IOSR Journal of Economics and Finance (IOSR-JEF)
e-ISSN: 2321-5933, p-ISSN: 2321-5925. Volume 11, Issue 6 Ser. II (Nov. – Dec. 2020), PP 26-34
www.iosrjournals.org

Determinants of Profitability in the Real Estate Industry: A Comparative study between Sri Lanka and Japan

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Abstract: *Real Estate industry plays a vital role in the economic development where it paves the way to stabilize the economy through guarantying continuous capital flaws for financing .The study is based on the factors which affected the profitability of the real estate industry in Sri Lanka and Japan. The study employed the deductive research approach by using secondary data from the Financial Statements and World Bank Data Bank over the period from 2010 to 2019. The Panel Regression Analysis was employed to derive the impact of firm specific factors and macro-economic factors on the profitability of real estate industry in both countries. Liquidity, Leverage and Efficiency are used as the firm specific factors while Economic Growth and Inflation as macro-economic factors. The results indicate that, the current asset ratio (CA), interest coverage ratio (IC), asset turnover ratio (AT), inventory days (ID) and economic growth (PCGDPG) have a positive relationship while, the cash ratio (CR), debt to equity ratio (DTE), debt to capital ratio (DTC), inventory turnover ratio (IT) and inflation (INF) have a negative relationship with the profitability of real estate companies in Sri Lanka. On the contrary, results of Japanese companies revealed a positive association between the cash ratio (CR), debt to capital ratio (DTC), interest coverage ratio (IC) asset turnover ratio (AT) inventory days (ID) and inflation (INF) while, negative impact of current asset ratio (CA) debt to equity (DTE) and economic growth (PCGDPG) with the profitability. The variation of results within the study is concluded by, Sri Lankan real estate industry follows an equity based capital structure whilst Japan follows a debt oriented capital structure.*

Date of Submission: 05-11-2020 Date of acceptance: 21-11-2020

I. Introduction

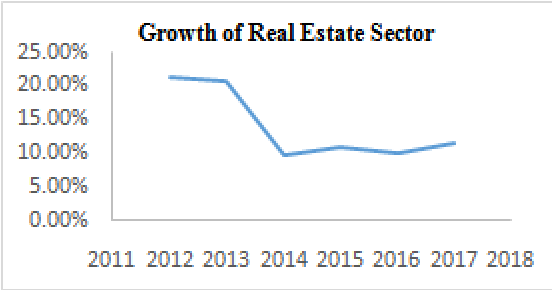
Background of the study

Real estate business can be identified as a most profitable segment for both developing and developed nations. Because it led the countries to enhance the inbound infrastructure by pumping foreign direct investments to the economy. When considering about the benefits of investing in real estate sector, investors able to gain predictable cash flaws, higher returns, tax advantages and hedge the inflation & diversify the risk of their portfolios.

Generally in Asia-Pacific real estate industry, companies mainly operated in their domestic markets, because real estate firms are vulnerable to domestic political and economic shocks. Thus, investors in this region seeks to expand their portfolios by broadening their horizons of investments in to the neighborhood countries. It paved the way to accelerate the market growth in this industry by establishing enormous public listed companies. Accordingly, international investors tend to invest in the real estate industry in the Asian region for gain diversified benefits by experiencing the favorable institutional framework which relates to lower trade barriers, open markets and legislations (Schindler, 2009). On behalf of that, development of stock and bond markets have a greater impact on the real estate sector because, vast of international investors were accessed to this segment through differentiated financial instruments. Bardhan & Kroll (2007) emphasized that the impact of technological development have a significant contribution towards the commercial real estate sector expansion due to the offshoring of production facilities and research and development.

Real Estate Industry in Sri Lanka

Sri Lankan real estate industry occupied a significant attention over the last few years because, improved economic activates across the urban areas paved the way for major market players to gain vast opportunities. Recent statics on the real estate sector illustrated that, increasing population growth, fast urbanization, increasing hosing requirement and tourism sector growth have a significant contribution towards the demand shift of the real estate sector in Sri Lanka (KPMG Sri Lanka, 2020). The following graph is showing the recent development in the Sri Lankan real estate sector.

