THE IMPACT OF THE GLOBAL FINANCIAL CRISIS ON PUBLIC LISTED PROPERTY DEVELOPMENT COMPANIES OF MALAYSIA, SINGAPORE, INDONESIA AND THAILAND

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Abstract

The Global Financial Crisis (GFC) that peaked in 2008 is said to be the worst economic crisis since the Great Depression. The contagion was transmitted to Asian economies indirectly through the collapse in exports. A study was conducted to examine the impact of the GFC on public listed companies and real estate investment trusts (REITS) of Malaysia, Singapore, Indonesia and Thailand. This article only gives focus on public listed companies. The study period was 2004-2012 inclusively to enable the dynamics of the pre-GFC, GFC and post-GFC periods to exert their full impact on the sampled companies. The companies were selected based on a set criteria. Panel Data Regression Analysis reveals that Singaporean (measured by ROAA and ROAE) and Thai companies (measured by ROAE) were affected by the GFC in 2008 and 2009 respectively. Malaysian companies (measured by ROAE) were negatively affected by the cessation of the mini-property boom in 2005 whereas Indonesian companies (measured by ROAA) were affected by the sharp domestic inflation of 2012. A country-by-country macro-analysis was conducted to provide explanation behind these performances.

Keywords: Corporate financial performance, domestic shocks, external shocks, government intervention

1. INTRODUCTION

The Global Financial Crisis (GFC) with its epicentre in the US has been acknowledged as the worst economic crisis since the Great Depression of 1929-1939. It emanated from the US investors' loss of confidence in the value of sub-prime mortgages in July 2007, which then escalated into a liquidity crisis. By September 2008, the crisis rapidly reverberated around the world when stock prices in many countries plunged dramatically. The full-blown systemic crisis in emerging countries did not take place immediately in 2007, but in September 2008 with the Lehman Brothers' collapse (Frank and Hesse, 2009). Asian economies were affected even though their business cycles and that of industrial countries have been observed to be decoupled (Kose, 2008). The contagion was transmitted to Asian economies indirectly through the collapse in global demand and world trade (Lin and Treichel, 2012). Singapore, Malaysia and Thailand suffered negative growth rates in 2009, though not Indonesia (see Figure 1).

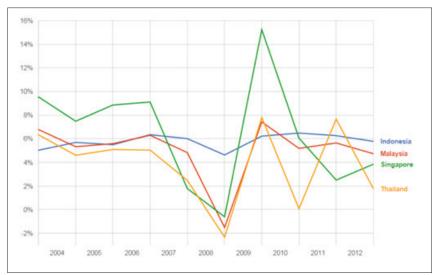


Figure 1: GDP growth of Malaysia, Singapore, Indonesia and Thailand Source: World Bank.

Different countries responded in different ways to mitigate the contagion. Malaysia and Thailand increased their expenditure whereas Indonesia relied on tax deductions to stimulate the economy (Sangsubhan & Basri, 2012). Singapore adopted the 'Keynesian logic' (Chew, 2011) and complicated monetary policy (Lee, 2011).

Milunovich and Truck (2013) note:

"Despite the ongoing debate on contagion in financial markets, there is only a small body of literature investigating contagion specifically for property or real estate markets. This is even more surprising, since GFC originated from a subprime mortgage crisis and was, therefore, heavily related to real estate."

Hence a study was initiated to examine the extent to which the GFC impacted the financial performance of public listed companies and REITS of Malaysia, Singapore, Indonesia and Thailand. Because of space limitation, this paper presents the findings of the former. The listed companies of

these companies were impacted by the GFC (see Figure 2). Their combined market capitalisation in 2008 was US\$568.442 billion, which was just over half (52%) from the previous year of US\$1,086.891 billion. The selected study period was 2004-2012 inclusively to enable the dynamics of the pre-GFC, GFC and post-GFC events to properly manifest in the financial performance of these companies.

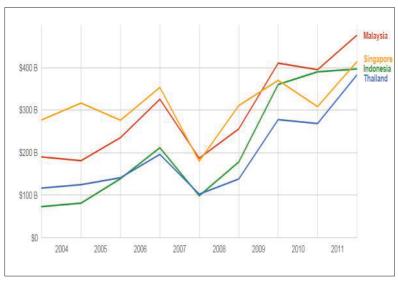


Figure 2: Market capitalisation of listed companies (current US\$) of the studied countries. Source: World Bank.

The research objective were as follows:

- 1. To determine whether the lowest points in the financial performance of public listed property developers of Malaysia Singapore, Thailand and Indonesia coincided with the GFC.
- 2. To provide possible explanations behind the emergence of these lowest points.

Singapore, Thailand and Indonesia were chosen as they are Malaysia's closest neighbors. Together they, like the rest of Asia have been experiencing closer financial and trade linkages, as well as increase in business cycle co-movements (Gong and Kim, 2013). It is always useful to conduct a cross-country comparative study to gauge how Malaysia fare in the face of external shocks comparatively to others ,and to provide explanations for the phenomenon. (Singh and Dhinga, 2013) Because of financial and time constraints more neighbouring countries could not be included.

