

## Real Estate–Foreign Direct Investment–Growth in Malaysia:

### Re-Framing Eclectic Paradigm

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**Abstract—** This study presents the theoretical concept that explains relationship between real estate, FDI and GDP growth in Malaysia. The motivation of this study arises when Malaysia’s house price changes are found to be different than South Korea’s house price changes when these economic variables are linked with respective country’s FDI growth and GDP growth. In understanding the issue, locational factors of Dunning’s Eclectic Paradigm are reframed to include real estate related factors. Without neglecting FDI classic determinants, their impact on FDI inflows in Malaysia will be observed. The effect of FDI is expanded on Malaysia’s growth and growths related to real estate such as transaction values, house price and public property.

**Keywords-component; real estate; FDI; Eclectic Paradigm; Malaysia**

#### I. INTRODUCTION

Malaysian growths were progressing well when the country adopted export-led-growth strategy that was heavily fuelled by FDI inflows in the 1990s. Post 1997 Asian Financial Crisis, awakening of China as an unmatched low cost destination and series of global economic uncertainties caused the country to look further than using export as the economic backbone and revamped some policies to enhance the country’s competitiveness. A classic industry that was given the ‘face-lift’ through several policy liberalization measures is the real estate.

Stimulating real estate industry to attract foreign capital post-2000 is seen significant in enhancing a country’s growth. In 2004 Ernst & Young identified top 10 global real estate trends and listed the active capital flows movement in the industry to champ the list [1]. In the Asia Pacific, the real estate market trend outperformed their US and European counterparts in 2009 thanks partly to the China resilient economy and factors such as improved liquidity market, moderate loan-to-value ratio condition that allows borrowers to service their loans, the ability to recapitalize their investment in capital market, the optimistic business sentiment and the low risk of derivative investments instruments as Asians culture are less interested in foreclosure risks which are highly associated with derivatives investment [2].

Recent returns in Asian real estate are higher than past decades indicating the increasing demand in the capital areas. Table 1 shows the average real estate yields in average

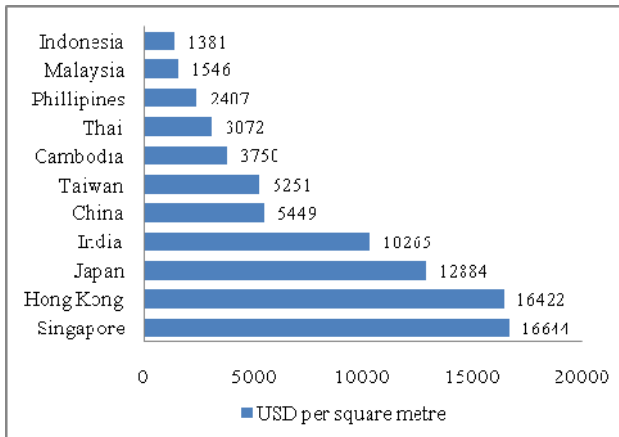
market as at 30 June 2009 according to sub-sectors Grade A office, retail, residential and industrial. Mumbai and New Delhi had the highest yields in grade A office but not in residential while Shanghai had the highest yield in all sectors indicating strong demand in the location’s real estate.

TABLE 1. AVERAGE REAL ESTATE YIELDS IN ASIA

	Grade A Office (%)	Retail (%)	Residential (%)	Industrial (%)
Bangkok	3.5–4.5	6.5–7.5	4.0–4.5	8.0–9.0
Beijing	7.0–8.0	8.0–9.0	4.0–6.0	9.0–10.0
HCMC	12.5	12.5	11.5	14
HK	3.1	4.2	3	6.8
Jakarta	8.1	4.4	10	8
KL	6.3–6.8	7.0–7.9	6.0–7.7	NA
Manila	7.0–10.0	NA	7.0–10.0	NA
Mumbai	13.0–15.0	14.0–16.0	3.5–5.0	NA
New Delhi	10.0–12.0	10.0–12.0	2.5–3.0	11.0–13.0
Seoul	7.0–8.5	6.0–7.0	1.0–1.5	8.0–9.0
Singapore	4.8	6.1	2.7	5.3
Shanghai	8.0–10.0	10.0–12.0	8.0–10.0	8.0–10.0
Taipei	3.8–4.5	4.0–5.0	NA	4.0–5.0
Tokyo	3.5–4.0	3.5–4.0	5.5–6.5	5.3–5.8

