

**GLOBAL RISKS THAT IMPACT NEWCOMERS IN THE REAL  
ESTATE INDUSTRY: A CASE STUDY THAILAND  
RESIDENTIAL REAL ESTATE**



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: A Case Study Thailand Residential Real Estate

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### **Abstract**

The objectives of this study are (1) to gain an understanding of the impacts of global risks on the residential real estate industry in Thailand, (2) to identify measures or pre-emptive actions industry participants, especially newcomers, can take in case of recurrence of past crises, and (3) to recommend a strategy to industry newcomers with the aim to survive and prosper in the residential real estate business.

**Research Methodology:** This research utilizes literature review to accumulate background information and thematic qualitative analysis of data derived from interviews to interpret thematic concepts that can be collated to provide insights, implications or useful cues for the construction of a recommendation for new entrants to the industry.

**Research findings:** Global economic risks make up the most important threat to the real estate business overall all as it compasses various other related risks that have both direct and indirect impacts on the real estate industry. Nevertheless, other risks such as natural phenomenal and man-made disasters can also impact the industry. Political risks have become dominant in Thailand in recent years as well as social changes that can determine consumer behavior. Players must be adaptive, innovative and alert to market situation and trends, customizing their products to customer needs. They must also be financially strong or have access to financial backing from financial institutions.

**Keywords:** Global risks, Thailand real estate industry, thematic qualitative analysis,

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# CHAPTER 1

## INTRODUCTION

The background of the problem, associated problems, significance of the study, and the scope and limitations of the study are discussed in this chapter.

### 1.1 Statement of the Problem

The world no longer finds the real estate industry as tightly circumscribed or restricted within a region since the 2007 worldwide financial crisis, started by the sub-prime mortgage crisis in the US. The real estate business nowadays plays a relatively critical role in the international financial market and the world's economic strength (World Economic Forum, 2011b:4). Today, real estate companies are faced with continuing volatility because of the international credit squeeze. The limitations on accessibility to credit and the short-term incapability to install investment at satisfactory levels of return have paralyzed the transaction side of the real estate industry (Sinha, 2009). Globalization has progressively become more concerned with the internationalization of service businesses very similar to the trend in the manufacturing sector, and the various sub-sectors of the real estate industry have been eager participants in the rise of global market. Real estate market players such as property developers, finance firms, builders, brokers, service providers, consulting firms, and investors have expanded their business coverage beyond their traditional markets to a global arena (Bardhan & Kroll, 2007). This development has also expanded their risk exposure and the volatility of the global market.

As evidence by the recent economic crisis, the overall outlook of the real estate businesses in Bangkok and vicinity area has suffered from knock on effects from the recurring spats of global financial crises. Over the past few years, the Thai economy has had to face with negative impact of the European Union Debt Crisis, following the US sub-prime crisis that has spilled over into the real global economy. The economy of Thailand is generally linked to global economic situation as the country's economic growth heavily relies on exports and the flows of international capital (Sethapramote, 2014). The ongoing European Debt Crisis has impacted the

exports growth of Asian countries (Yuvejwattana, 2012). In addition, the risks from higher fuel prices also have negative effect on the real estate industry and its growth prospects as the increase of fuel prices can increase raw material prices overnight. Other global risk factors are fluctuations on loans availability, volatility in exchange rates, which are the carry over effects of the sub-prime crisis in the US as Khumpaisal & Chen (n.d.) have referred from Vanichvatana (2007).

Moreover, the World Economic Forum (2011) showed that the real estate industry is vulnerable to social factors as well such as the increase in population and the rural to urban migration trend. These demographic changes, including the influx of immigrants into Thailand, have impacted the social makeup of the residents living in Thailand, as well as on the demand they put on the residential sector. According to World Economic Forum (2011a, p. 17, para. 4) the populations in less economically developed countries are commonly more exposed to the unpredictability of natural disasters as they are more dependent on agriculture and farming lands, which are increasingly vulnerable to natural hazards. These hazards are commonly the push factors for rural-urban migration.

There is no doubt that Bangkok and vicinity real estate sector is exposed to risks and their outcomes. Therefore, the major factors affecting the real estate sector should be carefully analyzed, using available tools. STEEP (Khumpaisal & Chen, n.d.), is a useful technique that categorizes risks and analyzes them. STEEP is an acronym for Social, Technological, Economic, Environmental, and Political headings that clearly differentiate and identify the risk factors under respective category. Major risks that affect the investment process can then be addressed.

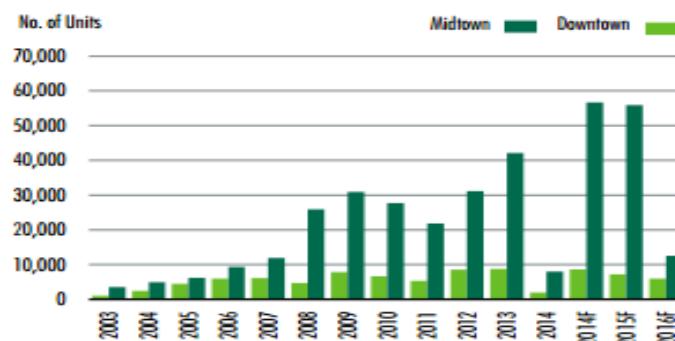
Risks in the real estate sector have increased greatly in many countries around the world, in addition to those caused by natural disasters. In order to fully analyze the effect of global risks in the case study of the Thai real estate industry, the factors affecting the industry need to be carefully examined. Over the years there has been a series of events that have drastically affected the real estate industry in Thailand, for example, the devastating in 2011 that destroyed 1/6 of the value of the economy of the nation, it was estimated. Haraguchi and Lall (2013) stated that the tragedy occurred from a combination of a natural anomaly and man-made factors. The levels of water in Thailand's major reservoirs were high and had significantly exceeded their storage

capacity to prevent flood due to heavy rainfall in Thailand's northern region. But mistiming and mismanagement of excess of water by responsible agencies, including an unprecedented rainfall created a tragedy.