2. THE GLOBAL FINANCIAL CRISIS

This section sets the scene by providing some details about the GFC, in particular what triggered it and how it reverberated around the world. It ends by hinting of the Eurozone Crisis.

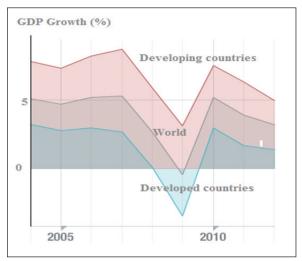


Figure 3: GDP growth of selected regions of the world, 2004-2012. Source: IMF

Except for a few economists, the GFC was largely unanticipated (Lin and Treichel, 2012). Since 2000, the world economy had experienced strong expansion. Accompanying it, was the emergence of large current account surpluses in East Asia and Europe and a widening current account deficit in the US. Many accept that the GFC began with the collapse of Lehman Brothers on September 14th, 2008 following accumulated defaults on mortgages and derivative products. Panic ensued. It triggered a significant decline in credit to the private sector and a sharp rise in interest rates. The collapse of the US financial institutions led to the crash of equity markets, international trade and international production around the world. Advanced economies, including the US, together with developing countries entered into a recession (see Figure 3). Simply put, what started as an asset bubble, exploded into a housing and banking crisis with a cascading effect on consumer and investment demand (Krugman, 1998).

In the run-up to the GFC, credit expansions fueled real estate booms in many developed economies including the US (Laeven, 2010). When the GFC gripped these countries, the housing bubble could not be sustained. Many householders could not cope with the rising interest rates and falling home values. Sharp compression in consumer spending compounded already difficult situations in the real estate. Austria, Hungary, the UK, Iceland, Ireland and the US were among the earliest to experience house price declines (Pais and Stock, 2011). The GFC demonstrated the powerful links between the housing sector, finance and the economy (Doling, 2013). Figure 4 shows the global house price index peaked just before the GFC. By the end of 2012, it had yet to recover to the pre-GFC level.

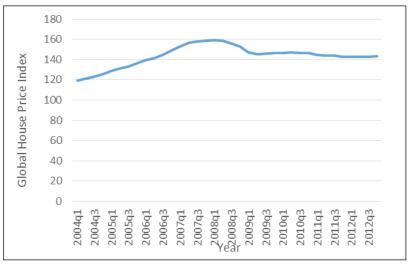


Figure 4: Global house price index, 2004-2012.

Source: International Monetary Fund (http://www.imf.org/external/research/housing/)

Pais and Stork (2011) posit that one of the channels that contributed most to the global spread of the GFC was common shocks to asset markets, especially the real estate markets. The real estate sector of different countries experienced different levels of vulnerability to GFC (Peto, 2011). While this was true for countries like Singapore which displayed the highest extreme dependencies to react together with similar countries, it did not apply to countries like Malaysia (Kim and Zhuo, 2013). Instead the GFC was transmitted to many developing countries through the contraction in aggregate demand caused by the collapse in exports, either directly or indirectly, from the US (Zainal and Rasiah, 2009).

The US Financial Crisis Commission created to investigate the root causes of the GFC noted that the crisis was avoidable. It said:

"Despite the expressed view of many on Wall Street and in Washington that the crisis could not have been foreseen or avoided, there were warning signs. The tragedy was that they were ignored or discounted. There was an explosion in risky subprime lending and securitisation, an unsuitable rise in housing prices, widespread reports of egregious and predatory lending practices, dramatic increases in household mortgage debt, and exponential growth in financial firms' trading activities, unregulated derivatives, and short-term "repo" lending markets, among many other red flags. Yet there was pervasive permissiveness, little meaningful action was taken to quell the threats in a timely manner. (p. xvii)"

More ominously, Razin and Rosefielde (2011) warned that the mentality and institutions which prompted the crisis in the first place remain firmly in command. There is little prospect that a constructive consensus will emerge capable of disciplining contemporary societies for the greater good by promoting optimal efficiency, growth and economic stability.

The GFC triggered unprecedented European sovereign-debt crisis resultant of the real estate bubble burst in Ireland and Spain, and tax revenues deflation in Greece, Italy and Portugal (Burda, 2013). The crisis began in October 2009 when Greece's finance minister revealed that the budget deficit

would be double the previous government's estimate and will reach 12% of GDP. International lenders lost confidence in the ability of these countries (which became known as PIIGS) with their severe sovereign government debt vis-a-vis their GDP to cover their deficits. Their borrowing costs reached a level that threatened the integrity of the Eurozone banking system, the mechanisms of payments, the European Central Bank and the common currency itself. The OECD (2014) indicated that the combined gross borrowing needs of OECD governments of US\$11 trillion appeared to have peaked in 2012. However it warned that the government debt ratios are expected to further increase and remain at high levels in the near future as their economies are taking longer to recover. In fact for a group of selected major OECD countries, general government debt as a percentage of GDP in 2014 is projected to surpass the World War II peak of around 116%.