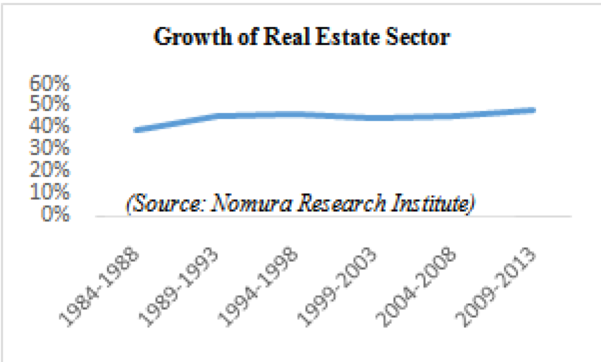


(Source: Central Bank of Sri Lanka)

According to the above graph, it showed 21.2% of market growth in 2012 and it gradually decreased to 9.9% in 2014 due to the lower foreign direct investment. After that growth rate was gradually increased to 11.6% in 2017.

Real Estate industry in Japan

Not like Sri Lankan real estate industry, the Japanese real estate market is highly transparent and highly regulated through international standards. Because, since 2012 the real estate price index on a transaction basis was publically available to parties. Although, it revealed a rapid development over the past few years due tothe high yield of rentals, the stable business environment, foreign property ownership and lower geopolitical risk.Fa-bin (2013)commented that,after the world war two, the Japanese economy experienced a rapid development and it led the nation to a vast urbanization and it paved the way to promote the real estate sector in to the public. Meanwhile, recent studies elaborated that the low rate of interest rate on borrowings in Japan led the firms to expand their wings. On the contrary, banks encourage citizens to move towards home mortgage loans with lifetime fixed loan rates and cash back inventive for home buyers. That led the increase of domestic demand of real estate projects.



(Source: Nomura Research Institute)

According to the above graphs, during the period of 1984-1988 Japan real estate sector was developed by 39% and it was increased up to 46% on 1994-1998. Moreover, it gradually increased up to 48% of market growth during the period of 2009-2013. Therefore, the real estate sector caters a significant importance in Japanese context.

Factors affecting to profitability

When examine the main motivations on investing in real estate industry, investor's keener about the profitability, liquidity, solvency and efficiency of the market players. By analyzing the profitability, investors get the clear idea about financial performance and healthiness of operations. Profitability of an entity depends on several factors i.e. firm's specific factors and macro-economic factors Doan (2020).

Liquidity refers the firm's ability to manage its short term obligations. Generally firms with losses may distinguish as sick, but inability to meet the appropriate liquidity may lead the firm to be dead (Ehiedu, 2014). If the firm's liquidity position is high it hasa higher margin of safety and vice versa.Although, there is a contradiction with higher liquidity. If the firms have a higher liquidity ratio, it refers the existence of idle funds which don't earn any income for the firm. When consider about the real estate industry, it is highly vulnerable to drags on liquidity. That refers the, delayed or reduced cash inflows to the firms due to higher bad debts, obsolete inventory and tight credits. Therefore, it is essential to assess the impact of liquidity on the profitability of developed and developing countries' real estate markets.

The composition of the capital structure (Leverage) have significant influence on every business because, it leads to enhance the firm's value. The capital structure decision refers the way which a firm uses its sources of funds for finance the operations and growth. In real estate industry, firms need huge funds in order to invest in lands and properties. Thus, firms prerequisite to decide the appropriate mixture of equity and debt for the smooth performance of the entity. Because, if a firm hugely depend on debt, they have to pay a large amount of interest from their profits which may dissatisfy the stockholders. On the other hand, if a firm utilizes equity financing, it needs to maintain a healthy stock valuation by generating constant profit which is higher riskier. Thus, there is a clear cut tradeoff between both debt and equity financing. Eventually, Nguyen, Nguyen, & Dang (2017) argued that, the capital structure of developed and developing countries have a large gap because developing countries have lack of information. So it is vital to determine the composition of debt and capital structure on this phenomena.