Source: CB Richard Ellis, www.cbre.com (Dec, 2010)

In many cases, the house price in Asia Pacific had also becoming high as the demand in prime economies soars such as in China, Singapore and Hong Kong. Fig. 1 shows that Singapore and Hong Kong, being two small states but exuberant have the most expensive residential at average of more than USD 16400 per square metre. Interestingly, Malaysia’s residential is among the ‘cheapest’ averaging about USD 1546 per square metre, yet the country is able to produce around 7.7 percent annual return – indicating its ability to offer a higher yield residential at a competitive price.



Source: Global Property Guide Research, <http://www.globalpropertyguide.com> (Dec, 2010)

Figure 1. Square metre prices in premier locations (USD)

Nonetheless, there is still concern over this emerging trend for developing countries, given their real estate markets that are much younger and less liquid compared to the US and Europe. For example, in China complaints escalate the industry and hampered foreign investors due to problems such as i) lack of experiences because of short history; ii) limited competing capability due to smaller sizes; iii) insufficient capital and backward marketing means; iv) lower management skills and v) not service-oriented in general [3].

Things also get sour in Dubai when Dubai Development and Investment Authority (DDIA) decided to shift from oil-based economy to a technology-based and saw Dubai becomes 'property heaven'. DubaiLand and DubaiHealth sector attracted FDI of \$1billion in 2005 [4]; had the yearly growth of 17.9% (2001-2007) [5]; had been ranked as the topmost destination FDI, even surpassing London and Shanghai. UAE created about 87,000 new jobs in 2008 [6] and now the flow is spilling over to Abu Dhabi. Unfortunately, all the gold and glitters of property development in Dubai did not wait too long for it to dim due to global recession and the slowdown causing mass unemployment, spiralling economy and expats left the country, leaving Dubai in difficulties serving the liabilities.

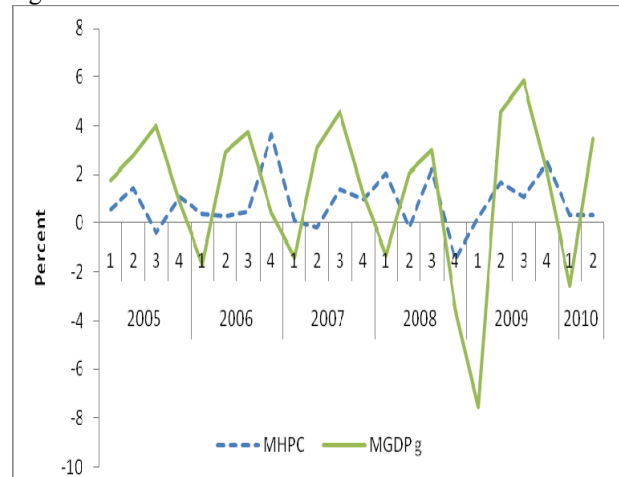
In Malaysia, liberalizing and developing property policies to allow for higher FDI, which later used to stimulate the economy raises concern over its effectiveness. The country has yet to see how property could really help to boost the FDI inflows, importantly the growth. Real estate-FDI-growth model is viewed as a two-edged sword. At one side, it acts as a catalyst to increase a country's growth but on the other side, it could jeopardize growth whenever shocks or external elements hit.

While researches on Malaysian FDI have been exhaustively studied [7,8] none has linked it with real estate industry. The industry's liberalization measures have started to show its impact on the country's median house price, but link between real estate-FDI-growth is still beyond empirical comprehension. Therefore, this study proposes a conceptual framework that may assist in explaining the relationship

between the three variables, hoping that it would find reasonable gap between house price changes, FDI growth, overall growth that help to increase the average Malaysians affordability in owning a house.