3. RESEARCH METHOD

All property companies that were listed in their respective stock markets (i.e. SGX, Bursa Malaysia, IDX and SET) made up the sample population on the condition that they passed the following criteria:

- (1) Listed before or on 1 January 2004.
- (2) No significant changes to the financial structure due to mergers and acquisition, changes of financial years that leads to discontinuities in the reporting period, or trading status suspension due to sanctions or irregularities.
- (3) Remained substantially as a property development company (i.e. the proportion of revenue from property activities must be at least 50%).
- (4) Financial reporting was in local currency (Singapore cases only).
- (5) At least 50% of revenue from domestic sources (Singapore cases only).

Because the number of Malaysian companies that pased this pre-participating screening process was big (i.e. 71), systematic sampling of firstly arranging them according to size of total assets (2012 figures) in descending order and then selecting companies alternately was adopted. One company was eliminated from the final sample due to extreme outlier data. The final numbers of the sample population are as follows: Singapore 12, Malaysia 35, Indonesia 18 and Thailand 27. Three types of financial analyses were exercised:

- 1) financial statement, including total revenue, total profit before tax, net profit, total assets, total liabilities, total net assets, total equity and total market capitalisation, and
- financial ratios, including examine profitability ratio, efficiency ratio, liquidity ratio, and market ratio.

The adopted financial measures follow past studies (Hoberg & Phillips, 2010). A weight was applied to each ratio to ensure that the companies represented their sectors. The weightage changed annually concomitant with revenue change. Financial data were extracted from annual reports usually available from the respective stock market website, if not the companies themselves. Obtaining annual reports proved particularly challenging for Indonesian and Thai companies.

SPSS PASW (Predictive Analytics SoftWare) and E-Views 7 were used to analyse the financial data of the companies. Panel data regression analysis was used to explore the relationship between independent variables and dependent variables for the most suitable pair of event years. Financial performance of the companies was represented by 6 variables: net profit margin (Profit), return on average asset (ROAA), return on average equity (ROAE), debt ratio (Leverage), market capitalisation

(Size) and market-to-book value (Growth). Independent variables were represented by Leverage (Debt Ratio), Size (Market Capitalization) and Growth (Market-to-book Ratio). Profit (Net Profit Margin), ROAA (Return on Average Asset) and ROAE (Return on Average Equity) signified as proxies for dependent variables. The correlations between these 6 financial variables were examined by SPSS. Several pairs were tested to find the most appropriate years to be included in the model. All market capitalisation values were converted to log value in order to have a standardise data and to obtain the best interpretation of results. The econometric model was developed which states Profit, ROAA and ROAE were depending on Leverage, Size and Growth:

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Y(P,ROAA,ROAE)_{it}
= \beta_0 + \beta_1 L_{it} + \beta_2 S_{it} + \beta_3 G_{it} + \beta_4 D_1 + \beta_5 D_2 + \mu_{it}
where
i = 1,2,...,27 \text{ (company)}
t = 1,2,...,9 \text{ (year)}
D_1 = 2008 \text{ (year)}
D_2 = 2009 \text{ (year)}
\mu_{it} \text{ is a random error term}
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Panel data consists of three types of model namely Pooled OLS Model, Fixed Effects Model and Random Effects Model. The Random Effect Model was chosen after applying the Hausmen test which determines the appropriate model to be applied in this study. Panel data regression in this study was diagnosed for normality and autocorrelation problems. The remedies applied differed between large and small sample sizes. Jarque-Bera normality test was conducted to diagnose for normality case for all models. Durbin-Watson statistic test was applied for autocorrelation problem which means correlation between members of series of observations ordered in time (as in time series data) or space (as in cross-sectional data). And if necessary, the Cochrane-Orcutt iterative procedure was also adopted.

4. FINDINGS AND DISCUSSION

The results of the panel data regression analysis show that Singaporean companies (measured by ROAA and ROAE) followed by Thai companies (measured by ROAE) a year later were negatively impacted by the GFC. The other nationality groups however were affected by domestic events during the study period — Malaysian companies by the cessation of the mini-boom in 2005 (measured by ROAE) and Indonesian companies by the sharp inflation of 2012 (measured using net profit margin and ROAA). Below, all events that led to such outcomes are elaborated below.

4.1 Singapore

The two equations below from the transformed model shows that the ROAA and ROAE of Singaporean public listed companies were most affected in 2008:

LNROAA =0.0737-0.0444D1 ROAE =0.1475-0.0947D1

where D1 is 2008.

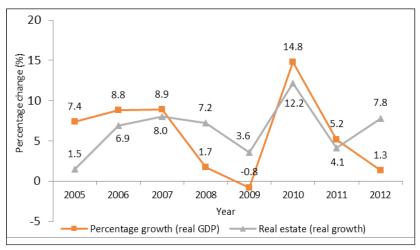


Figure 5: Real GDP and real estate growth, year-on-year, 2005-2012 (2005 market prices). Source: Department of Statistics and Ministry of Trade and Industry.

