

The Pricing and Investor Returns from Operations in Colombo Apartment Market; the Supply Perspectives

H.A. Ajith Priyantha

*Undergraduate, Department of Estate Management and Valuation
University of Sri Jayewardenepura, Sri Lanka. aj.usjp.emv@gmail.com*

K.E. Sadeesha Dias

*Undergraduate, Department of Estate Management and Valuation
University of Sri Jayewardenepura, Sri Lanka. sadeedias@gmail.com*

S. B. Y. Swarnapali

*Undergraduate, Department of Estate Management and Valuation
University of Sri Jayewardenepura, Sri Lanka. yashodhaswarnapali@gmail.com*

L. M. Munasinghe

*Tutor, Department of Estate Management and Valuation
University of Sri Jayewardenepura, Sri Lanka. lasika@sjp.ac.lk*

T.G.U.P. Perera

*Senior Lecturer, Department of Estate Management and Valuation
University of Sri Jayewardenepura, Sri Lanka. tgup@sjp.ac.lk*

Abstract

Real Estate investments are a significant contributor to the economic development of the country. With the post-war developments, Sri Lanka is shown to have a growing real estate sector, out of which significant contributions were observed to be generated through the investments in apartments. Thus the article attempts to investigate what does apartment pricing offered in the market imply about investor returns from operations in the Sri Lankan apartment market. Here the investor is referred to the apartment unit buyers who would commit their capital with the expectation of buy-to-let whilst the term “implied” is used to indicate that the discussion of this paper is limited to the supply perspective of the apartment market – what does the apartment supply imply or signal the investor to form demand. The study analyses this implied investor returns by providing an analysis on asking prices and rentals, operational expenses and net operating income that the apartments anticipated to be generated. The data related to the above factors were collected from a convenient sample of 234 “luxury” apartments units within the district of Colombo. It was found that market supply implies that the investor return for average 135 sq.m bedroom apartment units within Colombo city and transition suburbs could range from 3.62% -6.35%. Whilst this reflects the hybridity of character that the apartments carry being both income producing (i.e commercial) as well as residential, it calls for a further research agenda to investigate more into the Sri Lankan apartment market with respect to its variations between asking price and market prices.

Keywords: Investor Returns, Colombo Apartments

Background

The post-war developments of Sri Lanka since 2010, resulted in rapid expansion of the real estate market in the country. From 2010-2016 the real estate related activities have contributed LKR million 307,112 to LKR million 676,760 to the national Gross Domestic Product (Department of Census and Statistics, 2016). Within this, apartment market gets a premier position within the residential property market of Sri Lankan Real Estate sector. Here, apartment denotes individually owned housing units but owns the land and common property (elevators, halls, roof, stairs, etc.) jointly with other unit owners, and shares the upkeep expenses on the common-property with them (Business Dictionary, 2018). Unit owner pays property taxes only on his or her unit and may mortgage, rent or sell it just like any other personal property (ibid). In Sri Lanka, the ownership and management of apartments are primarily regulated through Apartment Ownership Law No. 11 of 1973 (Principal Enactment) as amended and Common Amenities Board (Amendment) Act No. 24 of 2003. From a market perspective, apartments have a peculiar feature - income producing or *commercial* real estate whilst its occupancy would be *residential* whilst inviting both local and globalization forces (See, for example, Horrigan et.al, 2009; Wu, 2000). According to the said Apartment Ownership Law, in Sri Lanka, an investor¹ has the possibility to purchase an apartment as an outright purchase (i.e. freehold interest), whilst apartments in many other countries such as UK, Singapore, Hong Kong etc. are traded in the market under leasehold ownership.

All around the world apartments have become a popular investment vehicle within the investor portfolios. Here, the investor meaning denotes the apartment unit buyers who commit their capital having the expectation of buy-to-let. The new government initiatives, inbound migration, the growth of the middle-income sector and increase in tourist arrival have been acting as pull factors to increase in apartment investments in Sri Lanka. With this anticipated investment influx for apartments, it is important that both investors and developers operating in Sri Lanka to understand the investment return performances to assess their investment portfolios and development decision making respectively. On this basis, this paper aims to analyse, what does the readily available market information, particularly the online (smart) platforms would imply about the investment performances of the apartment market in the Colombo district. Colombo district has shown a high growth and contribution to the national economy over the years, continuous incensement of demand for the residential real estate and is poised to be the centre of Asian property market in the near future. Knowledge gaps are identified as an agenda for future research to better understand the apartment market and its impact on the real estate sector in Sri Lanka. Besides this research would provide valuable insights for property investors for their investment portfolio analysis, the academic researchers also may find this is useful for future research opportunities in Sri Lankan Apartment Market.