Political instability is another important risk factor that causes turmoil in Bangkok and vicinity's real estate businesses. Recent years have witnessed instability in Thailand's political arena that had pitched the Red Shirt faction against the Yellow Shirt. The Red Shirt group consists of supporters of the former Prime Minister Thaksin Shinawatra. On the other side is the Yellow Shirt group who opposed Thaksin's administration. The political stalemate was eventually broken on 22 May 2014, by a military coup against Yingluck's administration as anticipated by many Thais. Nevertheless, Thailand has recovered some stability eventhough the country is run under martial laws. Nevertheless, the overall economy has been tremendously impacted by the political crisis as well as s a threat to the real estate industry is labor wages as Khumpaisal and Chen (n.d.) referred from Vanichvatana (2007), but this has become a minor issue as the industry has adjusted to the new minimum wage rate regime.

### Condition of Real Estate Market in Thailand

The recent political turmoil has slowed down Bangkok's high-rise housing projects throughout the city, resulting in a sharp decline of new residential project launches, including unit sales of properties and the reselling trend of condominiums in Bangkok. Currently, the number of newly completed condominiums in Bangkok's midtown area is higher than downtown area according to Figure 1.1 below:

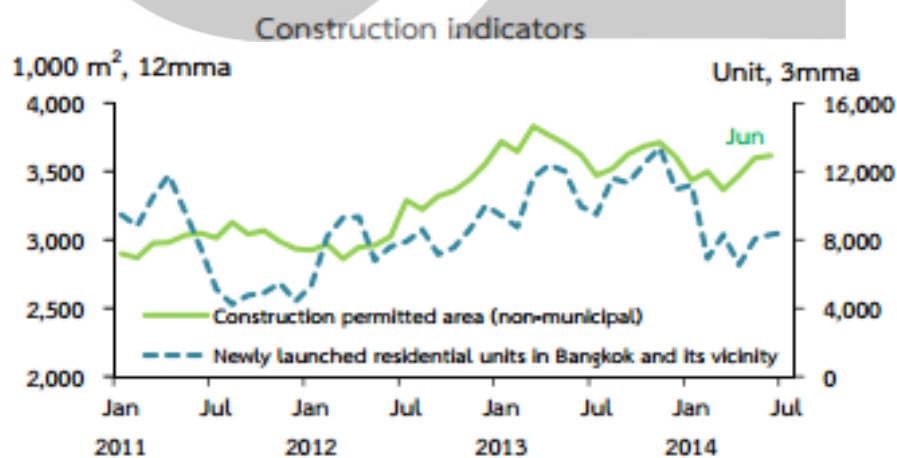


**Figure 1.1** Newly Completed Bangkok Condominiums from 2003 to 2016F

**Source:** CBRE Thailand, 2014

The Thai economy has dropped drastically since 4Q 2013. Bangkok and vicinity's real estate industry in 2014 has slightly deteriorated compared to the same period in the previous year due to a combination of both political uncertainty and economic slowdown. Political instability has caused both the supply and demand sides to falter, with many investors postponing their investments. A drop in consumer confidence has also led to a downturn in sale of residential properties, as consumers tend to become more cautious in their expenditures. Based on a Business Sentiment Survey conducted by the Bank of Thailand (2014b: 1), unit sales of real estate are expected to improve slightly in Q3, 2014 as consumer confidence increases. Statistics from the Bank of Thailand indicated that lower cement sales correlated with drastic decline in construction usage by private investment during the first half of 2014 compared to first half of 2013. Moreover, the number of permits and construction areas has decreased in H1 2014 compared to in H1 2013, while the average new units launched has dropped from 12,000 to 8,000 over the same period.

The numbers of construction areas approved and cement sales dropped by about 50% in the second half of 2013 from the figures in the first half of 2013. Since the protests started in November 2013, business sales have been affected tremendously as consumers and business lost confidence. Various government agencies were shut down, consequently operators faced a difficult time if they require official approval documents. Many firms waited for the situation to improve, while many businesses postponed their investment (Bank of Thailand, 2014).

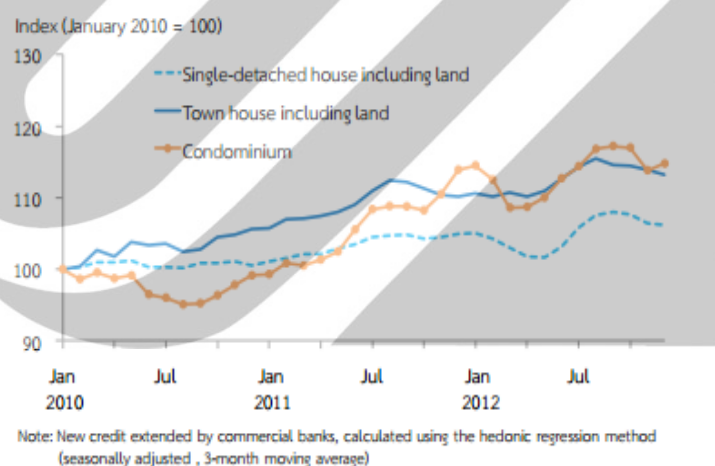


**Figure 1.2** Numbers of Newly Launched Residential Units in Bangkok and Vicinity

**Source:** Bank of Thailand, 2014

Figure 1.2 illustrates the improvement in numbers of construction permitted areas and newly launched residential units in Bangkok and vicinity after the country was taken over by the Thai military in a coup. Confidence in business and consumers has improved as can be seen in the upticks from June 2014.

The Bank of Thailand (2014) reported that businesses in all sectors were less affected during political instability in 2014 comparing to figures in the 2010 political turmoil and during the flood in 2011. Kasikorn Research Center (2014) forecast that the real estate market in the second half of 2014 would improve as the political unrest eases with the support from the new government's stimulus schemes. The impact of political crisis has increased the cost of living and rising household debts which have delayed buyer's decision to purchase fixed assets. Thailand's military government has recently granted 11 billion dollars in funds to boost the overall economic growth and create more jobs in the country. The budget is to be utilized for the maintenance of government's infrastructure such as buildings, schools, and roads (Yuvejwattana, 2014).