Figure 5 shows that Singapore's economy suffered contraction in 2009, and that the real estate concomittantly experienced a sharp drop in growth that same year. Yet the panel regression analysis in fact points to the sampled Singaporean property development companies as a group actually suffering from the GFC the previous year. This stands to reason as Singapore's economy was among the earliest in the region to contract sharply at the end of 2008 (Doraisami, 2011). By late 2007, some signs of slower growth became evident in Singapore's broader economy due to economic downturn in the US (Monetary Authority of Singapore, 2008). Being highly open, the GFC led to Singapore's economy experiencing sharp drop in growth rate in 2008.

Table 1: Percentage change of property price indices for various real estate sub-markets.

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	Private res.	% change	Office sp.	% change	Shop sp.	% change	Factory sp.	% change
2004	113.8	0.9	73	-0.7	86.6	0.5	78.1	1.7
2005	118.2	3.9	76.3	4.5	92.5	6.8	80	2.4
2006	130.2	10.2	89.3	17	101.3	9.5	85.4	6.8
2007	170.8	31.2	118.4	32.6	114.7	13.2	105	23
2008	162.8	-4.7	110.1	-7	112.5	-1.9	92	-12.4
2009	165.7	1.8	92	-16.4	105.6	-6.1	113.8	23.7
2010	194.8	17.6	109.4	18.9	114.7	8.6	144.6	27.1
2011	206.2	5.9	124.5	13.8	120.8	5.3	180	24.5
2012	212	2.8	126.2	1.4	123.2	2.0	185.7	3.2

Source: Department of Statistics.

Table 1 shows all real estate sub-markets suffering from drop in prices in 2008. The GDP

contraction in 2009 as a whole was milder than expected (Monetary Authority of Singapore, 2010). In fact the economy rebounded in 2009, partly because of the turnaround in Singapore's trade-related industries and asset market activities as firms around the world replenished inventories which had been run down earlier, and credit and financial market conditions improved. The economy recovered strongly in 2010. Despite Singapore's fiscal policy being geared mainly to promote long-term economic growth rather than cyclical adjustment, the government took the drastic step of unveiling the Economic Resilience package to the tune of \$\$20.5 billion or RM50 billion - equivalent to 8.2% of GDP - in January 2009 (Doraisami, 2011). The package was purposely designed to curtail leakage by way of imports. In October 2008, Singapore also ceased allowing its currency to appreciate gradually against the US dollar, thus reversing a poliocy that was implement in April 2004 (Takagi, 2009). Furthermore in April 2009, Singapore, re-centered its policy band to the prevailing level of the nominal exchange rate (which represented an effective depreciation of the currency).

Most important to note is that there was no specific counter-cyclical measure for the real estate sector. If anything at all, the government implemented various measures to cool down the property market beginning 2006 until the end of the study period (Kim and Yong, 2013). This measures had an impact on players in the industry as reflected in the downward spiral of the general business expectation in the real estate segment from the end of 2007 onwards (see Figure 6). Earlier, in July 2005, the government introduced a raft of measures to resuscitate the market (Lum, 2011). In December 2006, buyer stamp duty concesion was withdrawn. In October 2007, the Deferred Payment Scheme introduced by developers was disallowed. In September 2009, the Interest Absorption Scheme introduced by developers was also disallowed. To sum up, these cooling measures coincided when the GFC hit Singaporean developers the most. Notwithstanding the fact that the GFC coincided with the implementation of these cooling measures, one possible reason why real estate was not targeted by the stimulus package is because of the small role private developers play in housing delivery.

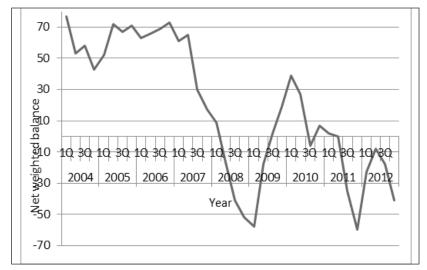


Figure 6: General business expectation in the real estate segment, 2004-2012. Source: Department of Statistics.

As to why the Singapore government did not intervene to prop up the property market, one needs to appreciate its housing market. The Singapore government, via its agent, the Housing Development Board, dominate the housing sector. Private developers concentrate on the small but growing high-end housing segment (Lum, 2011). They cater largely to the upper echelons of Singapore's society, expatriates and foreign investors (Phang, 2007). The sharp economic downturn during the second half of 2008 continuing into the first half of 2009 resulted in a drop in demand for private homes, but the demand for new and resale HDB flats continued to hold steady during this period. Therefore, any stimulus for the private housing sector would have had miniscule impact on the broader economy. The strong influence of foreign housebuyers is absent in the other three studied countries. Singapore has long used foreign liquidity to stabilise its real estate market by easing rules and regulations on foreign investment when the market is dull and tightening them when the market overheats (Liao & Zhao, 2014). To boost the market, foreigners were allowed to buy land parcels and completed homes at Sentosa Cove since August 2004. This resulted in a surge of foreign liquidity into the private residential market. In mid-2005, the government removed the restriction for foreigners to own apartments below 6 stories, raised the loan-to-value limit and reduced the cash down payment. The influx of foreign liquidity into high-end private housing market aided the recovery of the market (Deng and Mcmillen, 2012). However as Table 2 shows, there was an appreciable slowdown in growth of number of private residential units owned by non-Singaporeans in 2008, which led to private developers suffering as a consequence.