¹ In Sri Lanka, time to time the government may regulate the foreign ownership of apartment properties.

The aim of the study

The purpose of this research is to provide insights with respect to the implied investor returns from operations² in the apartment market of Colombo City and its immediate suburbs. For this, the analysis of the paper first considers the apartment unit pricing during the first quarter of 2018, giving consideration to property related attributes of apartment units. These include both rental and freehold prices quoted in the market. Secondly, the operational cost of apartment units was identified to analyse the implied net rate of returns for apartment investments. Finally, followed by the implied investor return analysis in Colombo apartment market, the paper compares the apartment quoted pricing and rental yields of Sri Lanka with that of other Asian cities. This is to reflect the positioning of Sri Lankan apartment pricing and implied returns within the overall regional real estate market in Asia.

Literature Review

Real estate is a fundamental asset type available in the capital markets for investment (Garcia.R.H., et al., 2004). It is a unique type of asset where unlike shares and bonds, its' data on price transactions is not computed on a daily basis. The unique character that the real estate associated with makes the investor difficult to assess the investment performance more accurately (ibid). However, similar to other investment vehicles, the investment performances on real estate can be assessed through the rate of return or what is commonly known as return on Investment (ROI) (see, for example, Newell and Seabrook, 2006). Keeping the focus to supply perspectives of Sri Lankan apartment market, this study measures the cost of investment in the light of asking price, whilst highlighting that the actual asset prices in the markets are set on an individual transaction basis by negotiators whose motives, talent, and access to information may vary (Black and Diaz, 1996). Thus the ROI measures in the study are said to be implied ROI. Basically, it measures, how much money an investor would make from the operating income of the property by factoring that into the *maximum size of the initial investment*. The measuring of ROI in the light of Cap rate (capitalization rate) is found to be effective where the rate of return on an income property is based on the net operating income (NOI). It is the current understanding of the market that ROI above 6-7 % considered being a good return on income-producing real estate investment (see, for example, Mashvisor; Investopedia) whilst for residential investment, this could be acceptable in the range of 3%-5%. ROI is a profitability indicator that shows the rate of return that regards the method of financing. In countries where real estate investments are performed under securitized markets and information on systematic risks are available, the investment performances have been measured through safe ROI. This is by adjusting the ROI with the risk associated with the property investments. See, for example, Haw's (2003) property investment analysis in Malaysia, Bello's (2003) residential and securities' investment analysis in Lagos and so on. In the absence of such market information in the context of Sri Lanka, the study is limited to employing of the simple ROI in the form of cap rate to measure the operational performance of apartment investments.

² This study has not taken into account the investor returns from capital appreciation

Methodology

A convenience sample of 234 apartment units within the Colombo City and its immediate suburbs was selected for this study (Table 1). Data regarding property specifications, sale prices, rental returns and operating costs were collected through both primary and secondary sources. Those include interviewing of property developers, brokers and apartment occupants, browsing of online property listing websites such as Lanka Property Web, Lamudi.lk, Ikman.lk, Airbnb, booking.com and Global Property Guide. These are listing websites – a form of “smart” platforms, in which the market supply information is available to inform and direct the apartment investors at the preliminary stages of the investment decision making – streamlining which regions, cities, neighbourhoods to invest. The analysis of data is descriptive, performed through Statistical Package for the Social Sciences (SPSS) version 23.