Efficiency refers management's ability to use its assets in order to manage the liabilities in the short term and long term. It measures the efficiency of how a firm utilized its assets for the revenue generation while managed the assets.Mainly, efficiency ratios compare the firm's assets to its sales or profit performances and provide information for the investors regarding the firm's strategies towards profit generation (Karaca & Savsar, 2012).

Demand of the real estate sector is hugely depending on the customer's income. Because, if people have higher income, they seek to increase their living conditions which escalate the demand for real estate properties. While, higher per capita GDP allows investors to improve the savings and ultimately to take the investments choices (El Wassal, 2013). When an economy suffering from a recession, it will directly affect to reduce the property prices which will lead the real estate companies to be default (Davis, 1995). Additionally, inflation of the country has a significant impact on buying behavior. If the economy is suffering from the high volatility, investors are showing less reluctance on investment activities (Garcia & Liu, 1999). If real estate investment added to a mixed asset portfolio, investors should be able to hedge the inflation risk (Charles, Glenn, & Donna, 1991).

Significance of the study

1. The real estate industry has a significant influence on economic development of a nation, whether it is developed or developing. And the factors affecting to the profitability of companies in those regions are varying according to different circumstances. Thus, it is necessary to compare the performance of developed countries (i.e. Japan) and developing countries (i.e. Sri Lanka). The study is coping for compare the firm's specific factors of profitability and the effect of macroeconomic factors on profitability of Sri Lanka and Japan real estate industry.
2. On the meanwhile, investors who are willing to startup their businesses on the real estate sector in those countries can get an idea about the potential trends of this two regions.
3. Policy makers in developing countries may use this study in order to identify the major market conditions of the success story of the real estate markets in developed countries and create national policies based on that.
4. Future scholars may use this study in order to pursue their research on factors affecting to profitability of developed and developing countries.

Problem Statement

When an investor seeks to invest in real estate industry in Japan or Sri Lanka, he or she may need to evaluate the investment proposal which based on the profitability, leverage, liquidity and efficiency of existing companies. Thus, the profitability of the firms in those two countries are diverse due to the firm's specific factors and macroeconomic factors. Hence, this study is focused on the problem of 'what are the impact of those factors on profitability of real estate industry in Sri Lanka and Japan.'On behalf of that, the studies relates to this area were very few and scholars conducted the researches separately for each countries in this context. The appropriate mixture of the capital structure need to be clearly identified in this business where it requires huge funds on financing. Thus, it can identify as a problem in this scenario, whether it is equity financed or debt financed? Apart from that, there is lack of studies relates to assess the cross country relationships between Sri Lanka and Japan.

Research Objectives

1. Determine the impact of Liquidity, Leverage and Efficiency on profitability of the real estate industry in Sri Lanka and Japan.
2. Determine the impact of GDP and Inflation on profitability of the real estate industry in Sri Lanka and Japan.
3. Determine the capital structure of Sri Lanka and Japan real estate industry.

Research Questions

1. What is the relationship between profitability and liquidity, leverage & efficiency of Sri Lanka and Japan real estate industry?
2. What is the relationship between GDP& Inflation and real estate profitability of Sri Lanka and Japan?
3. What is the composition of the capital structure of Sri Lanka and Japan real estate industry?

II. Literature Review

Financial performances of real estate companies are varying due to the differences in regional, country and sector factors because real estate companies operates locally. On behalf of that, development of the banking sector have a significant impact on real estate profitability where it paves the way to allocate the real resources within the industry. Furthermore it mentioned that "widespread appearance of negative housing equity can have a catastrophic impact on large numbers of households" (Renaud, 1997). Edelstein, Qian, & Tsang (2011) point out that, real estate industry among countries are fluctuating due to the country factors such as; corporate governance, accounting standards and legal system.