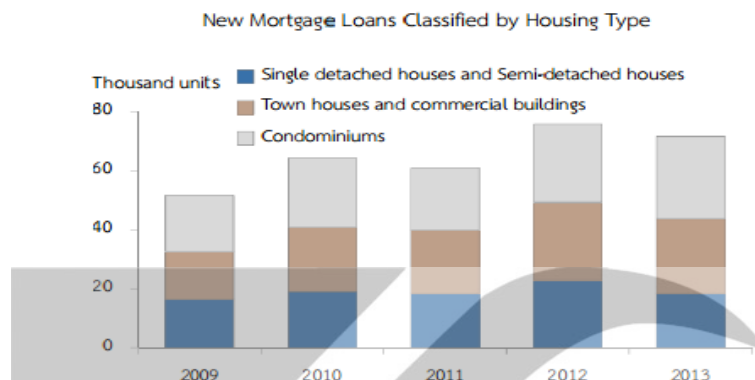


**Figure 1.3** Housing Price Indices in Bangkok and its Vicinity.

**Source:** Bank of Thailand, 2012b:28

Figure 1.3, shows the trend of rising prices for condominiums after the devastating flood due to higher demand for condominiums in the market. The flood has significantly caused the price of condominium to climb because of flight to safety effect as condos are perceived to be as a safer abode, while sales of single-detached houses declined. Developers have gradually increased the launch of new projects,

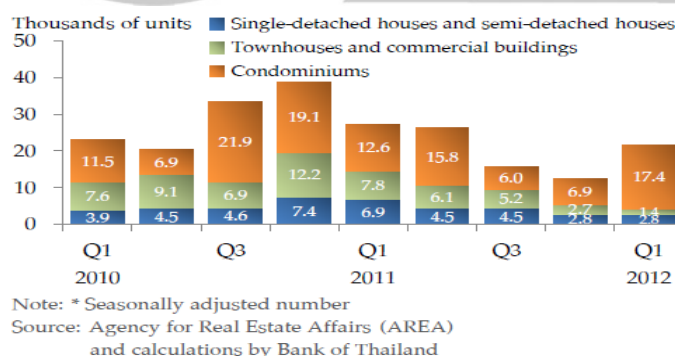
mostly condominiums that had been delayed as a result of the floods to meet the increasing demands.



**Figure 1.4** Number of New Mortgage in Bangkok and Its Vicinity

Source: Bank of Thailand ,2013b:29

From figure 1.4 below, new mortgage loans to the single detached houses segment are the least when compared to lending to other types of housing segments. Since the flood disaster, single detached houses have lost much of their attractiveness to buyers. Therefore lending to this segment has dropped, whereas loans to condominium buyers have risen steadily since 2011. The number of mortgage credit approvals by commercial banks in Bangkok and its vicinity in the first quarter 2012 climbed by 17.8% when compared to the previous quarter or a decline of 5.8% when compared with the same period of 2011 (Bank of Thailand, 2013b.).



**Figure 1.5** New residential units launched in Bangkok and its vicinity

Source: Bank of Thailand ,2012

Figure 1.5 shows how Thailand's real estate sector was affected during and after the devastating floods. All of the investments in residential units were affected as developers delayed launching new projects of 2011 in the third and fourth quarters. In 2012, property developers had gradually re-launched held-up projects especially condominiums. Bank of Thailand (2012) reported a drop of 21.8 percent in the number of latest housing project launches in Bangkok and vicinity of 2012 in the first quarter, when compared to the data of 2011 in the first quarter. The number of new residential projects has improved when compared to fourth quarter of 2011, up by 74 percent.

In the market, the Bank of Thailand (2011:1) reported that developers are facing shortage of skilled workers as they have continued to relocate to work in the farming sector instead of construction sector. In the Bank of Thailand [BOT] (2012a, p. 1, para. 7)'s report, Thailand's labor market remained scarce as some workers returned to their home provinces during the flood and have not all returned to work in the manufacturing industry. Due to the rise in crops prices, some laborers have changed their occupations and have gone back to work in the agricultural sector instead. Meanwhile, Thailand's minimum wage was legislated in April 2012 by Yingluck's government causing workers to wait for adjustment of their minimum wage to take effect before going back to work. As a result, many operators began to hire workers at the new minimum wage of 300 baht per day or higher to maintain readily available skilled workers and improve the efficiency of their work force (Bank of Thailand [BOT], 2012b, p. 52, para. 4; p. 60). Meanwhile, the private sector was expected to invest more in machinery to raise productivity and substitute scarce labors. Many businesses have switched from using manual labor to machines or automation to do jobs that once needed intensive labor so as to cut down costs and the number of laborers (BOT, 2012a, p. 1, para. 6). Industries such as food processing are expected to reduce their workers as they modify their technology and turn to automation (BOT, 2012b, p. 63, para. 3). These workers are expected to find new jobs easily due the higher demand for labor in other industries. However, jobs that cannot be substituted by machinery are also increasing, such as high rise building workers and those working in the assembly of electronics components. In addition, BOT (2012b:63) suggested real estate companies to invest in prefabricated building

supplies as an alternative to real to substitute labor. Higher wages and better compensation in more developed countries have attracted Thai construction laborers to seek jobs there, whereas a majority of construction laborers in Thailand are now migrant workers from less developed countries such as Burma and Laos. Thailand offers better wages and compensation when compared to these developing countries.

Thailand in the post-coup real estate scenario in the fourth quarter of 2014 is expected to recover gradually to normalcy as the country slowly gains the confidence of foreign investors and real estate developers have resumed building works. The decrease of demand in residential real estate property is likely to be temporary because residential properties is considered an essential need by most Thais. Even though the 2011 flood and recent political crisis have impacted the economy of Thailand, consumers' purchasing power and confidence have remained relatively strong. Thailand's real estate prices are expected to stabilize as most developers do not believe that there would be an immediate impact on property prices from higher oil and material costs and wages henceforth (Bank of Thailand, 2014).

Thailand's real estate developers need to adapt their plans to lessen business risks in the future. Due to growing demand for high-rise residential condos prices are expected to continue rising. A research by KRC (Kasikorn Research Center, 2012) showed that project developers would concentrate on building condominium rather than low-rise properties. A study by CBRE (CBRE Thailand, 2012) indicated that many new residential projects with less than 200 units each have been launched by newly set up private condominium developers. The sites near current mass transit routes such as the MRT are most preferred by developers to construct their projects.

Areas along Bangkok's existing and upcoming MRT and BTS routes (See Appendix C, The System Map of Bangkok Rail Transit Network) are most preferred by developers. Moreover, the sales prices of residential units are different as the cost of land in various locations is different. Given more land availability close to the MRT purple line, it is expected to be an attractive investment route for real estate developers as the price of land is cheaper and more obtainable, when compared to sites close to BTS and the current MRT dark blue routes. For this reason, construction of low-rise residential housing and condominiums along the MRT purple route area is practical for developers.

