

An Analysis of Determinants of Office Rental Values in Sri Jayewardenepura

**Dissertation submitted to the University of Sri Jayewardenepura as a
partial fulfillment for the requirements of the final examination of the
M.Sc. in Real Estate Management and Valuation Degree.**

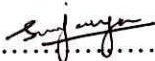
Full Name : P S Ranaweera
Examination No : REMV / 82
Registration No : GS / M.Sc / REMV / 3770/ 09
Department : Estate Management and Valuation
University : University of Sri Jayewardenepura
Date of Submission : 03. 12. 2012



The work described in this dissertation was carried out under the supervision of Mrs. N.C. Wickramaarachchi, Senior Lecturer of the Department of Estate Management and Valuation and any report on this has not been submitted in whole or in part to any university or any other institute for another degree / examination or any other purpose.

Full Name : P S Ranaweera

Examination No : REMV / 82

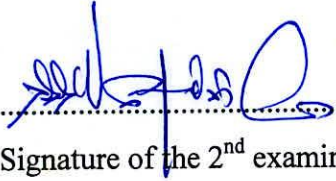
Signature of the Candidate :.....

Date : 03.12.2012

Hereby, I certify that Mr. Pani Sanjaya Ranaweera, (GS / M.Sc / REMV / 3770 / 09) duly completed the research titled "An Analysis of determinants of office rental values in Sri Jayewardenepura" under my supervision and recommended to submit for the final submission.



.....
Signature of the supervisor



.....
Signature of the 2nd examiner



.....
Signature and the official stamp of the Head

Head
Department of Estate Management & Valuation
University of Sri Jayewardenepura
Nugegoda, Sri Lanka.

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ABSTRACT

The contribution of the service sector for the GDP of the country is dominant being accounts for 59.5% of GDP. Office properties where most of the service sector activities are taken place reflect it as one of important aspects of the economy of the country. An office property is one of main category of commercial properties and also heterogeneous goods. Hence, office property is associated with a bundle of characteristics related to physical, range of quality attributes and specific locational characteristics as residential properties. Property valuation is dealt with identification, analysis and quantification of these various kinds of attributes in order to determine the value of a particular property. Literature established that the Hedonic Regression Analysis is the most common method used in the previous studies which analyse the rent determinants and formulate rent models initially for residential properties, in the past two decades this technique has also been applied in a host of office market analysis to predict rent. Hence, it is encouraged to study on office market of the country and this research attempts to examine significant determinants of office rent through the Hedonic regression Analysis. The primary objective of this study is to identify significant office rent determinants with special reference to Sri Jayewardenepura Kotte being the Administrative Capital of the country and focus on spatial variation of rent determinants by selecting two specific town centers situated in the study area.

The study uses data, obtained from rating cards maintain by the Govt. Valuation Department for office properties and through a field survey. The stated rental values which are more or less similar to the actual rental values mentioned in rating cards, have been applied as dependant variables along with 16 independent variables as predictors to run multiple regression analysis. The OLS estimation has been applied using SPSS for the analysis. In addition, determinants of rating rent other than stated rent also has been examined based on the rating rent data available for all office units which have been selected from the two specific locations namely Nugegoda and Battaramulla.

The results generated from the analysis indicated that the floor area or size, type of building, vertical location related to physical attributes, availability of car parking, air condition facilities as building amenities and location of office units, were among the significant predictors of office rent. Out of which it was found that size or floor area of office unit was the most influencing predictor of rent, where 1% increase of which accounts for about 74% and 73% positive effect of monthly stated rent in Nugegoda and Battaramulla areas respectively. As far as its impact on rating rent is concerned, it accounts for about 84% and 93% of rating rent in respective areas, reflecting its influence on rating rent variation which is stronger than stated rent. Other than these predictors condition of office unit, the availability of reception area and zone were also found as significant determinants on rating rent of office properties in two areas. Importantly, the explanatory powers of rent models are concerned, stated rent models were explained about 84% and 74% rent variations in Nugegoda and Battaramulla areas respectively. It was further revealed that office rent determinants and their influences on rental values spatially vary depending on different geographical areas.

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CHAPTER 01

Introduction

1.1. Background of the Study

Determinants of rental values of different type of real estate properties have been examined by previous empirical studies which mainly focused to identify and quantify determinants of rent in relation to residential properties. These studies have identified market rent determinants under three broad categories namely, property specific attributes, management specific factors and vacancies and findings indicated that location, quality attributes and amenities are the significant determinants of rent.

Most of the previous studies analyzed determinants of rental values in the property markets used Hedonic Price Model which is the typical statistical technique applied by many researchers as it has proved its reliability of establishing implicit price of individual attributes of property and their marginal contribution to overall property value.

As residential property an office is also heterogeneous goods which is associated with a bundle of characteristics such as size, age, range of quality attributes and lease terms. Being physical asset, it has its own specific location. These unique set of characteristics affect its value. Property valuation is dealt with the identification, analysis and quantification of these characteristics. Hence, a different bundle of characteristics inherent in each office property make valuation difficult.

Eda (2003) discussed the importance of commercial property related to three different factors: First as a factor of production, it provides the space to house the activities of business and industry. Second, as financial asset, commercial property constitutes a significant part within asset market. Third, as an investment medium, it provides revenue to its holders on the basis of value. Although the commercial properties comprise a large portion of wealth of the country, less attention was paid to commercial property compared with residential real estate. Commercial property can be divided into two main sectors, offices and shops.