Growing literatures regard with the financial analysis explained it as different ways. Wild, Subramanyam, & Halsey (2004) argued that financial analysis as a process of analyzing the financial statements in order to examine the financial condition, position and future performance.Meantime, Feroz, Kim, & Raab (2003) commented that, ratio analysis can be used as a tool for authenticates the performances of the entity which provides the consistent and reliable information of the future ahead.Doan (2020) analyzed the Vietnam real estate industry by using data over the period of 2010-2018 by employing systematic GMM, fixe effect and random effect model approaches and found that profitability of Vietnamese real estate industry profitability is affected by leverage, age of the entity, current ratio and inflation while firm growth is negatively affected.

The study conducted by Diaz & Hindro (2017)analyzed the small , medium and large scaled real estate companies in Indonesia by utilizing the ordinary least squares (OLS), fixed effect and random effect regressions over the period of 2010-2014 and clinched a positive relationship between the current ratio and profitability of the large firms while inverse relationship in small and medium scale companies. And they argued that, small and medium scale companies are experiencing a lower current asset base compared to large companies.Tongkong (2012) unveiled a negative relationship between profitability and leverage of listed real estate companies in Thailand stock exchange by using two-step Arellano and Bond GMM estimation method over the period of 2002 to 2009. Furthermore, it identified a positive relationship between firm size & growth opportunities and leverage. Also, it argued that, when a firm earns a higher profit then they moved towards reduce the debt position of the entity.

On behalf of that, Rajendran & Nimalthasan (2013) illustrated a significant impact of the capital structure on the firm's profitability on the Sri Lankan manufacturing firms by using the data from 2008-2012 over 25 manufacturing firms as sample. Kester (1986) scrutinized that, Japanese manufacturers are experiencing a long term profitability due to the low cost of source capital and hence, Japanese firms can be categorized as debt oriented.Mesfin (2016) revealed that, net working capital, capital expenditure and inflation have a significant negative relationship between the profitability of Ethiopian manufacturing companies and it scrutinized a positive relationship by utilizing multiple regression analysis over the period of 2009-2014. Meanwhile, Rizki, Anggraeni, & Hardiyanto (2019) revealed a positive association of GDP growth, inflationwhile a negative relationship of interest rate with the profitability of the Indonesian real estate sector by using data over the period of 2011-2015.

Literature gap

When consider about the profitability of real estate industry, researches conducted by Doan (2020);Nguyen, Nguyen, & Dang (2017);Tongkong (2012) considered about the effect of firm specific factors such as; working capital, liquidity, capital structure and efficiency on the profitabilityparticular to the specific countries. The strategies used by the management personalon controlling the firm's specific factors were different according to the countries' macroeconomic characteristics such as income growth, inflation, interest rate, and,etc. (Cyril & Singla, 2020). Hence, this study is more focused towards fill the literature gap by compare the sensitivity of that impact of the firm's specific factors and macro-economic factors towards profitability of both counties.

III. Methodology

Data

All the data related to the firm specific factors were gathered from the financial statements which covers the period of 2011 to 2019. Data allied to the macro economic factors were acquired fromWorld Bank Data Bank.

Sample

The sample covers seven public listed companies listed in Sri Lankan Stock Exchange's Main Board and employed the seven public listed companies listed in Tokyo Stock Exchange by using the random sampling method.

Operationalization

This table presents the way of measurements that are used to operationalize the variables of study.

Table 01: Operationalization of the study

Variable	Measured by
Profitability	Return of Assets (ROA)
Liquidity	Current Assets ratio (CA)
	Cash ratio (CR)
Leverage	Debt to capital ratio (DTC)
	Debt to equity ratio (DTE)
	Interest coverage ratio (IC)
Efficiency	Asset turnover ratio (AT)
	Inventory turnover ratio (IT)
	Average inventory days (ID)
Economic Growth	Per capita GDP growth (PCGDPG)
Inflation	Consumer price index (INF)

(Source: Developed by author)