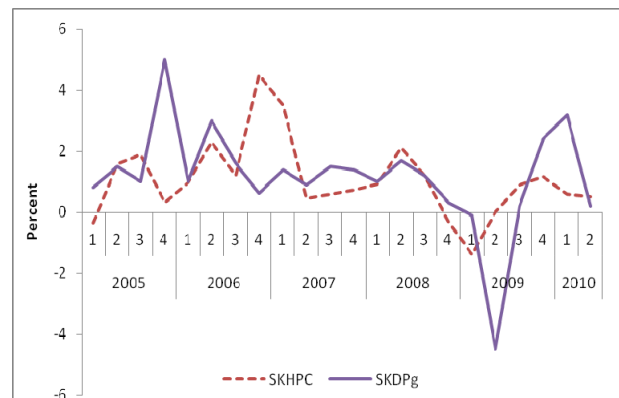
## II. PROBLEM STATEMENT

To understand the real estate-FDI-growth issues in Malaysia, this study compares the relationship between Malaysia and South Korea. South Korea is chosen as the economy is somewhat similar to Malaysia. Fig. 2 and 3 shows the quarterly GDP growth and quarterly house price changes in Malaysia and South Korea. Comparing these two figures, it can be seen that the difference between the GDP growth and house price changes are larger in Malaysia than in South Korea. In 22 quarters (between 2005 and 2010) there were only eight times where Malaysia's difference lesser than Korea's difference. On average, the difference between the GDP growth and house price changes in Malaysia is about 44% whereas in South Korea is about 8%. It raises a question on the factors that have caused such a significant difference between these two countries.



Source: Global Property Guide, <http://www.globalpropertyguide.com> (Dec 2010) and World Development Indicators, <http://data.worldbank.org/> (Dec 2010)

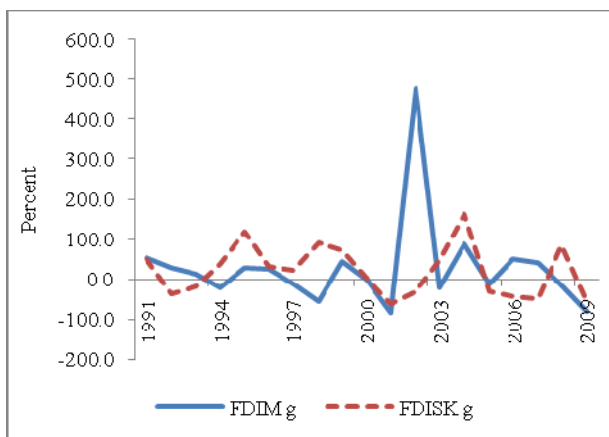
Figure 2. Malaysia's house price changes and GDP growth (2005-2010)



Source: Global Property Guide, <http://www.globalpropertyguide.com> (Dec 2010) and World Development Indicators, <http://data.worldbank.org/> (Dec 2010)

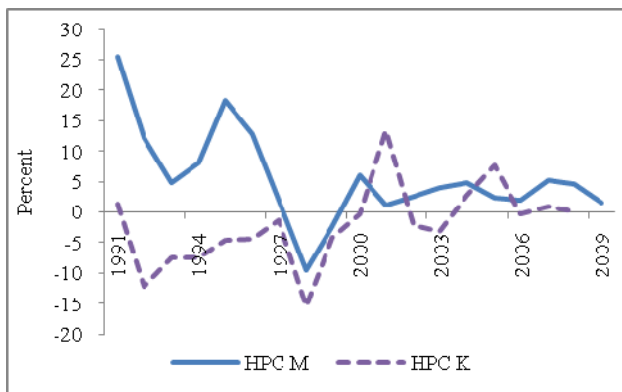
Figure 3. South Korea's house price changes and GDP growth (2005-2010)

The study includes FDI to further understand its link between real estate and growth. From Fig. 4, with the exception for year 2002, FDI growth in Malaysia and South Korea move in the same trend but most of the time, the FDI growth for Malaysia is lower than South Korea. Again, when looking at the house price changes between these countries (Fig. 5), this time the graph shows that in most of the quarters, house price changes in Malaysia exceeded house price changes in Korea. This raises another question: Why did in Malaysia, lower FDI growth associates with higher house price changes? This situation is different in South Korea where they can still have a higher FDI growth than Malaysia even when their house price change is low.