Data Analysis

Data has been gathered from 234 apartment units within the Colombo district (Table 1) having the condition of “luxury”. The average prices indicate the price collected from one to four-bedrooms apartment units excluding the effect of taxes such as value-added tax³. The mean, mode and median of floor areas that the average asking prices and rentals were computed were 1460 sq.ft, 1400 sq.ft, 1441 sq.ft respectively. Accordingly, the average prices and rental analysis in the paper primarily reflect the two – three-bedroom apartments which are on average 1453 sq.ft or 135 sq.m equivalent. Regardless of the scale of “luxury”, all properties included the attributes such as lift elevator (four floors or above), swimming pool, Fitness centre, lobbies, garbage collection & disposal system, CCTV & security system, backup generators, water etc. These were the common facilities that the investors are primary being charged as payments for operating costs. In addition to such operating cost comes as management fees, in calculating of implied rate of returns, the study also adjusted the rental income with annual rates⁴ and contingencies such as vacancy periods (2-3%; *Jaffe and Sirmans, 1995*). Pricing of apartments showed to be varied depending on the locational character, number of bedrooms, scenic view, lot size, floor area, floor level, basement area, number of fireplaces, number of parking spaces, access to schools, shopping centres, highway, parks etc.

³ Data was collected in the 2018 first quarter where the Value Added Tax had not been imposed on Sri Lankan apartments.

⁴ Assumed the rates for the apartment will be paid by the apartment investor.

Table 1: Case Processing Summary

Location of the apartment	Number of apartment units
Colombo 3	9
Colombo 5	53
Colombo 7	5
Colombo 8	18
Moratuwa	20
Nawala	12
Nugegoda	20
Rajagiriya	49
Thalawathugoda	9
Battaramulla	39
Total	234

Source: Compiled by Authors, 2018

As per the Table 2, the average asking prices of the Colombo city and its suburbs varied between LKR 86,666,667 to LKR 15,425,000, recording a minimum of LKR.14,600,000 to maximum LKR.150,000,000. According to the study, the average prices of a one-bedroom apartment varied between LKR.38,000,000 and LKR.39,000,000, two-bedroom LKR.15,380,000 - LKR.61,500,000, three-bedroom LKR. 14,600,000 - LKR.150,000,000 and four-bedroom LKR. 48,500,000 - LKR.83,000,000.

Table 2: Average Asking Price of Colombo and immediate suburb

Location	Mean (LKR)	Minimum (LKR)	Maximum (LKR)
Colombo 3	86,666,667	38,000,000	150,000,000
Colombo 5	42,291,509	27,700,000	83,000,000
Colombo 7	60,220,000	51,500,000	78,900,000
Colombo 8	52,730,556	38,450,000	60,000,000
Moratuwa	15,425,000	14,600,000	16,700,000
Nawala	32,016,667	27,000,000	35,500,000
Nugegoda	31,345,702	28,380,066	34,000,000
Rajagiriya	39,765,306	19,950,000	65,000,000
Thalawathugoda	18,816,667	17,350,000	19,950,000
Battaramulla	25,877,891	15,380,000	41,800,000

Source: Compiled by Authors, 2018

These apartment units were shown to be recorded an average gross rent between LKR 991,800 to LKR 5,081,325 (Table 3) from operations. Colombo 03 recorded the maximum operational gross rent whilst the Moratuwa- the Colombo suburb recorded the lowest within the data. Moreover, the operational gross income found to be generated from short-term rentals where the consumption of

the apartment was not merely for “residential” use, but also as “hotel staying” and rental income flows being influenced by globalization forces such as flexible labour-markets (employees coming for short term staying) was also observed.

Table 3: Average Gross Rent Per annum

Location	Mean	Minimum	Maximum
Colombo 3	5,081,325	3,230,000	6,920,000
Colombo 5	2,270,789	1,320,000	6,290,000
Colombo 7	3,108,000	2,640,000	3,600,000
Colombo 8	2,869,000	2,040,000	3,420,000
Moratuwa	991,800	864,000	1,140,000
Nawala	1,775,000	1,080,000	2,550,000
Nugegoda	1,611,429	1,170,000	1,800,000
Rajagiriya	2,448,245	1,020,000	5,400,000
Thalawathugoda	1,306,667	1,200,000	1,400,000
Battaramulla	1,925,538	780,000	3,480,000

Source: Compiled by Authors, 2018

The operational expenses (computed based on the aforementioned basis) on average were ranging from LKR 146,133 to LKR 475,077. Apartments in Colombo 05 showed the maximum operational expenses whilst the lowest was recorded from Battaramulla (Table 4). But the average operating expenses in other areas of Colombo suburbs such as Nugegoda, Rajagiriya shown to be relatively higher having LKR 475,077 and LKR 457,910 respectively.