## **Foreign Direct Invest in Thailand Real Estate Market**

There are restrictions for foreigners to invest in landed properties in Thailand, which create a drawback due to the restriction of ownership in Thailand's housing project. According to Ministry of Interior, foreigners or foreign business owners are not allowed to own land in Thailand, whereas foreigners are allowed to buy leasehold interests. However, foreigners are allowed to buy or own freehold assets under the following conditions:

1. Joint venture between foreigners and Thai in which foreign parties' share does not exceed 49% of ownership
2. A BOI promoted manufacturer with foreign ownership.
3. Oil concessionaires under the Petroleum Act
4. The location of a business within industrial estates

For residential purposes, land plots purchased by foreigners must be reviewed by the Minister of Interior. Foreigners are permitted to own up to one rai or 1,600 square meters of land. In addition to buying restrictions, a foreigner is required to maintain an investment of at least 40,000,000 baht for a minimum period of 5 years in Thailand in a particular business. There are also restricted areas for foreign ownership of land in Thailand. Foreigners are permitted to only obtain land in Pattaya, Bangkok Metropolitan Region, and Tessaban (municipality). They are forbidden from buying land in a security buffer zone. Consequently, the ownership of land could be impounded for up to two years from the day of acquisition of land registration if the usage is not obtained for residential reason or does not meet the terms specified.

In any condominium project, foreigners are permitted to buy up to a maximum of 49 percent of the total space without the requirement for permanent residence during the period of the submission for registration. Foreigners who are entitled to buy condominiums are the ones with residence permits and those who have received authorization to enter Thailand under the Investment Promotion Act. However, foreigners who do not have a valid permanent residence must transfer 100% in foreign currency the total asset price from oversea into Thailand in order to purchase the condominium. Similarly, a foreigner who owns more than 49 percent of a limited company's capital or a person deemed a foreign 'juristic person' under Thai laws and

possesses promotional certificates is allowed to buy condominium (Royal Thai Embassy Moscow, n.d.).

## **1.2 Objectives**

1) To gain an understanding of the impacts of global risks on the residential real estate industry in Thailand

2) To identify measures or pre-emptive actions industry participants, especially newcomers can take in case of recurrence of past crises.

3) To recommend a strategy to industry newcomers with the aim to survive and prosper in the residential real estate business.

## **1.3 Significance of the Study**

1. To gain an understanding of the impacts of global risks on the residential real estate in Thailand.

2. To identify measures or pre-emptive actions industry participants, especially newcomers can take in case of recurrence of past crisis.

3. To recommend a strategy to industry newcomers with the aim to survive and prosper in the residential real estate business.

## **1.4 Scope and the limitation of the study**

This study uses both primary and secondary data. Secondary data are acquired from literature review to scan for background information of global risk factors, concepts and theoretical perspectives of other studies of related topic in real estate investment. The data were collected via anecdotal responses to open-ended questions to allow for wide coverage feedbacks. Sufficient data were collected for the researcher to carry out a qualitative analysis. With regard to the limitations of this research mode, the researcher felt that the task of interviewing posed considerable challenge as the researcher has to remain neutral while conducting the interview. This is to ensure feedbacks that are not “being led”. Sometimes the interview got strayed from the topic or issue being talked about, and the interviewer must use her judgment to refocus. Also, interviewing skills are called for because the interviewee’s attitude can be observed from non-verbal cues such as their facial expressions, tone of voice,

and other body language. Some interviewees were ill at ease in answering on some issues. Nevertheless, the researcher attempted to mitigate this limitation by being professional. On sample bias, the researcher tried mitigating it by selecting sample members across a range of real estate operators to ensure a reasonable representation.

#### **Location-based study**

This research is done focusing only on the residential real estate market in Bangkok and vicinity. Specific areas covered are Nonthaburi, Prathumthani, Central Bangkok and riverside areas by concentrating on real estate business operations.

#### **Interview based study**

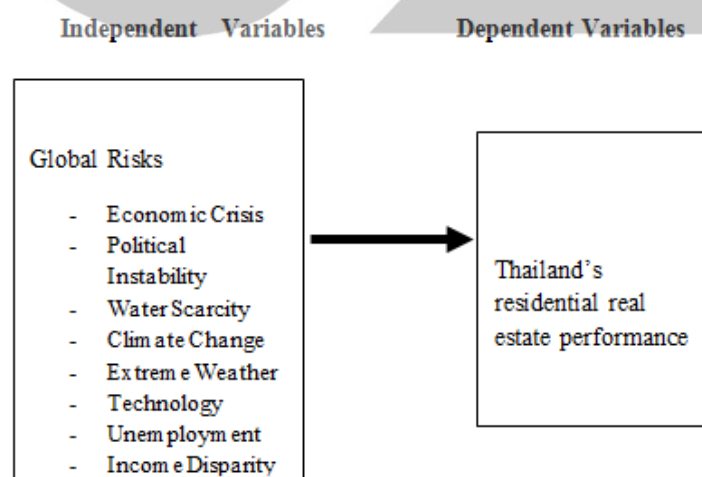
This research uses interviews as a tool to collect data and thematic qualitative analysis to analyze the data.

### **1.5 Conceptual Framework**

The research framework used is depicted in Figure 1.7. The independent variables are made up of risks factors of global concerns and the dependent variables are the impact of the interaction between these variables to residential real estate industry. The framework will assist the research in two ways:

1. To identify research variables
2. To explain correlations among the variables.

By connecting to the research problem statement, the conceptual framework helps to set the boundaries for the research question and focuses the study.



**Figure 1.6** Conceptual Framework

## 1.6 Definitions of Term

**Global risk** is the likelihood that something catastrophic or destructive may possibly occur which will concern each and every country

**Climate change** means the transforming of weather patterns over a particular period of time, generally taken over 10-15 years (Swiss Re, 2014).

A **newcomer** is defined as new residential real estate developer who has not listed on the stock exchange of Thailand.

**Residential Real Estate** is defined as every part of land and accommodation that can be utilized for housing purposes (Foreign Investment Review Board, n.d.).