IV. Analysis and Discussion

Table 02: Descriptive statistics

Variable	Descriptive Statistics							
	Sri Lanka				Japan			
	Min.	Max.	Mean	Std. Div	Min.	Max.	Mean	Std. Div
ROA	-0.2869	0.3872	0.0553	0.0857	0.0095	0.9165	0.1513	0.2253
CA	0.0657	140.9189	5.7955	17.2667	0.3753	8.4070	2.6846	1.8968
CR	-0.6540	54.0737	1.3841	6.4959	0.1163	4.7659	1.0148	1.1573
DTC	0.0053	0.9330	0.2328	0.1886	0.8752	22.2807	2.9598	2.8415
DTE	0.0053	13.9181	0.5939	1.7209	0.8754	22.2807	3.0061	2.8296
IC	-168.443	8636.1963	421.9145	1411.0260	0.6600	92.1000	18.7713	22.4541
AT	0.0000	0.4786	0.1106	0.1160	0.0500	1.7700	0.6623	0.4154
IT	0.0000	34.2427	5.3672	8.6821	0.0000	804.2700	36.6591	117.7133
ID	0.0000	92.5784	4.0669	13.1410	0.0000	21.6200	7.6340	5.0150
PCGDPG	0.0166	0.0900	0.0442	0.0249	0.0007	0.0417	0.0143	0.0117
INF	0.0214	0.0770	0.0517	0.0196	-0.0072	0.0276	0.0047	0.0091

ROA refers about the firm's profitability relative to its assets. According to the above table, Sri Lankan real estate industry has 5.5% of average ROA while Japan's real estate industry has 15.1% of average ROA. That confirms that, Japan firms are more efficient in generating the returns from its invested assets.

Current asset ratio states about the firm's strength of short term liquidity which relates to its available current assets and short term liabilities. The results shows that, Sri Lankan firms have average of 1: 5.79 ratio while Japan shows a 1: 2.68 ratio. The higher CA ratio of Sri Lanka narrates about the inability of management towards manage the appropriate liquidity position. Because firms can generate additional income from its excess liquid assets. Hence, Japan real estate industry encounters a good liquidity in order to face the short term obligations rather than Sri Lankan Industry. Cash ratio considers about the company's total cash and cash equivalents to its current liabilities. According to the above results, Sri Lankan firms have a higher average CR ratio (1:1.38) compare to Japan. That elaborate that, cash generated from the operating, investments and financing activities is enough to cover the short term obligations and it confirms the existence of the industry in the short run.

When considering about the Debt to Capital ratio, it elaborates about how the firm's assets were financed through debt. In Sri Lanka, assets were averagely financed by 23% of debts while 76% of assets were financed through the equity. But when considering about Japan, it has an average DTC ratio of 295% which ascertain that, Japan's firms have more debts than its assets. On the other hand, Debt to Equity ratio of Sri Lanka displayed 59.3% while Japan showed 300% of DTE ratio. That hinders that, Japan's real estate industry is solely depending on debt financing, while Sri Lankan real estate industry based on both debt and equity financing.When deliberating about theinterest coverage ratio, Sri Lanka it has a higher ratio of 421 times of interest coverage. This kind of larger ratio is existing in Sri Lanka, because companies have lower interest payment due to the mixture of debt and equity capital. When considering about the Japan's solely debt base financing, it has a satisfactory average interest coverage of 18 times because the Japanese bank based economy provides the debts with a very lower interest rate.

According to management's ability towards generating sales from its assets, Sri Lanka has an average return of assets of 11.6% while, Japan encounters 66% of average AT ratio. This can identify as a favorable condition in the Japanese real estate industry.When considering about the how many times the firms have sold and replaced inventory during the given period, Sri Lanka has an average inventory turnover ratio of 5.36 timeswith 4 months of average inventory retention period while Japan real estate industry turns its inventory 36 times with 7 months of average inventory retention months. This can higher ratios can be expected from the real estate industry because, it doesn't have a regular sale of real estates as like consumer goods.

Sri Lanka experienced an average 4% of per capita GDP growth over the past ten years while Japan showed a 1% of growth. On behalf of that, it can identify an average of 5% of inflation in Sri Lanka while Japan has a 0.4% of inflation.