The Hedonic Regression analysis has been widely used to analyse residential property markets. Dunse and Jones (1995) stated that ‘this technique is commonly used in valuation of residential property in the USA, in particular in mass appraisals and it has been used in the UK to a limited extent. Within commercial property sector, it has had only limited application and these are confined to US studies’.

As residential properties, commercial office properties are also heterogeneous goods which comprise a large portion of country’s wealth. This is true even in the context of Sri Lanka where the demand for office space has been increased as a result of the growth of the service sector, which indicated its share in Gross Development Product (GDP) was accounted for 52.8% in the year 2001 and reached up to 59.5 % in 2010. However, less attention was given to the office property market in the country.

In spite of concentration of offices within the Colombo city, capital of the country, experienced in the past, they are now moving from the Colombo city towards suburban areas closer to the city located in Colombo Metropolitan region. This is due to the Government decision to develop Sri Jayewardenepura Kotte as administrative centre of the country which is now speedily implemented and all government institutions located in the Colombo city are being shifted from there to Sri Jayewardenepura Kotte and the administrative unit of Battaramulla in Kaduwela Pradeshiya Sabha. Hence, sub urban areas within the metropolitan region are concentrated with office activities.

In Sri Lanka the demand for office space has been experienced rapid growth during the last decades. One of the main reasons for this is developing trend in the service sector. This has been evidenced by the statistics provided in the Central Bank Reports in which noted that three main contributors for the GDP of the country are the agriculture, industry and service sectors out of which the service sector dominated having a share of more than 50% of the GDP and has also been gradually increased during the last decade. The main sub sectors in the service sector are whole sale & retail trade, transport & communication, banking, insurance & real estate, government service and private services etc. It is reported that the majority of the service sector activities are taken place in an office environment. Ariyawansa and Dilhani (2010) stated that office market related studies in the country seem not prominent. Also noted that reasons for which may be higher complexities in identifying an exact office market in the country, even though, in most of the other countries have well

demarcated office markets such as New York, Manhattan office market, Berlin office market & Hong Kong office market etc.

There are no published research papers which examined determinants of rental values in the office market of the country, and application of hedonic approach was also limited for environmental studies and some residential property market analysis. Considering the need for a research on the office market in the country, this study is aimed at analyzing office market by examining significant determinants of rental values of office properties located in several suburban areas in the administrative capital of Sri Jayewardenepura Kotte. As explained, the Government has made a decision to develop Sri Jayewardenepura Kotte as the administrative capital with the intention of redeveloping the city of Colombo; capital of the country and as well the largest commercial city, by expanding its commercial activities throughout the city. Hence, all the administrative institutions concentrated in the city of Colombo are being shifted from there to Sri Jayewardenepura Kotte.

1.2. Research Problem

In the context of Sri Lanka, the highest contributor for the GDP of the country is the service sector having share of 59.5 % of GDP and its annual growth rate was recorded as 17.2% in the year 2010/11 compared to 12.6% growth in 2002. The sub sectors represent the service sector is concerned, it is revealed that the whole sale and retail trade account for highest share of GDP which is 23.6% in year 2010/11. Moreover, Transportation and Communication, Banking, insurance and real estate etc, and Government services are other predominant sub sectors having share 14.3%, 8.8% and 7.1% of GDP respectively. Labour force indicators for year 2010 also proved the important contribution of service sector to country having highest percentage of labour force involved in the sector which amounting to 43.1%. Hence, office properties become one of the important aspects of the property market as well as of the economy of the country where all most service sector activities are taken place.

There is lack of econometric studies on the economics of the office property market in Sri Lanka mainly due to general absence of data on rental values. Besides, lack of studies on office rent determinants hide the progress of office rent market. Arbitrary

decisions of landlords on fixing of office rent may further affect negatively to rental market.

Consequently, studies on office markets are very crucial to policy making agencies to have an overview on the office property market as well as for the valuation practitioners to identify and quantify the factors which affect the value of office properties. The method followed by the traditional valuers is subject to criticism which is based on their personal judgment. Therefore, another approach is needed for valuation practice to minimize the influence of personal judgment at the same time to enable to accelerate the market transaction.

Although the Hedonic Price Model is widely used by developed countries to overcome difficulties arised in identifying and quantifying the property attributes on rental values, in Sri Lanka there is no evidence of use this technique in the field of property valuation. Hence this study attempts to “Analyse the determinants of office rental values through Hedonic Price Model”

1.3. Significance of the Study

A valuer is called upon to make a valuation of an interest in a certain property where the value is the amount of capital required to purchase the interest of that property. In many instances properties are occupied by the owner or external person, therefore, the value of such property is dependant on the amount of rent which an occupier is willing to pay for the right to occupy and level of return which an investor would require on his capital.

Since, there are many characteristics associated with properties, difficulties arise in quantifying the influence of these characteristics on rental value of a property. As valuation is based on professional judgment, it is subjective opinion of value. Rent is determined by making relevant adjustments to rental values obtained from comparables which is done subjectively by a valuer depending on his knowledge of the property market.

Consequently, this study which identifies and quantifies the rent determinants on office properties recognizes the importance of study on local office markets and also it would be useful for the valuers to make aware of influence of significant attributes associated