, and the Non-Bank Financial Institution [NBFI] Department):
- Associated financial infrastructure (Home Finance Company, Domestic Payment System, and Institute of Chartered Accounts of Ghana); and
- The contractual savings industry (National Insurance Commission, State Insurance Company, Social Security and National Insurance Trust).

Although the financial system in Ghana is dominated by the banking sector (50% of GDP), there has been proliferation of other non-bank financial institutions such as insurance businesses. Compared to other African markets, the insurance industry in Ghana is relatively small. For instance, insurance premium as a percentage of GDP in 2001 was less than 1%. As of December 2004 the sector contribution to the entire financial sector was 1.3, rising to just under 8% in 2013 (Lamptey 2014). The industry is made up of insurers, insurance brokers, actuarial firms, and agents. But the number of insurance companies has more than quadrupled from only 3 private insurance companies in the 1990s to 17 insurance companies, 30 insurance brokers and 2 re-insurers by 2004. There were over 30 insurance companies as of December 2013. In view of the growing numbers, additional office spaces are required.

Another impact on office demand is the privatisation in the Telecommunication industry. This led to a significant growth in the need and demand for high tech office spaces. For example, before the mid-1990s, parastatal enterprises were the only providers of television and radio broadcasting, and telephone services. However, significant competition was introduced from the mid-1990s onwards. Compared to a single government owned and controlled TV broadcasting house, the Ghana Broadcasting Corporation [GBC], there are now more than 5 private television broadcasting service providers. In addition, companies providing television services via a satellite dish have entered the industry. Over 100 private radio FM radio stations have now spread across the greater Accra region alone. In the 1990's there were only government-owned radio stations. Furthermore, post, telephone and mobile phone service providers have entered the industry after the hitherto government owned and controlled P&T Communication was privatised.

Service provider companies are major users of high technology office space. Therefore, these developments have introduced competition as well as increased the need and demand for suitable office space in the capital. They have, no doubt caused a stir in and boosted demand in the Accra office market.

5.2. Supply of office space in Accra

Accra's office market can be separated into several grades; mainly Premium Grade, Grade A, Grade B, Grade C and Grade D. These office spaces are predominantly located in the Central Business District [CBD]. The city is experiencing very low vacancy rates for office space located in the CBD with particular high demand for premium grade and grade A office space. The average vacancy rates of Accra's office market are 5.8%.

Before the 1980s, an area called the Ministries and further south of the Ministries along the Accra High Street was collectively perceived as the Central Business District in Accra. This was where the High Court was located and the central bank, and major banks had their headquarters and major branches here. It was also a key location for international businesses and organisations. This area being the main CBD of Accra was clogged with traffic congestion. Retail markets located in the vicinity aggravated the concomitant traffic congestion that characterised the area. The Accra Metropolitan Assembly [AMA] realising the impact of traffic congestion in Accra and especially in the CBD, initially focused efforts in redeveloping the main retail sector called Makola market in a bid to easing traffic congestion and to provide an appropriate shopping area. In the process few office spaces were added to the office stock.

Office sector expansion became a reality when the Social Security and National Insurance Trust [SSNIT] ventured into real estate investment during the early 1990s. In particular, they entered the office sector and by 2000 they owned several office buildings most of which were skyscrapers located in the Ridge Ambassadorial Enclave of Accra, adjacent to the Ministries area. By 2004, the lettable area of SSNIT office spaces was roughly 30,740 square metres in their property portfolio (Karley 2008). Table 1(a) shows the number of office spaces brought to the Ridge Ambassadorial area and the rents charged are shown on Table 1(b).

Table 1a Rental evidence at Ridge Ambassadorial area

PROPERTY	FLOOR AREA (SQM)	RENT PSM PER MONTH(\$) / (GHC)	MAJOR TENANT(S)	PROPERTY GRADE
Ridge Tower	14,355.33	18	MTN, Fidelity	В
Heritage Tower	9,340.55	18	UBA, Volta River Authority (VRA), Ghana Revenue Authority (GRA)	В
Premier Tower	10,262.78	18	Zenith Bank, SG SSB GC NET, Affiliated Computer Services	В
Trust Tower	4,122.25	13	_	В
Round House	1,094.96	13	-	В
Okofo House	721.46	13	_	В
Total House	_	12	_	С
Movenpick	_	45	_	Α
World Trade Centre (WTC)	_	39	_	Α
Accra Financial Centre (AFC) (under construc- tion – completion 2014)	13,700– Office, 1,800 - Retail (9 storeys plus base- ment parking)	40	_	А

BROLL (2013)