Table 2: Number of private residential units owned by Singaporeans as compared to permanent residents and foreigners.

	Singaporeans	% change	Perm. res. & foreigners	% change		
2004	183,519	5.7	22,652	6.5		
2005	189,311	3.2	23,884	5.4		
2006	192,988	1.9	25,113	5.1		
2007	191,945	-0.5	28,872	15		
2008	194,102	1.1	31,809	10.2		
2009	198,892	2.5	35,201	10.7		
2010	206,497	3.8	401,185	14.2		
2011	208,662	1.0	44,134	9.8		
2012	217,488	4.2	48,216	9.2		

Source: REALIS

Due to Singapore's small housing market compared to the its neighbours compunded by the small role private developers play in housing delivery, some public listed property development companies ventured overseas. To capture the GFC impact domestically, those that earned more than 50% revenue overseas were excluded from the study.

4.2 Thailand

Thai companies (measured by ROAE) were negatively impacted by the GFC a year after their Singaporean counterparts did as shown by the equation below:

$$ROAE(1) = -2.6074 - 0.7276L + 0.1477S - 0.1194G - 0.2279D2$$

where D2 is 2009.

This is despite the government's efforts to prop up the ailing housing market. The GFC even overshadowed the domestic shocks that local property developers faced during the study period, the two main ones being the combination of tsunami, political unrest and drought of 2005, and the worst flooding in 70 years which inundated the Mekong and Chao Phraya river basins including Bangkok.

As Figure 7 shows, in 2008, the Thai economy expanded 1.7%, decelerating from 5.4% in 2007, following a decline in net exports, particularly in the fourth quarter when global economic downturn and internal political unrest adversely affected Thai export demand, manufacturing production as well as tourism prospects (Bank of Thailand, 2009). In 2008, overall real estate market expanded from 2007, due mainly to the government's economic stimulus packages to reduce property transfer and mortgage registration fees. The number and value of real estate transactions grew at 8.4% and 18.0%, respectively.

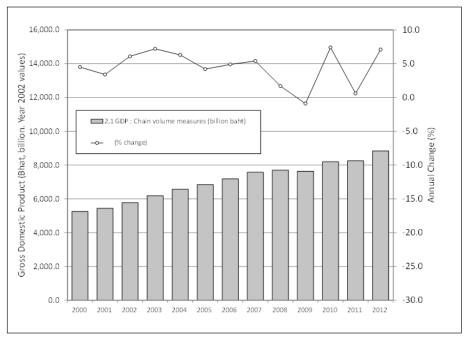


Figure 7: GDP in real 2002 values and growth rates Source: Bank of Thailand

Two stimulus packages, the first (SP1) valued at Baht 117 billion was disbursed at the end of March 2009 and the second (SP2) valued at Baht 350 billion in 2010. The government's tax reduction on property transfer and mortgage registration fees effective on 29 March 2008 caused a large jump in purchases and transactions in the second and third quarters in 2008. However, in the fourth quarter, real estate demand declined considerably due to a low level of consumer confidence following domestic economic slowdown which was tied to both political instability and the global financial crisis. Although new projects were launched in 2008, and put on sale in the first half of 2009, new supply in 2009 were limited due to tightened credit standards, especially for small and medium sized real estate developers, as a result of higher risk perceptions.

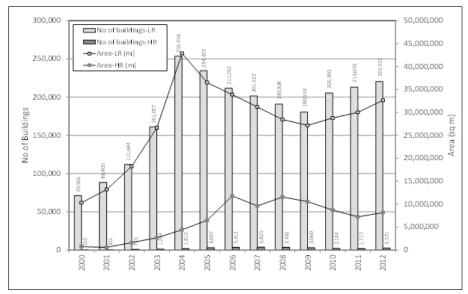


Figure 8: Construction permits for low-rise (LR) and high-rise (HR) housing — nationwide Source: REIC

For the first time in a decade, the Thai economy contracted by 0.9% in 2009 due to the GFC which had significantly affected its major trading partners (Bank of Thailand, 2010). Exports shrank sharply, leading to a fall in business confidence, as well as domestic consumption and investment. During the first quarter of 2009, the Thai economy was most severely affected by the GFC. However, in the second half of that year, the Thai economy showed signs of recovery following the world economic recovery, as well as monetary and fiscal policies designed to stimulate the economy and shore up producer and consumer confidence. Notheless, construction permits for low-rise housing were at their lowest in 2009 compared to the rest of the study period (see Figure 8).