Table 4: Operational expenses

Location	Mean (LKR)	Minimum (LKR)	Maximum (LKR)
Colombo 3	268,624	134,872	378,310
Colombo 5	365,434	140,400	1,257,600
Colombo 7	213,240	199,200	228,000
Colombo 8	301,055	205,200	369,504
Moratuwa	247,950	216,000	285,000
Nawala	173,250	152,400	196,500
Nugegoda	475,077	201,506	510,480
Rajagiriya	457,910	142,800	1,080,000
Thalawathugoda	146,133	144,000	148,000
Battaramulla	281,621	111,720	487,200

Source: Compiled by Authors, 2018

The implied net rent analysis of apartments as shown in Table 5 were derived by synthesis the data in Table 3 and 4. In line with the gross return of apartments, Colombo 5 indicated the highest net return whilst the Moratuwa performed to have the lowest net returns for investors. In terms of net return per square foot (Table 5), the annual average varies between LKR.513 and 2984. The highest net return per sq. ft was gained from Colombo 03 and the lowest shown to be from Nugegoda area. According to the analysis, the ceiling limit and floor limit of average implied net rent per sq. ft per annum within Colombo was Rs.4216-Rs.460 respectively.

Table 5: Implied Net Return Analysis

Location	Implied Net Rental Price Per annum (LKR)			Implied Net Return per sq. ft per annum (LRK)		
	Mean	Minimum	Maximum	Mean	Minimum	Maximum
Colombo 3	4,812,701	3,090,328	6,537,190	2984	2188	4216
Colombo 5	1,905,355	1,179,600	5,030,400	1463	985	2484
Colombo 7	2,894,760	2,440,800	3,372,000	1901	1524	2070
Colombo 8	2,567,945	1,834,800	3,142,560	1547	1334	1746
Moratuwa	743,850	648,000	855,000	513	472	586
Nawala	1,601,750	927,600	2,353,500	1465	833	2027
Nugegoda	1,136,352	968,494	1,289,520	603	460	808
Rajagiriya	1,990,335	877,200	4,320,000	1320	871	2057
Thalawathugoda	1,160,533	1,056,000	1,252,000	987	881	1100
Battaramulla	1,643,918	658,668	2,992,800	1275	741	2027

Source: Compiled by Authors, 2018

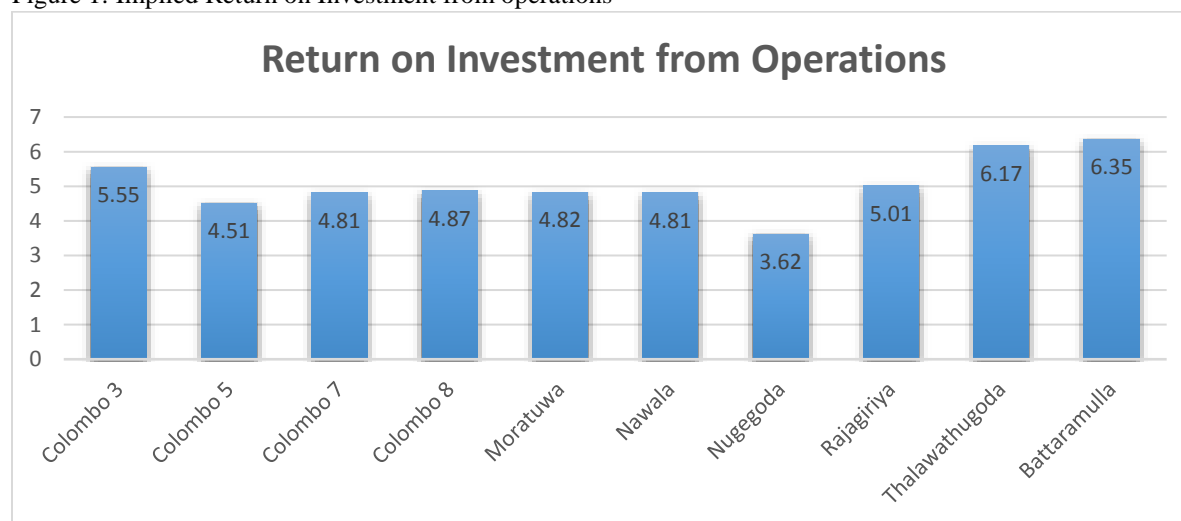
Table 6: Implied ROI Analysis on Apartment investments