Table 03: Correlation Analysis

Variable	Correlation	
	Japan	Sri Lanka
ROA	1.0000	1.000
CA	0.0224	-0.0094
CR	0.389**	-0.0797
DTC	-0.236*	-.552**
DTE	-0.2270	-.589**
IC	0.759**	0.1800
AT	0.736**	-0.0116
IT	0.853**	-0.330**
ID	-0.561**	0.1710
PCGDPG	0.03911	0.0733
INF	0.0102	-0.0438

*= Significant at 5%.
**= Significant at 1%.

According to the results of the correlation, Japan have a positive correlation between liquidity and profitability of the real estate industry. Because, it retains an appropriate combination of current asset base in order to meet the short term obligations. While, results shows a negative correlation between liquidity and profitability in Sri Lankan real estate industry. That kind of relation can be anticipate because, compared to Japan, Sri Lankan real estate firms keep higher liquid assets within the firm which will lead to reduce the profits due to the higher opportunity cost of excess liquidity.

Whenconsidering about the correlation among debt to capital, debt to equity and profitability, results of both countries shows a negative relation with profitability. Because, higher debt lead to reduce the profit of the firm as a result of interest payment on debts. On behalf of that, the interest coverage ratio of both countries shows a positive relation with the profitability. Finally, it can conclude a negative correlation between leverage and profitability of Japan and Sri Lankan real estate industries based on the DTC and DTE.

There is a positive relation existsbetween the asset turnover ratio and profitability in Japan, while it is negative in Sri Lankan real estate industry. On behalf of that, inventory turnover ratio shows a positive correlation between profitability in Japan while it is negative in Sri Lankan real estate industry. That emphasize the fact that, the contribution of assets and inventory for the sales generation in Japan is efficiently contributing to the profitability rather than Sri Lankan real estate industry. However, the day's inventory outstanding is negatively correlate with profitability while it is positively correlate with the profitability in Sri Lankan real estate industry.

When deliberating about the correlation between economic growth and profitability of real estate industry, it can identify a positive correlation among both Japan and Sri Lanka. That kind of correlation can expect because, theescalation of consumer income will lead to increase the demand for real estates which ultimately leads to increase the profitability. Meanwhile, inflation shows a positive correlation within profitability of Japanand it is negative in Sri Lanka. Because higher fluctuations in inflation inversely affect to the profitability of the Sri Lanka companies while, Japanese minimum fluctuations are leading to increase the profitability of the Japanese real estate companies.

Table 04: Regression Analysis

Variable	Japan				Sri Lanka			
	Fixed Effect		Random Effect		Fixed Effect		Random Effect	
	Coefficient	Sign.	Coefficient	Sign.	Coefficient	Sign.	Coefficient	Sign.
Constant	-0.0683	0.0320	0.0215	0.3720	0.0740	0.0190	0.1046	0.0000
CA	-0.0092	0.1920	-0.0318	0.0000	0.0026	0.1890	0.0018	0.3400
CR	0.0140	0.0126	0.0529	0.0000	-0.0086	0.0950	-0.0062	0.1920
DTC	0.2046	0.0220	-0.0832	0.3460	-0.0375	0.6670	-0.1229	0.0410
DTE	-0.2009	0.0250	0.0813	0.3570	-0.0241	0.0040	-0.0233	0.0010
IC	0.0019	0.0000	0.0037	0.0000	0.0004	0.4330	0.0002	0.6380
AT	0.2379	0.0000	0.0877	0.0000	0.1955	0.0870	0.1826	0.0200
IT	0.0005	0.0000	0.0010	0.0000	-0.0008	0.6340	-0.0014	0.1310
ID	0.0023	0.2030	0.0014	0.4620	-0.0002	0.7960	0.0004	0.6150
PCGDPG	-0.1177	0.7390	-0.7903	0.1790	0.0957	0.8020	0.0942	0.8030
INF	0.1234	0.7850	-0.3993	0.6000	-0.4269	0.3680	-0.5347	0.2680
Hausement Test		**0.0000**			**0.2366**			

The study employed Fixed Effect and Random Effect models for identifying the significance of the selected variables. To identify the most appropriate model for this study, it employed the Hausman Test. Hausman Test Hypothesis is set in order to determine either Fixed Effects or Random Effects are suitable for determining the significance of the selected model.