Table 1b Rental es	calation in	i the Kidae	Ambassadorial area
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PROPERTY	2006	2007	2008	2009	2010	2011
Ridge	13.45	13.45	13.45	14.35	16.15	16.15
Heritage	13.45	13.45	13.45	14.35	16.15	16.15
Premier	13.45	13.45	13.45	14.35	16.15	16.15
Trust	10.764	10.764	10.76	11.66	11.66	13.00
NIA	_	_	_	11.66	11.66	11.66
Round House	5.38	5.38	5.38	5.38	5.38	5.38
Okofo	5.38	5.38	5.38	7.64	7.64	7.64

BROLL (2013)

Table 2a Prime office spaces in the Airport City area

PROPERTY	FLOOR AREA (SQM)	RENT PSM PER MONTH(\$) / (GHC)	MAJOR TENANT(S)	PROPERTY GRADE
Opeibea House	2,124.00	15	Stanchart/Ghana Life/IFC	С
Aviation House	2,104.00	18	GCAA	В
Gulf House	3,233.00	21	GCB/ADB/Intercity Hotels	В
Millennium Heights	3,500.00	15	JICA	В
UNA House	2,944.00	25	Barclays/PWC	Α
Silver Star Tower	7,111.00	26	Delta Air/ Ecobank / Stanbic Bank/Lakeside Estates	Α
Manet Towers (Twin Towers)	_	26	UT Bank and Vodafone Ghana Limited	Α
Cocoshie Building	3,000	19	Kosmos Energy / Procredit	В
One Airport Square	16,000	50	_	Α
Icon House	15,000 – offices, 2,500 – retail Total – 17,500	40	Stanbic Bank Ghana Limited	А

BROLL (2013)

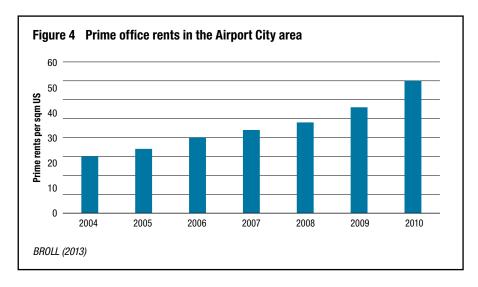
The introduction of these prime office spaces attracted businesses quickly to the area and the rate of take up of office spaces increased. According to BROLL (2007), the property management company responsible for SSNIT commercial properties, most of these offices achieved 100% occupancy rate on inception. The overall occupancy was 88% in 2004 rising above 93% in 2005. Thereafter, the occupancy rate for all SSNIT offices has increased to nearly 100% throughout the years to date.

As the Ridge area became an attractive location so did private companies' interest in the area. Private companies entered into office development for either their own use and/or for investment purposes. Notably, redevelopment of properties along the Independence Avenue resulted in a complete facelift of both sides of the highway and many international organisations, and businesses relocating to occupy office spaces in the area. Banks, insurance companies and other financial institutions currently have both head offices and branches in this location. The Ridge area has also become a hot spot for the leisure industry, to the extent that some of the best hotels in Accra (e.g. MOVENPICK and NOVOTEL) are located in this area. It is interesting to note that compared to the CBD of the Ministries and Accra High Street areas, the Ridge Ambassadorial enclave, experienced a lower rate of traffic congestion.

Another addition to existing office space came with the reconstruction of the Accra -Airport highway, completion of various overhead bridges on the main highway, completion of the Tettey Quarshie interchange linking the Tema motorway to Accra. A new spatial structure of offices emerged. The Ministry of Foreign Affairs commissioned a Chinese construction company to develop a new office building in the vicinity. This was completed in 2012 to allow the permanent seat of the ministry to be moved there. Other developments such as Opebia House, Gulf House and the Airport City project (shown in Table 2a) completed in stages, brought additional prime office spaces to this area of the city. Hence, there seemed to be a shift or creation of another CBD in the Accra Airport City area, thereby attracting demand to the area and hence a further increase in rents as shown in Figure 4.

6. Discussion of Accra rental vales

Whilst many issues affecting rent can be looked at on the micro-economic level of the office market and property industry, the macroeconomic factors of the country, region and global impacts, must be taken into account



as they can influence the current and future expectations for rental values across the office sector in Accra.

If the economy is doing well and in a boom, rental values generally are higher than if the economy is in a recession or in a downturn. With Ghana and for that matter Accra's economy expected to continue to do well as stated earlier, and vacancy rates at low levels, rental values are expected to continue their steady ascent.

Ghana's economic growth figures were assessed earlier. To establish the current impact and the future expectations, we need to establish the following:

Will there be a further period of strong economic growth? Has the economy reached a peak? Are the economies in the region in a period of decline in output? How will global issues affect office rents? Certainly issues like inflation, interest rates, currency rates, unemployment, demographics, monetary and fiscal policies are also crucial.