**ISO** defines 31000:2009 as a set of guidelines used to supply standards, structure, and a system to administer risk. This process can be utilized by any businesses in spite of its industry, size or activity. The company that uses ISO 31000:2009 can increase the success rate of achieving the company's goal, and can be used to locate and specify uncertainties and hazards. However, certification cannot be issued by ISO 31000 as it only provides guidelines to review the inner and outer conditions of the company. By using ISO 31000:2009, businesses can evaluate their risk assessment performance with a globally accepted benchmark in order to offer conceptual values for businesses to manage and govern efficiently.

## **CHAPTER 2**

### **LITERATURES REVIEW**

In this chapter, literature on concepts, theories and other related information relevant to the research topic: “Global Risks that Impact Real Estate Industry. Case Study: Thailand residential real estate” is screened, mined, and summarized to give a better perspective of all the underlying factors and drivers of the real estate industry. These cover globalization of real estate market, global risk, risk management, EIA PESTLE analysis, impact of climate change, AS/NZS ISO 31000:2009, and other related research.

- 2.1 Globalization of Real Estate Market
- 2.2 Global Risks
- 2.3 Risk management
- 2.4 EIA
- 2.5 PESTLE Analysis
- 2.6 The Concept of ISO 31000:2009
- 2.7 Climate Change
- 2.8 Other Related Research

#### **2.1 Globalization of Real Estate Market**

To be aware of the mechanism to which global risks may affect real estate business, it is essential to have some background knowledge of globalization and risks factors, which may affect the real estate industry development and growth.

Globalization refers to the internationally integrated markets in the global economy (The Economics Times, 2009). Levein Instutite defined globalization as a development driven by worldwide trade and investment through incorporation between the populations of countries, organizations, and governments of various countries supported by information technology. This development of globalization has impacts on the culture, environment, political systems, economic development, prosperity, and the condition of human physical wellbeing in countries around the world. The advantage of globalization to the real estate industry according to

Falkenbach and Toivonen (2010:8) is that it benefits the real estate market as it adds value to properties in a competitive environment. Also, Liao, Zhao, Lim, Grace and Wong (2014) stated that globalization facilitates foreign inflow of funds to local real estate market. Residential real estate properties can be sold at higher prices due to an increase of foreign investment in the central urban areas as foreign investors are more likely to purchase residential properties in the central districts rather than in the suburb. Ownership of properties by foreigners has a significant impact on property prices. On the other hand, the selling prices of properties in suburbs area are relatively low compared to the central area due to lower demand. The effects of globalization on real estate studied by Keivani (2010) found globalization to be an important means of stimulating the prices of land and properties in a country as the world becomes more integrated.

In addition, foreign direct and indirect investment can be great opportunities for the low-income population. Meanwhile, the price of properties tends to increase if foreign investors choose to purchase properties outside the central area. Therefore, the opportunity of globalization can be very beneficial to any country that attracts foreign investment. Laurin, D'Argensio and Goginashvili (2010) found that foreign direct investments inflow has a positive impact on the price of property. However, the country risk needs to be measured properly as the value and price of asset can be misjudged by foreign investors. Despite all the benefits of globalization to the real estate industry, some concerns regarding the impact of globalization on real estate are the risks that real estate market faces. Some risks have extensive effects such as interest rate risk, business risk, inflation risk, liquidity risk and market risk, while others are more limited. These risk factors help to measure the performance of a country's market condition, whereas each risk is dependent on the situation of each country's market (Al-Bakri, 2013).

McAllister and Nanda (2014) explained that foreign buyers need to pay for information, called the costs of information acquisition, before making a decision to buy an asset or property in another country. It is essential for buyer to know Exchange Rate Risk they are taking when buying foreign properties, including the underlying forces that determine the value of money. They need to learn cultural barriers to understand the role of market institutions and their functions.

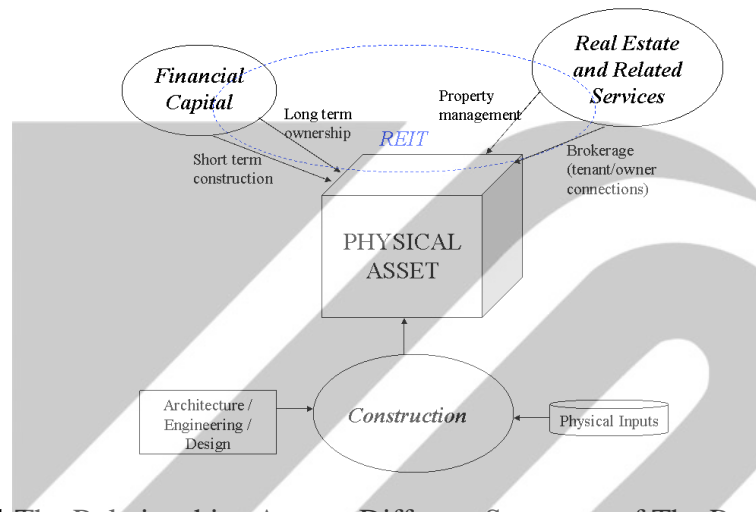
**Table 2.1** Mapping general themes and issues in real estate development

Theme					
	Philosophy	Mechanisms	Geography	Implementation	Outcomes
<b>Issues</b>	Politics and governance	Power relations	Local- global involved agencies	Role and partnership	Balanced interest
	Markets	Markets drivers	Location market demand and supply	Market feasibility and viability	Market vacancy and Take up
	Economics	Finance and investment for economic opportunities	Price, cost and value of locations	Economic and financial instrument	Economic added value
	Legislation and law	Planning system and property rights	Placed-based regulatory conditions	Project-specific legal conditions	Environment al impact
	Spatial planning	Physical Challenges	Spatial patterns	Development phasing	Physical structure

Source: Squires and Heurkens, 2014:19

In table 2.1, Squires and Heurkens (2014) elaborated on the connections between the real estate development issues and worldwide practices. For instance, on the issue of politics and governance on real estate development is their quest to create sustainable and equitable roles in the relations between local and global agencies. In the private sector, players and customers should aim to be fair. Both foreigners and locals should all be equally treated and enjoy equitable benefit from real estate development. On the issue of market in real estate development, market drivers would stimulate demand and supply by considering market feasibility, sustainability and viability to ensure appropriate level of real estate occupancy. On the issue of economics on real estate development mechanism, participants in the market should be concerned on finance and interest rate in order to create opportunities by considering the cost or location of projects by using proper economic and financial instruments in order to increase added value to real estate asset. On legislation and law, the real estate industry should utilize planning system and be concerned about property rights. All players should consider the local regulatory conditions and implementation that focuses on project specific legal conditions to lessen the impact

to the environment. On the spatial planning process in real estate development, investors or developers should consider physical challenges, which could mean site selection or architectural design. In terms of geography, focus should be on spatial patterns. In terms of implementation, the developer should focus on the project timing to the completion of the project or building.