Source: World Development Indicators, <http://data.worldbank.org/> (Dec, 2010)

Figure 4. FDI growth in Malaysia and South Korea (1991-2009)



Source: Global Property Guide, <http://www.globalpropertyguide.com/>, Bank Negara Malaysia ([www.bnm.gov.my](http://www.bnm.gov.my)), Bank of Korea, [www.bok.or.kr](http://www.bok.or.kr) (Dec, 2010)

Figure 5. House Price Changes in Malaysia and South Korea (1991-2009)

The differences in property-FDI-growth between Malaysia and South Korea lead this research to uncover the irregularities in factors underlying property and FDI growth. However, it has to be acknowledged that non-uniformity, unavailability and short span of real estate data between both countries are the major limitations that hinder a macro assessment to be undertaken. Nonetheless, it is still possible to look at Malaysia's issue by observing the factors

underlying real estate, FDI and growth. With this in mind, it was determined that the following were the key questions that needed to be answered.

What are the determinants of FDI? This question is common among FDI researchers but adding real estate-related factors gives a new direction in observing the impact of these factors on FDI inflows into Malaysia.

How much does the FDI contribute to growth? It is not only the overall growth that this study is interested in, but also in examining its impact on dynamic property, change in house price growth and the public property growth.

Will real estate-related factors, FDI and growth cointegrate in the long-run?

How far should a property liberalization measure be stretched? This question is vital as world had seen countries that liberalized its property sector too much plunged on economic shocks.

### III. LITERATURE REVIEW

In many papers (and to date) it was found that FDI cannot be explained by a single determinant; instead require a model that includes a range of variables. Dunning [9] offered a holistic framework to identify and evaluate the significance of factors influencing foreign production. Prior to evaluating the FDI determinants, Dunning suggest that MNCs and host country to identify their advantages engaging in international production. According to him, in order to invest overseas, MNCs must possess sufficient ownership, location and internalization (OLI) advantages to offset the disadvantages in the targeted host countries. Dunning explained that the propensity of an firm to engage in FDI depends on three determinants:

“...first, the extent to which it possesses (or can acquire, on more favourable terms) assets which its competitors (or potential competitors) do not possess; second, whether it is in its interest to sell or lease these assets to other firms, or make use of – internalize- them itself; and third, how far it is profitable to exploit these assets in conjunction with the indigenous resources of foreign countries rather than those of the home country”

In the OLI eclectic paradigm, the ownership advantage refers to the firm-specific assets which MNCs own. The location advantage refers to the situation where choice of location for foreign production depends on trade barriers, rationalization of production and marketing strategies and factor endowment of the host countries. Internalization advantage refers to the situation where a firm believes that its ownership advantages are best exploited internally rather than sold directly or offered through licensing and contractual agreements. All three advantages have been discussed based on specific hypothesis, individually. Supporting the eclectic concept [10], reports that it is widely agreed that FDI takes place when three sets of determinant factors exist simultaneously.

Many researchers have linked the FDI inflow contribution to the host nation's economic growth. An early

study by [11] describes the relationship between FDI and economic growth using the product cycle model of internationalization. The model involves four steps – i) new product is produced domestically and sold in the domestic market, ii) the products are still produced domestically but are also exported overseas, iii) the foreign market becomes bigger, the firm opens up production facilities in that foreign market and iv) the exports from the home country decrease, the foreign subsidiaries have achieved output levels at which there are significant economies of scale and sell their products at a cheaper price. Vernon's study, however, did not clearly state how FDI can increase the economic growth.