Location	ROI %		
	Mean	Min	Max
Colombo 3	5.55	8.13	4.36
Colombo 5	4.51	4.26	6.06
Colombo 7	4.81	4.74	4.27
Colombo 8	4.87	4.77	5.24
Moratuwa	4.82	4.44	5.12
Nawala	5	3.44	6.63
Nugegoda	3.62	3.41	3.79
Rajagiriya	5.01	4.4	6.65
Thalawathugoda	6.17	6.09	6.28
Battaramulla	6.35	4.28	7.16

Source: Compiled by Authors, 2018

The implied net rental yields for the apartments are within the range of 3.62% to 6.35% per cent per annum (Table 06). Despite the highest mean of the asking price and net operating income of apartments were shown to be from Colombo 03 (i.e LKR.86,666,667 and LKR.4,812,701 per annum, respectively), Colombo suburbs (Battaramulla and Thalawathugoda) shown to have the highest implied ROI from operations indicating a figure of 6.35% and 6.17% respectively. The distribution of implied ROI from operations is indicated in Figure 1.

Figure 1: Implied Return on Investment from operations



Source: Compiled by Authors, 2018

Table 7: Comparison of apartment price and annual gross rent of 120 sq. m. apartment in Asian countries

Country & City	Buying Price US \$ per Sq. m.	Buying Price LKR per Sq. m. (1US\$=160LKR)	Gross Rental Yield (%)
Cambodia, Phnom Penh	2,913	466,080	5.33
China, Shanghai	11,829	1,892,640	2.10
Hong Kong, Hong Kong Island	28,570	4,571,200	2.35
India, Mumbai	10,932	1,749,120	2.32
Indonesia, Jakarta	2,823	451,680	7.40
Japan, Tokyo	16,322	2,611,520	2.66
Malaysia, Kuala Lumpur	3,441	550,560	3.72
Philippines, Metro Manila	3,952	632,320	6.13
Singapore	13,748	2,199,680	2.54
Taiwan, Taipei	10,373	1,659,680	2.06
Thailand, Bangkok	3,952	632,320	5.13

Source: Global Property Guide Data, 2018

Comparing the 135 sq.m (mean floor area) apartment average prices per square meter of Sri Lanka with that of other selected Asian countries (where mean floor area is taken as 120 sq.m), Sri Lanka records to have the lowest price per apartment square meter (Table 7 and 8). The highest square

meter price recorded within the data for Sri Lanka is UD\$ 6,893 which is yet lower than average prices of Mumbai, Hong Kong, Tokyo, Singapore Taiwan and Shanghai. Moreover, contrary to apartment market yields for Colombo, these cities more primarily records lower (gross) rental yield. The investment performance of Colombo is much closer to the apartment markets in Phnom Phen, Bangkok, Metro Manila and Jakarta showing a yield that falls under the income-producing commercial properties.

Table 8: Comparison of apartment price and rental of 135 sq. m. (1460 Sq. Ft.) apartments in Sri Lanka

Description	Absolute Price - LKR	Absolute Price - US \$	Price -Per Sq.m in LKR	Price -Per Sq.m in US \$
Mean Asking Price	37,918,650	236,992	278,814	1,743
Minimum Asking Price	14,600,000	91,250	107,353	671
Maximum Asking Price	150,000,000	937,000	1,102,941	6,893