**Figure 2.1** The Relationships Among Different Segments of The Real Estate Industry

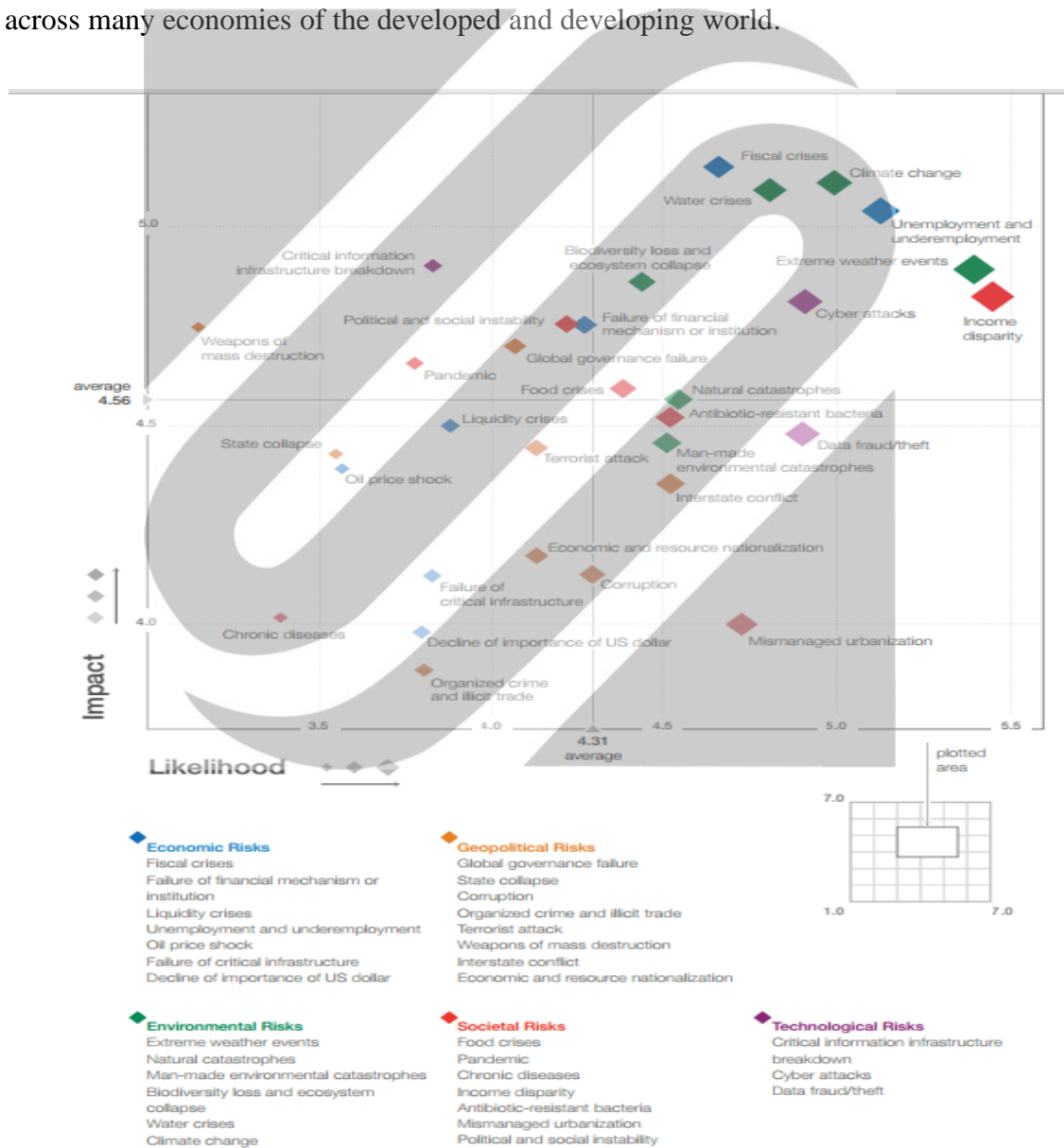
**Source:** Bardhan and Kroll , 2007: 6

Figure 2.1 shows the inter-linkages between physical assets to construction as any building or asset project has to be constructed through planning made by architecture/engineering/design team. Real estate and related services department is responsible to manage property and find tenants for owners, whereas financial capital provides shorter construction and long term ownership of property. According to Bardhan and Kroll (2007), the transaction of real estate businesses in a globalized arena can be managed by the public sector to develop each country's infrastructure and resources both internationally and locally. BMI (2015) reported that Thailand has recently launched (REIT) or real estate investment trust market. There are a lot of players in real estate industry.

## 2.2 Global Risk

As a major component of the economy, real estate businesses cannot escape the effect of global risks. But impacts can be assessed and identified to minimize their severity if mitigating measures are taken by operators. A global risk is defined as

an event that drastically causes downside impact for a number of countries and businesses beyond a period time of up to ten years (World Economic Forum, 2014). Nwogugu (2012) reported the recent global economic crisis of 2007-2011 occurred because of insufficient global risk regulations. He pointed out that the crisis was caused by inadequate supervisory governance programs and regulations to eliminate risks in various developing nations and high-income countries. Baum (2009) said the impact of US subprime mortgage in 2007 has caused a chain of global risk effects across many economies of the developed and developing world.



**Figure 2.2** Global Risk Landscape 2014

**Source:** World Economic Forum, 2014

**Table 2.2** Ten Global Risks of Highest Concern in 2014 based on Global Risks Perception Survey 2013-2014 conducted by World Economic Forum.