If FDI affects the investment recipient countries, it is expected that the countries which receive high FDI will have a better economic performance compared to countries which receive less FDI inflows. For example, in Malaysia real estate, future technology in house-building and architectural design that ensure sustainable living is still new but growing in demand, thus the need for foreign expertise is heightened. FDI is said to contribute to economic growth through technology. In a study by [12] in analysing the effects of FDI flows from industrial countries to 69 developing countries over the last two decades, they found that FDI is a major channel for access to advanced technologies. This is due to the superior position of MNCs as the most technologically advanced firms, accounting for a substantial part of the world's research and development (R&D) investment. In connection with host economic growth [13] confirm large flows of FDI into the country will introduce the country to new technologies and create technology spillovers which lead to an increase in the GDP level and market size of the host country. Not only via technology [14] found that FDI contributes to the economic growth via transfer of capital and management knowledge from an enterprise (of an investing country) to a specific enterprise of a host country.

The subject that relates real estate and foreign investment have focused more on the real estate performance [15, 16], rather on both relationship. To analyze the relationship [17] suggested that FDI and FPI (foreign portfolio investment) must be together in one methodology approach as real estate investment are often hybrid in nature. They extended the Eclectic Paradigm by inserting the 'portfolio' factor to overcome the lack of using FDI factors alone.

Applying the locational concept [18] determined the foreign service FDI in US by employing domestic producer services, share of metro population, value of commercial industrial property and population growth. The findings vary across the US region. An increase in the value of land positively influenced the growth of FDI, but decreases the value in the Northcentral region.

Researches on FDI and real estate have been treated separately due to data limitation and industry itself is seen as 'new' in developing countries. Therefore, this paper is positioning its place by proposing a framework that bridge the gap by emphasizing factors related to real estate without neglecting the classic FDI determinants such as market size, real exchange rate, social and political factors.

#### IV. APPROACH-THEORETICAL FRAMEWORK

Based on the issues and literature reviewed, this study proposes a conceptual framework (Fig. 6) to answer the questions in section II. The analysis is divided into two parts. The first part estimates the determinants of FDI and is bound under Dunning's Eclectic Paradigm. The second part consists of several bivariate analyses. The determinants of FDI are divided into three: real estate factors, macroeconomic factors and social factors. Under real estate factors, three important elements that drive investor to a country are the property-related tax, lending rate and number of loans to property sector. It is hypothesized that investors are attracted to a lower tax, lower lending rate but higher loan distributed. Macroeconomic factors that must present in FDI discussion are the host country's market size, openness to trade and real exchange rate. This study hypothesizes that investors are attracted to invest in a country that has a large market size, lower openness to trade and low exchange rate. Under social factors, this study includes real estate transparency and business freedom. These factors are bound together under Dunning's Eclectic Paradigm in explaining FDI. In mathematical expression, these factors can be explained as below:

$$FDI_t = \alpha + \beta_1^- PT + \beta_2^- LR + \beta_3^+ NL + \beta_4^- GDP + \beta_5^- O + \beta_6^+ REER + \beta_7^+ TR + \beta_8^+ BF + \varepsilon_t \quad (1)$$

where  $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8$  are the beta coefficients for FDI inflows, property-related tax (PT), lending rate (LR), number of loans (NL), size of market (GDP), openness to trade (O), real exchange rate (REER), transparency (TR) and business freedom (BF).

The second part of analysis looks at the bivariate relationships between FDI and various growths namely the GDP growth, growth in house price, growth in transaction value, and growth in public property. Ordinary least square will be used to estimate the variables while the bounds testing approach will (ARDL) cointegration testing will be employed.

#### V. CONCLUSION

This paper suggests a theoretical framework connecting real estate, FDI and growth for Malaysia due to the incongruence in the performance of the country's growth in FDI, GDP and house price found in comparison with South Korea's combination. This sparks several questions about the property-related determinants of FDI and the FDI impact on growths, particularly that related with real estate. The determinants of FDI are modified following the Eclectic Paradigm approach to enable real estate factors to be included. Main and significant determinants such as market size, openness to trade and real exchange rate, are maintained as these factors are proved to be robust in many studies. The analysis will be divided into two parts. The first part will assess the impact of the real estate, macroeconomic

and social factors on FDI inflows. The second part will consist of several bivariate relationships between FDI inflows and growths. Long-run cointegration test will be employed to find whether all variables move in the same trend with FDI.

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