Supply and demand are some of the main factors determining rental values. Supply directly relates to vacant office spaces at any one given time and the demand is determined by the take up rate of new and existing office spaces. We have seen that the supply cycle of office spaces in Accra is currently at or near the bottom of the cycle with very low or negligible vacancy rates and new office buildings only slated to be completed towards 2016 and 2017. New supply coming into the market is situated in the Airport area, a relatively new area in the city. Furthermore, the take up rate for new office spaces has experienced high levels of pre-leases and only a low percentage not being taken up yet. As supply continues to be limited, the rental values of office spaces in Accra will remain relatively high and likely continue to go up. The demand for office spaces also remain strong going into 2016/17. New buildings both in Accra's 'traditional' CBD as well as in the Airport area, a relatively new business district, have both seen strong demand for office spaces with spaces being taken up even before the new office buildings are completed. This strong demand is a determinant of rental values in the city and in this case will likely drive rental prices of office spaces up in the city.

We have seen a growing service sector in Accra dominated by finance, insurance and telecommunications. As there is an increase in employment, there is a need for additional office space to accommodate them. It is interesting to note that during the 1980s, although office employment (white colour jobs) grew considerably, the absorption of office space in Accra did not experience the same level of growth. This is due to the type of jobs being generated currently, requiring high tech and sophisticated office spaces.

The forecast for immediate growth in the Accra Airport areas is high because of their reliance on the banking and oil sector with the news that "investment banks are growing and with oil drilling already in the country. The overall forecast for the Accra office market is on the whole very positive. For instance, it is anticipated that the current prime rents of US\$30 per square foot [psf] in the Accra market will increase to USD35 by the end of 2015 and will reach 40 psf in 2017 and a significant increase in rental value is also expected for the Airport city project.

There is an 'Accra effect' at work here. The city is an attractive destination for businesses seeking office space. It attracts businesses

from all over the world. The market is of special interest because of its international character: According to Lamptey (2014), over 95% of new office space in prime locations are occupied by non-Ghana firms, Furthermore, BROLL (2013) asserts that a number of overseas companies taking up flagship units have driven up rents on prime streets.

Accra is a prime example of an agglomeration economy, which is embodied by pooling of skilled labour, a greater supply of supply inputs and services, and information flows between firms (Ball et al. 1998). We explained earlier that Accra is attracting other sectors into its commercial property market such as the Technology, Media and Telecommunication [TMT] Sector. Lamptey (2014) supports the theory of agglomeration theory by confirming that businesses from the TMT sector by identifying that "there are clear business advantages for technology and telecommunication companies to choose Accra including talent pool and access to a truly global marketplace in Africa."

It is the case that "the office space required in Accra specification" (BROLL 2013) because the demand coming from the overseas businesses and the TMT sector will seek a supply of Grade A property. As the level of demand in Accra continues to rise with limited new supply scheduled for 2016/17, this will continue to push up rental values until the supply of quality property increases. The nature of property means that in the short run, supply cannot be easily adjusted in response to increased demand. It is possible to look for alternative property in other areas, but as demonstrated above the types of businesses that operate in the Accra market do so to benefit from the specific advantages of its location. In reality the evidence suggests that rental values in Accra will continue to increase until the market is adjusted to equilibrium with the onset of further supply of quality buildings. Fraser (1993) summarises "if demand increases the rental value will increase due to the inelastic supply curve in the short run. This will induce an increase in supply but only after a time lag." The cause of this time lag is in the main part down to the time it takes to build office accommodation, particularly the tall and high specification buildings.

7. Conclusions

A number of issues determine the price paid per square foot for office space. All the three main sub-sectors of the market, namely the occupier, investment and development sectors affect the market in various ways. These 3 areas are important when looking at the rental values.

As observed earlier, in fact, a premium is paid for central sites in the Accra office market. These attributes would be carefully considered by each potential occupier and applied to the rent they might want to pay for an office space.

While the main factors that determine rental values in Accra have been explained theoretically by imbalances between market fundamentals - demand and supply for space, there are other unexplained factors contributing to higher office rents. First, premium office is difficult to come by due to the oligopolistic tendencies among suppliers. This is due to the fact that it has a market that has high barriers to entry and as Clapp (2004) suggests 'However, due to rising values over the past 20 years the market seems to be generally restricted to major funds such as SSNIT, big international property companies or high wealth individuals'. Secondly, there seems to be a significant amount of speculation regarding value of land and anticipation of the amount of business likely to be brought into the city and country in the long run. So landowners are demanding more than current land values and/ or reluctant to release land, hoping to cash in in the future. It is expected that foreign investors' interest in the office market in Accra will remain strong going into the future and so demand for office space will continue to grow. To ensure that increasing rents do not affect the local economy, more needs to be done with regards to curbing speculation and to encourage release of land for office development to ensure that rent escalation is controlled.

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