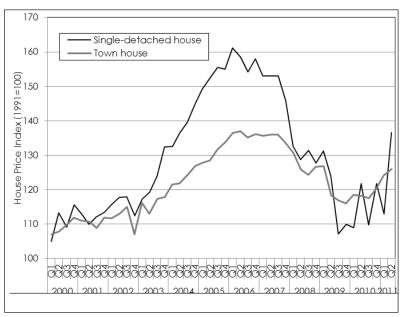


Figure 9: GDP in real 2002 values and growth rates Source: Bank of Thailand

House price index for single detached houses and town houses peaked in the first quarter of 2009 before crashing in the third quarter 2009 (see Figure 9) as a result of the contraction in the Thai economy, and the uncertainties with regards to the stimulus measures, in particular the income tax deductible for new residential property purchases, which were supposed to cease at the of March 2009. Other incentives include reduction in ownership transfer fee from 2% to 0.01%, and reduction of mortgage registration fee from 1% to 0.01%. (In the end all these measures was extended until end 2009). Housing developers were also rushing to complete their projects to qualify for the government real estate incentive programme originally scheduled to end in March 2009. In 2010, when the economy recovered with a growth of 7.4%, the real estate sector expanded and housing demand started to gradually improve until the end of the year. The price of single detached houses also rose but slower than for condominiums partially due to higher demand for the latter and their corresponding lower prices.

The GFC coincided with yet another round of political upheaval (see Table 3). Somehow the housing market was resilient to this domestic shock. Elections were held in December 2007, after a military-appointed tribunal outlawed the Thai Rak Thai party and prevented TRT party executives from contesting in the elections. The People's Power Party (PPP) won the December 2007 general election. Though it became the largest party in the House, the PPP did not gain an absolute majority, and had to win the support of five smaller parties to appoint its chief, Samak Sundarvej as Prime Minister. The opposition People's Alliance for Democracy (PAD) soon resumed protests against the coalition government. In November 2008, protestors seized and closed both Don Muang and Suvarnabhumi International Airports, paralysing air travel for several days. The government eventually declared a state of emergency in Bangkok and five neighbouring provinces in April 2009.

Table 3: Thailand's prime ministers between 2004-2012. Note: * acting ** caretaker

Name	Term start
Thaksin Shinawatra	February 9th 2001
Chitchai Wannasathit*	April 5 th 2006
Thaksin Shinawatra**	May 23 rd 2006
Surayud Chulanont	October 1st 2006
Samak Sundaravej	January 29th 2008
Somchai Wongsawat*	September 18 th 2008
Chaovarat Chanweerakul*	December 2 nd 2008
Abhisit Vejjajiva	December 17 th 2008
Yingluck Shinawatra*	August 5 th 2011

4.3 Malaysia

Malaysian companies were relatively unscathed from the GFC. Instead they were most affected by the cessation of the mini-boom in 2005 as measured by ROAE:

LNROAE = -0.2295 - 0.2162 LEVERAGE + 0.0189 SIZE - 0.0399 D1

where D1 is 2005

Table 4: Volume and value of property transaction, 2003-2012.

Year	Volume of tr	ansaction	Value of transaction		
	Number	Change (%) y-o-y	(RM billion)	Change (%) y-o-y	
2003	243,376	-	43,435	-	
2004	293,318	20.5	60,012	38.1	
2005	276,508	-5.7	56,782	-5.3	
2006	283,897	2.7	61,599	8.5	
2007	309,455	9.0	77,143	25.2	
2008	340,240	9.9	88,342	14.5	
2009	337,859	-0.6	80,996	-8.3	
2010	376,582	11.4	107,440	32.6	
2011	430,403	14.3	137,828	28.3	
2012	427,520	-0.7	142,845	3.6	

Source: NAPIC

As Table 4 shows, the volume of transaction contracted in 2005, marking the end of a mini property boom that began in 2002. It also coincided with slower GDP growth (see Figure

10) in the midst of moderation in the growth of the global economy due to oil price hike, downturn in global electronics cycle and US' less accommodative monetary policy (Ministry of Finance, 2006)

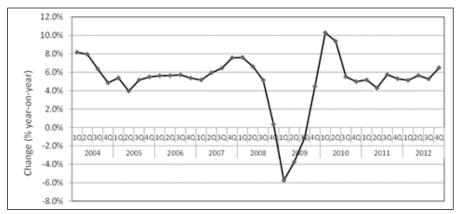


Figure 10: Change in quarterly GDP (% year-on-year, constant 2000 prices) Source: Department of Statistics Malaysia

New residential launches dropped in 2005 to 57,290 units from 95,339 units the previous year as developers adopted a cautious attitude Bank Negara Malaysia, 2008. The Malaysian economy expanded in 2006 in tandem with strong growth in the US and Asia. Strong external demand was complemented by strong domestic activity as private consumption rose in line with rising incomes, and private investment increased to expand productive capacity to meet demand (Bank Negara Malaysia, 2007). Still developers remained cautious and new launches dropped even further to 38,526 units.