No.	Global Risk
1	Fiscal crisis in key economies
2	Structurally high unemployment/underemployment
3	Water crises
4	Severe income disparity
5	Failure of climate change mitigation and adaptation
6	Greater incidence of extreme weather events
7	Global governance failure
8	Food crises
9	Failure of major financial mechanism/institution
10	Profound political and social instability

**Source:** World Economic Forum, 2014:13

Figure 2.2 sourced from the World Economic Forum (2014) depicts various risk categories ranging from economic, environmental, geopolitical, social and technological and arranged in their likelihood and impact. The figure shows that fiscal crisis to be the most serious potential impactful global risk in 2014. Hjelmgaard (2014) also identified fiscal crisis as most important issue in relation to global risk because developing nations' credit growth in the past has risen rapidly which sooner or later could cause an impact to the entire global financial system, given that most of financial activities in developing countries are linked to developed countries. Moreover, any financial crisis in a developed country could cause a global impact to the developing countries. According to global risk report, 700 worldwide specialists have chosen the impact of global unemployment and underemployment to be the second highest concern as many people enter the job market in both the developing and evolving nations. Young adults in evolving nations are most affected by low quality employment, with unemployment rate sometimes reaching as high as 50% in certain countries (Hjelmgaard, 2014).

Wisartsakul (2012) mentioned that the problem of economic risk has been

addressed yearly over the past years by Global Risk Report. This reflects strong interrelated issue between exchange rates and the financial system in today's world. The risk effects of foreign exchange rate on trades and investment loss of a country could spread to other economies in a short time. The most prominent examples are the 1997 Asian financial crisis, the U.S subprime mortgage crisis of 2008, and the ongoing Euro zone crisis, which has a wider impact.

The impact of global water scarcity is considered to be the third highest concern due to increasing water disasters as the consequence of human mismanagement of water resources and natural phenomena (Hjelmgaard, 2014). The United Nations (2014) forecasted that the world in 2025 would face severe water shortage in which 1.8 billion of people around the world will be affected. Water consumption in the world is increasing at more than double the rate of consumption of the total population in the 21st century. The impact of water scarcity is caused by the effect of nature and man-made. Boaz and Berger (2010) stated that water supply is becoming limited and polluted, while demand for fresh water has increased continuously. In the real estate sector, water scarcity has significant effect to property developers and customers.

Chloe (2013) suggested that the areas undergoing water shortages could have an impact on the raw material prices that can in time cause an increase cost of construction. In addition, properties in water shortage areas could face a decline in price, as people would move to area where water supply is inexpensive and more available. Given that water shortages could cause losses on investment in properties, property developers should look at the location of their project more closely when investing in an area. In the future, investment in property could be prohibited in the drought prone areas unless properties developers construct water retention facilities as substitute water supplies to obtain development permit. Because water scarcity could impact profits, green building can be a solution for developers in which water can be reserved and recycled. Consequently, developers and customers need to consider on countrywide water policies made by government in their plans.

Severe income disparity is considered the fourth highest treat in global risk in the World Forum 2014 report as the wealth gap between is expected the rich and the poor widen. Ortiz and Cummins (2013) suggested that the growths of emerging

countries' economies are likely to slow down if there is higher income inequality within the countries. On the other hand, a majority of developing countries can be measured by each country's spending. Most developed countries engage in public policies to encourage economic growth and demand in the countries. Developed countries usually make sure that their infrastructure, services, assets and land are accessible to the general population. Also labor productivity in developed nations is likely to be higher due to human development policy in the country. Conversely, developing nations can generate employments through expansion of macroeconomic policies by introducing social security, water supply, education, hygiene and health care to general public to reduce the impact of income disparity. Bird, Hattel, Sasaki and Attapich (2011) stated that the rate of poverty has constantly dropped from approximately 33 percent in 1988 to 9.0 percent in 2008. Comparing to other middle-income nations, Thailand's poverty rate is considered low. According to Mitrchob et al. (2012), the issue of Thailand's income disparity is considered of lesser importance in the recent 5 years as a result of higher minimum wages for workers. The quality of life of the people is better in general as people are more satisfied with their jobs security and social security. The introduction of social welfare has reduced the effect of poverty in Thailand. However, the unequal opportunities between classes of people and locations are still significant. The public aid or social service is still limited between the countryside and the city area. People in the city area are likely to receive better social security assistance than those in the rural areas. In the Justice system, higher income earners tend to receive more favorable bargain in a court of justice than lower incomers. Gender inequality is likely to be an issue in Thailand as women do not receive equal opportunity similar to men under equal circumstances. Women working in an executive position are still few in Thailand.

World Economic Forum (2014) ranked climate change as the fifth highest concern. Climate change is the main factor causing shifting weather patterns, increasing extreme weather frequency of drought and floods.

World Economy Forum (2014) revealed that over the next 5 to 10 years the world will be facing with four types of global risk trends: 1. Social, political and economic factors could be the risk factors to cause instability to new markets. 2. The pursuit of political authority in the local area could increase commercial and political

conflicts. 3. The conflict of technological change will keep on increasing. 4. Coping with global challenges is slow when organizations and global governance remains stagnation for a long time.

Global Property Guide (2009) reported that political instability was a concern for Thailand real estate, as the government was overthrown by the military in 2006. Consequently, buyer confidence was low, and investment in real estate remained risky. Residential property prices in Thailand decreased further in 2009, because of ongoing political stress and the recession. House prices declined 3.7% in 2009 to June or a 1% drop in real terms, based on a report from the Bank of Thailand (2009). Thailand's economy faced recession in Q1 2009. From January 2009 to July 2009, exports decreased 23.1%, and imports tumbled by 35.1%, due to the global credit crunch situation. In spite of government efforts to improve the real estate sector, as well as new laws in 2008, and two incentive packages in 2009, buyers remained cautious, and the market was projected to remain weak, according to Knight Frank (2009), a leading property research and consultancy firm.

Moreover, in April 2009, the BOT decreased its key rate down to 1.25%. Consequently, the average commercial bank MLR decreased to 5.85% in May, down from 7.25% in July 2008. Domestic banks had begun lending to foreigners in 2005, but only to foreigners who had work permits or were guaranteed by other Thai spouses. Majority of the loans are over 25 to 30 year adjustable-rate mortgages (Global Property Guide, 2009b).