Source: Compiled by Authors, 2018

Discussion & Conclusion

Through web-based information platforms, the apartment market supply perspective (for 135 sq.m size apartments) implies, an apartment investor who would invest in Sri Lanka is likely to earn a yield of investment (ROI) between 3.62% to 6.35% from operations. The apartments within the Colombo city centre implied a less varied yield: 4.51% -4.81% except for the apartments in Colombo 3 showing a ROI of 5.55%. The variation of yields was high in the transition suburban zones of Colombo – 3.62% in Nugegoda whilst Battaramulla and Thalawathugoda recorded 6.35% and 6.17% respectively. It provides market signals in a way to attract investors on the basis of lowest investment payback period for the committed capital on apartments. In sum, the hybridity of income producing (commercial) and residential character that the apartments carry seems to have been somewhat affected to generate these ROI figures. The investor yield comparison with other selected Asian cities indicates that the Sri Lankan apartment investment context is similar to the conditions recorded in Jakarta, Bangkok, Phnom Phen and Metro Manila where the apartment markets are yet to mature. In comparison, the more established markets in developed cities such as Tokyo, Shanghai, Taipei, Hong Kong and Singapore where urban dwellers are more accustomed to apartment living recorded a lower gross rental yield.

Implications for the further research agenda

The above analysis sets a further research agenda to investigate further into the investor returns based on transaction prices of apartments in Colombo district. This can more accurately showcase the market conditions by integrating demand perspectives by investors. Those would also provide more accurate and in-depth market insights indicating the variations between apartment market prices and offered prices and would indicate the apartment market positioning of Colombo within its competitive Asian region to attract investors. Highlighting the nature of the efficiency in the apartment markets would also inform the readers as to what level the investor returns in the

apartment market in Sri Lanka likely to generate normal and abnormal profits and to what implications those would have on attracting investors for apartments in Colombo.

Notes and assumptions

1. Investor returns have ignored the return generated through capital appreciation of apartments.
2. Return calculated are non-risk adjusted
3. ROI calculated denotes implied ROI - primarily based on market supply perspectives

Acknowledgement

All authors contributed to this paper equally. The authors acknowledge the group of students from B.Sc Estate Management and Valuation Special Degree Part IV (academic batch 2013/2014), University of Sri Jayewardenepura for their contribution to the collection of data.

References

Bello.O.M., 2003. Comparative Analysis of Performance of Residential Investment And Investment in Securities in Lagos, Nigeria. *Journal of Estate Surveyor And Valuer*, 1(26), pp. 7-14.

Business Dictionary, 2018. *Apartment Building*. [Online] Available at: <http://www.businessdictionary.com/definition/apartment-building.html> [Accessed 15 09 2018].

Department of Census and Statistics, 2016. *Gross output at Current Prices by Economic Activity*. [Online] Available at: http://www.statistics.gov.lk/national_accounts/dcsna_r2/reports/table119_120.pdf [Accessed 15 09 2018].

Garcia.R.H., Lind, H. & Karlsson, B., 2004. *Property yields as tools for valuation and Analysis*, s.l.: Stockholm.

Global Property Guide, 2018. *Most-Expensive-Cities*. [Online] Available at: <https://www.globalpropertyguide.com/most-expensive-cities> [Accessed 15 09 2018].

Haw, K. T., 2003. Investment Characteristics of Malaysia Residential Market Sector. *Pacific Rim Real Estate Society Annual Conference in Brisbane, Queensland Australia*.

Investopedia LLC, 2018. *Return On Investment*. [Online] Available at: <https://www.investopedia.com/terms/r/returnoninvestment.asp> [Accessed 15 09 2018].

Newell, G. and Seabrook, R., 2006. Factors influencing hotel investment decision making. *Journal of Property Investment & Finance*, 24(4), pp.279-294.

Mashvisor, 2018. *Mashvisor Investors*. [Online] Available at: <https://www.mashvisor.com/blog/good-return-real-estate-investment/> [Accessed 16 09 2018].

Wu, F., 2000. The global and local dimensions of place-making: remaking Shanghai as a world city. *Urban Studies*, 37(8), pp.1359-1377.

Horrigan, H., Case, B., Geltner, D. and Pollakowski, H., 2009. REIT-based property return indices: a new way to track and trade commercial real estate. *The Journal of Portfolio Management* 35.5: 80-91.

Black, R.T. and Diaz III, J., 1996. The use of information versus asking price in the real property negotiation process. *Journal of Property Research*, 13(4), pp.287-297.

Jaffe, A.J. and Sirmans, C.F., 1995. *Fundamentals of real estate investment*. Prentice Hall.