The rest of this subsection helps explain why the sampled population were not severely affected by the GFC. When GDP growth slowed down slightly in 2008 from 6.5% to 4.7%, the property market that year recorded near-double digits growths. REHDA, the trade association representing major developers in Malaysia, attribute the pre-GFC robust property market to three main factors (Mohamad, 2010) :

- 1. Removal of FIC approval for residential property above RM250,000 (26 Dec 2006)
- 2. Removal of real property gain tax (1 April 2007)
- 3. Firm market confidence

Additional boost for the property sector were the various tax incentives introduced for Iskandar Development Region in southern Johor, and the RM381 million government allocation to build 40,000 affordable homes and rehabilitate another 6,000 that had been abandoned. The Malaysian Property Incorporated (MPI) was set up to attract foreign investors in the property sector. To increase efficiency and productivity, the government introduced the One-Stop Centre (OSC) to speed up the process in the handling and approving of housing projects, the New Building and Common Property Act 2007 replaced six laws, exemption for the build-then-sell (BTS) developers from RM200,000 deposit fee and 30% low cost housing provision and fast track approvals for certain types of projects (Valuation and Property services Department, 2009).

Then the GFC hit Malaysia. Prospective housebuyers were cautious due to worsening economic conditions in 2009 (Mohamad, 2010). Even though the Malaysian property market moved on similar low tone with the overall economy for the first two quarters of the year, it recovered in the third and fourth quarters as the stimulus packages took effect Valuation and Property Services Department, 2009). REHDA described the property market that year as being 'resilient', and the residential and commercial market performance as 'making steady recovery' (Mohamad, 2010). In fact, the volume and value of transactions for 2009 were higher than 2007 (see Table 4). Just like the broader economy, the performance of the property market can be said to be better than expected (Valuation and Property Services Department, 2009). Government stimulus aside, additional measure includeds reducing registration time from 144 days to 41 days for properties that required valuation and 34 days for those that did not effective 2009 onwards. Budget 2009 focused mainly on housing subsector. The government allocated RM50 million under the Housing Assistance Programme to build 1,400 new houses and repair 1,000 homes for the needy. RM300 million was allocated to Jabatan Perumahan Negara to complete houses under various social programmes. Some stimulus measures did not produce the desired effect though. They included home ownership promotion for civil servants in the form of longer house tenure (25 to 30 years), home ownership promotion for the public through partial stamp duty exemptions on sales and loan agreement articles on the purchase of medium cost houses up to RM250,000 and the introduction of lower income tax to stimulate more purchases of medium cost houses. The mobilisation of higher funds through the Housing Credit Guarantee Scheme to assist those without fixed income to own houses did however bear fruit.

4.4 Indonesia

Two equations from the transformed model shows that net profit margin and ROAA of Indonesian were affected in 2012:

LNPROFIT = 0.5684 + 0.0366LNLEVERAGE + 0.1039LNGROWTH + 0.0717D2 LNROAA = -0.0323 + 0.0328LNGROWTH + 0.0350D2

where D2 is 2012.

This section focuses on this event, before providing explanation as to why they were less affected by the GFC.

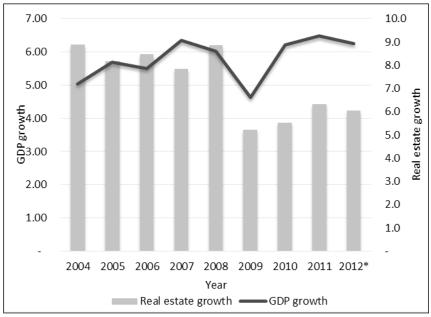


Figure 11: GDP and real estate GDP growth (at 2000 price) Source: Statistics Indonesia

In 2012, the world was again shaken by another shock so soon after the GFC – The Eurozone Crisis (see Figure 11). Despite the pullback in global demand which slowed down export performance, Indonesia's domestic economy which accounted for more than 50% of the economy was able to maintain steady growth due to strong performance of household consumption and investment (Bank Indonesia, 2013). This strong domestic demand however resulted in escalating import growth. Inflation for volatile foods and administered prices in 2012 was relatively well managed (i.e. 5.7% (yoy) due to better production and distribution of foodstuff.

The real estate sector was affected by the global economic slowdown in 2012 (see Figure 12). It slowed down slightly to 6.0%. Even so, credit growth was significantly high that year, particularly from the consumption sector that was dominated by residential (KPR) and motor vehicle (KKB) loans. The growth of these two sectors was above the aggregate of credit growth amounting to 24.4% (y-o-y). The residential loans growth, in particular, reached 33.12% (y-o-y). The Residential Property Price Index (RPPI) which covered 14 main cities in Indonesia experienced a drop in the first quarter of 2012, but surged upwards by the third quarter of that year. RRPI for the Jabotabek region (which included Indonesia) suffered an even more pronounced drop due to rising material and labour costs, along with increasing difficulty in bearing licensing cost.