H0: Random effects exist H1: Random effects do not exist (Fixed effect exist).

According to the Hausman Test results of the Japanese real estate industry, the probability is lower than 95% confidence level, thus it rejects the null hypothesis and accept the alternative hypothesis. Therefore, the fixed effect model is utilized for the Japanese context. The Hausman Test results of the Sri Lankan real estate industry is higher than the 0.05 significant level, hence it employed the random effect model as the appropriate model for Sri Lanka.

The Japanese real estate sector R^2 value of 0.8044 elaborate that 80% changes in profitability is explaining by the selected independent variables in this model.According to the fixed effect regression results,the current asset ratio (CA) and debt to equity (DTE) shows a negative impact on the profitability. While, the cash ratio (CR), debt to capital ratio (DTC), interest coverage (IC) and asset turnover ratio (AT) have a significant positive impact on profitability. However, inventory days (ID) and inflation (INF) are positively and economic growth (PCGDPG) negatively impact to the profitability, but it is insignificant.

On the contrary, R^2 value of Sri Lankan real estate companies indicate that, the selected independent variables are defining the profitability by 53% in the selected model. And the model is significant under the 5% significant level. Meanwhile, the current asset ratio (CA), interest coverage ratio (IC), asset turnover ratio (AT), inventory days (ID) and economic growth (PCGDPG) have a positive relationship with the profitability of real estate companies in Sri Lanka. Although, the cash ratio (CR), debt to equity ratio (DTE), debt to capital ratio (DTC), inventory turnover ratio (IT) and inflation (INF) have a negative relationship with the profitability. However, only the asset turnover ratio (AT), debt to equity (DTE) and debt to capital (DTC) shows a significant relationship with the profitability under this model.

V. Conclusion

When considering about the impact of the liquidity on the profitability, it can identify a negative impact of liquidity in Sri Lankan context. However, it is positive inthe Japanese real estate industry.Irawan & Faturohman (2015)argued that, the nexus between liquidity and profitability is divergent due to the industry, country and management's capabilities.When considering the Sri Lankan real estate companies, majority of companies capitalized the working in progressinventory as investment property. Because, property that is being constructed or developed for future use is classified as Capital work in progress (non-current assets) and stated at cost, until construction or development is complete, at which time it is reclassified and subsequently accounted for as Investment Property under Sri Lankan Accounting Standards. This adjustment leads to reduce the current asset base of the real estate companies. The statement of financial position of these companies includes a higher lease component underthe current liabilities. That, hinders that, most of the firms are lacking of sole ownership of the required machines and equipment in their asset portfolio and instead of that, they entered in to the lease arrangements with other parties in order to utilize those machineries. Generally, this paves the way to increase the current liability portion of the real estate companies in Sri Lanka. So we can argue that, as a specific country factor, lower technological development within Sri Lankan firms has aninverse contribution towards the liquidity.Therefore, this two factors can be identified as reasons to have to have a higher current ratio within the Sri Lankan real estate industry which affects inversely to the profitability.On the meanwhile, Bagchi (2013) also revealed a negative nexus between liquidity and profitability.

On behalf of that, when looking about the statement of financial position of Japanese real estate companies, its current assets include the inventory relates to real estate for sale (finished goods) and real estates for sale in progress (workingin progress), thus it reflects a higher current asset base within the balance sheet under Generally Accepted Accounting Principles. On the contrary, it is identified a very lower amount of lease amount in current liability section within the Japanese real estate companies. Because, technology development and innovations relates to the machines and equipment provide the economies of scales to Japanese firms to reduce the cost of production. Therefore, it helps to maintain a sustainable current ratio (liquidity) within the industry, which positively affect to the profitability. Goddard, Tavakoli, & Wilson (2005) also scrutinized a positive association between liquidity and profitability.