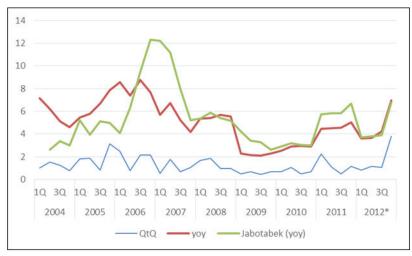


Figure 12: National and Jabotabek RPPI.

It may seem puzzling that the sampled Indonesian companies suffered more from the Euzone Crisis than the GFC given that the impact by the latter on the broad economy and the real estate seem greater (see Figure 11). The remainder of this section dwells on GFC's impact on Indonesian broader economy and the real estate sector.

In 2008, the general economy slowed down slightly but the real estate sector grew strongly with 8.9% growth (see Figure 12). In 2009, both the general economy and the real estate sector recorded sharply reduced growth brought about by the GFC. The real estate sector only recorded growth of 5.2% as confidence in the financial and real estate sectors was shattered.

Up until September 2008, the economy was still showing some resilience towards the GFC which was already full-blown in the world's most powerful economies (Titiheruw et. al., (2009). However, in the fourth guarter of 2008, the GFC began to bear down on the Indonesian economy at an unprecedented speed (Bank Indonesia, 2009). Weakening exports, pressure on the balance of payments and turmoil on the money market took their toll on Indonesia's economic growth. On the external side, the balance of payments began to accumulate rising deficit and the exchange rate underwent significant depreciation. In the financial market, global liquidity conditions tightened up in tandem with mounting perceptions of emerging market risks. This in turn triggered a slide in the Indonesian Stock Market and Government Securities prices alongside a sharp downturn in the exchange and prompting outflows of foreign capital. Still, the Indonesian economy was able to chart 6.0% growth in 2008 driven by private consumption and exports. Domestic demand made up roughly two-thirds of the economy, which partially helped insulate Indonesia from the full impact of the GFC. The general economy slowed down slightly in 2008, but the real estate sector grew strongly with 8.9% growth (Figure 12). Heavy pressure continued to bear down on monetary and financial system stability in the first quarter of 2009. The economic remained in downward trend due to a deep contraction in exports of goods and services (Bank Indonesia, 2010). These developments undermined confidence among economic actors in the financial and real sectors, as well as potentially reduced the positive performance achieved during the previous few years. Continuing from the fourth quarter 2009, the Bank Indonesia and government took a number of policies to safeguard macroeconomic and financial stability through monetary and fiscal stimulus. Fiscal policy response was put in place in the face of the contagion. Despite the slowdown, economic growth was 4.6% in 2009, the third highest in the world after China and India. The real estate sector recorded sharply reduced growth of 5.2% in 2009 as confidence in the financial and real estate sectors was shattered.

According to Wilczyńsk, Indonesia was able to maintain high growth rate in 2009, while Thailand and Malaysia fell into recession because it had implemented a managed floating regime in 2009. Thee offers four others reasons which includes Indonesia's low share of manufactures in its total exports, its relatively low dependence on export-led growth, and finally, it's relatively low exposure to banks in the US, EU and Japan.

5. CONCLUSION

The public listed property companies of the four countries showed remarkable variation in financial performance during the study period, depending how vulnerable the national economies were to external shocks, the structure of the industry and government interventions. Singaporean companies were the most affected largely because the economy and the property market was the most open among the four countries. They were even affected ahead of the rest of the economy. The double blow of drop in domestic demand as well as international interest resulted in ROAA and ROAE of the sampled companies severely deteriorated. In contrast, Indonesia's economy relied mainly on domestic demand. Instead of being affected by the GFC, it was the inflation due to the Eurozone Crisis that affected most the Indonesia property developers most during the study period.

Thai and Malaysian public listed property companies were affected by the GFC, but the economic stimuli implemented by their governments included measures for the real estate sector, unlike Singapore's. It was unfortunate that the Thai government misjudged the timing for withdrawal of the stimulus packages resulting in their companies suffering a delayed effect from the GFC. As the private players in Singapore play a minor role in the housing sector in Singapore, their plight during the GFC could be excluded from the country's policy intervention priorities without detrimental effect on the broader economy. In fact, in the run up to and even during the peak of the GFC, Singapore's policy makers were striving to cool down the property market.

There are a few lessons that can be drawn from this study. It is axiomatic to say that shocks cannot be predicted. Public listed property companies in more open economies have to mindful of external shocks than those operating in countries that are more insulated. External shocks can impact the performance of public listed property markets indirectly by weakening domestic demand. The more prominent is the private sector in the domestic real estate market, the more likely is the government to help cushion the impact of the external shocks. However, with all the best intention in the world, the timing of the intervention and its cessation may be misjudged. The one important lesson than can be drawn from this study is that public listed property companies need to be constantly vigilant to domestic as well as international forces acting on their markets, and that they should take the necessary recessionary steps when their market surveillance warns them of impending slumps. Relying totally on government interventions is not wise as the reactions may not fit perfectly with the unfolding events.

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