When considering about the impact of leverage on the profitability, it identified a negative relationship within the Sri Lankan real estate industries. Because the escalationof leverage illustrate an increase of interest payment and ultimately reduce the profitability. But in this case, Japanese real estate companies have to have a lower interest payment on their debts when comparing to the Sri Lankan real estate companies.Simultaneously, the Japanese real estate industry encounters a larger part in the economy, because mainly 158 real estate companies (Source: Japanese real estate company association) contributed to GDP by 11.4% in 2015 and 11.3% in 2017. Eventually, when the firm size is getting higher, firms tend to be more rely on debt financing and hence, it will reduce the profitability. This was scrutinized by the Rajendran & Nimalthasan (2013)in their study. Similarly, a negative relationship between leverage and profitability in Sri Lankan real estate industry could expected, because it operates in a more dynamic environment (politically unstable, tight fiscal policy and etc.). Thus, companies tend to get loans at higher interest rates. Simerly & Li (2000) also revealed that firms operate in a higher dynamic environment would have a negative relationship between leverage and profitability.

Efficiency has a positive impact on the Japanese real estate industry, where it elaborates the facts that, management efficiency of Japanese real estate firms are significantly affecting to increase the profitability. Accordingly, Japanese real estate companies have a higher return of assets and inventory turnover ratios. That hinders that, the increasing trend of housing requirements in Japanese context enable the managers to efficiently allocate their assets and inventory in order to increase their profits. But, when considering about the Sri Lankan real estate companies, it has a lower rate of asset and inventory turnover which shows an inverse relationship between profitability. As a developing nation, Sri Lankan real estate industry is trying to expand its wings, but the drawback relates to the lower sales growth rate leads to reduce the profits of its estates. Thus, it paves the way to reduce management’s ability to convert its assets and inventory in to sales. Hence, it inversely affect to the profitability of Sri Lankan real estate industry.

Development of an economy, reflect about the higher purchase power its citizens. When considering about the nexus between real estate profitability and economic growth, it has a positive relation within Sri Lanka and Japan. However, in Sri Lankan context, there is an increasing trend of per capita GDP thus, investors are seeking to invest in this kind of developing nation. It will directly influence to enhance the supply side of the real estate industry. As the world’s 3rd ranked economy, Japanese citizens have higher purchasing power. Therefore, real estate companies have a higher possibility to increase their revenue which ultimately leads to increase the profitability of the companies. On behalf of that, increasing movements of inflation in Sri Lanka context has a negative impact on profitability. Because, higher inflation paves the way to increase thecost of production which ultimately reduce the profitability of the real estate companies in the economy. Meanwhile, the deflation situation within the Japanese economy, attracts new investments to the industry and ensures a stable returns for investors.

For the time being, the capital structure of the Sri Lankan real estate industry can identify as an equity oriented. Because most of the companies, financed their projects through internal funds rather than debt financing(Yogendrarajah & Thanabalasingham, 2011). Thus, as a developing nation, companies in Sri Lanka tend to increase their equity through share market and IPOs. On the other hand, the interest rate of debt financing is very high comparing to the cost of equity.

The Japanese financial system is hugely based on the bank dominated rather than capital markets. Because, even implementing the Anglo American financial system in to Japan (which encourage people to invest in capital markets) didn’t changed the behavior of Japanese people and sill they prefer to engage with banks due to the relationship banking (Suzuki, 2011). On the meantime, lower interest rate on debts encourage companies to borrow long term debts, which is lower than the cost of equity. Hence, finally it can conclude the Japanese real estate industry as debt oriented and Sri Lankan real estate industry as equity oriented.

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Kaluarachchi Nithumal Dias. "Determinants of Profitability in the Real Estate Industry: A Comparative study between Sri Lanka and Japan." *IOSR Journal of Economics and Finance (IOSR-JEF),* 11(6), 2020, pp. 26-34.