A report from CBRE Global Investors (2014) suggested that investors should not lose sight of the prospect of the opportunity offered by the property markets of Asia Pacific. The stable economic growth in the Asia Pacific region has reinforced tenant demand in the commercial sector. The average vacancy charges in many Asian office markets decreased below their relevant 10-year historical averages due to improving leasing activities. Global real estate investment movement has been solid in 2014. Years of focused deals, significant in the "safe havens", has driven their profits down to very low levels. For that reason, a global investment market has shifted towards other segments of the market. However, there have been various disruptive situations in the democratic process in Thailand and the broad social and economic implications that brought conflicts in the recent years. On the other hand,

two of the world's three largest democracies – India and Indonesia – both held elections this year resulting in a change of leadership in both countries. With the progress of other countries, Thailand may face intense competition and buyers will grow cautious with unpredictable political scenarios.

### **Effect of external shocks (Sub-primes and global slowdown)**

Kritayanavaj (2008) explained that the global economic crisis affected Thailand due to globalization. The U.S. subprime crisis had impacted Thailand both directly and indirectly. The indirect impact would be that the depreciation of the US dollars has affected the Thai manufacturing sector with the slowdown of import from the US. Practically all the exporters in the Asia Pacific Zone were affected (Chatchawan, 2007).

Pongpattananon and Tansuwanarat (sited in Cheewatrakoolpong & Manprasert, 2001) identified three channels the impacts were felt: i) financial linkages ii) capital market iii) international trade. Thailand is exposed to volatility mostly through international trade, as it is a manufacturing base where it makes up part of the global production chain linked to other manufacturing entities in various countries. Thus, if a shock were triggered in one, Thailand would feel it, not unlike a domino effect. Thailand was vulnerable to external shocks because exports constitute a large part of its GDP. For example the crises triggered by sub-prime mortgage instruments in the US in 2007 impacted Thailand negatively, even though Thai firms were not much exposed to sub-prime instrument directly. Playing a vital role in the production of both parts and components and assembly and having about 30% its total export value linked to the supply chain, Thailand has high exposure to the bigger economies through direct and indirect channels. So the subprime crisis can have an adverse impact on Thailand (Pongpattanaoon & Tansuwanarat, n.d.).

### **Effect of external shocks on Thai trade financing.**

According to Jitsuchon and Chalongphob (2009), one possible cause of the slowdown in international trade during the course of a crisis is the difficulty in obtaining trade by exporters. This feeds the severity of the crisis itself. Thailand is reliant on exports services and goods. Therefore, manufacturers have been affected

tremendously, in line with the stock market. The subprime crisis had impacted trade volume. Additionally, Kritayanavaj (2008) explained, “the export sector has been steadily shrinking. The tourism industry has been severely affected not only from external economic decline but also from domestic political crisis.” As a result, consumers’ buying power and housing demand were impacted. Since the 1997 financial crisis, the financial institutions have tightened loans to property buyers and residential real estate developers. The current bank loans for mortgage are 20-30 year contracts. According to the banks’ terms, the mortgage interest is fixed for certain period. The interest rate may normally increase by 1-3% from the existing rate due to a floating rate. This can affect the borrower’s repayment.

### **2.3 Risk management**

A report of the World Bank (2014), defined risk as any chance of damage, which may arise from outside factors or accepted willingly in the search of opportunity.

Otegbulu, Mohammed and Babawale (2011) defined risk as uncertainty or certainty in activities deemed to be risky due to the uncertainty of returns and expenses, and this definition is well-matched to the real estate development.

As Hopkin (2012:1) noted, risk management is beneficial for the organization and the individual. He explained risk management as a response technique by identifying how risk should effectively be handled in different circumstances. According to Hopkin (2012, pp. 1-2)’s perspective on risk, the probability of severe weather conditions, terrorism, and world financial crisis as risk issues facing the world today.

Trent and Robert (2010: 118) also confirmed that risk management is an essential implementation to mitigate risk factors that may affect an organization’s overall performance. They claimed that environmental problems worldwide and locally are factors for determining risk impacts. The potential impact of a country’s vulnerability to damages from natural disasters such as flood, hurricane, and earthquake should be considered to reduce large losses to any organization. The safest way a risk manager can prevent its impact is to avoid completely investing in any country with an unstable environment.

Otegbulu et al. (2011) emphasized that there are various risks in real estate development due to numerous interacting event of activities or transactions. Therefore, the basic real estate development process can be uncertain and risky from planning to the completion stage of a project. Risks in real estate development business can be classified using STEEP which is an acronym for 1.Social 2.Technological 3.Environmental 4.Economic 5.Political as Otegbulu et al. (2011) referred from Morisson (2007).

Khumpaisal and Chen (n.d.) also affirmed that risk in real estate development business is affected by risk factors in STEEP as defined by Morisson (2007), Gehner et al. (2006) and Clarke (1999). For instance, risks in real estate development business are interconnected to the difference between construction and design, missing integrity, lack of communication, ambiguity, environmental changes, project complication, and economic changes. Inflation, deflation, and regional economic crisis can put pressure on the real estate industry to become more competitive in the business. In addition, the impacts of risks analyzed using STEEP factors should be acknowledged to avoid loss in project income as studying risks can help developers to understand the effects on the overall project with regard to project delay, project cost overrun, property usage, project management (Khumpaisal & Chen, n.d.).

What is certain is that the consequence of risk within the business can be prevented and eliminated when dealing with anticipated future problems. Given that operational risks can create damage to businesses, acknowledgment of the roles of operational risks for the organization is necessary to control uncertainties (Kenett & Ranaan, 2011). According to Kennett and Ranan (2011), if the risk is acknowledged, it is considered a management issue and the problem is no longer known as a risk.

However, Tulalarm and Atilli (2012) disagreed with the idea that risks can completely be eliminated once the problem has been acknowledged. He believed risk can never be accurately forecasted or controlled. As a result of uncertainty, the business can be disappointed with the effect when the outcome is not as expected. Sharing similar ideas with Trent and Robert (2010), Tulalarm and Atilli (2012) agreed that the benefit of risk management is to warn company from investing in volatile regions. On the other hand, Tulalarm and Atilli (2012) supported that the

goal of the company should be guided by risk management decisions. The potential hazards should be analyzed in all new operations, developments and inventions. Proper analysis is required in the risk management process in order to recognize threats and potential impact of risks to the company.

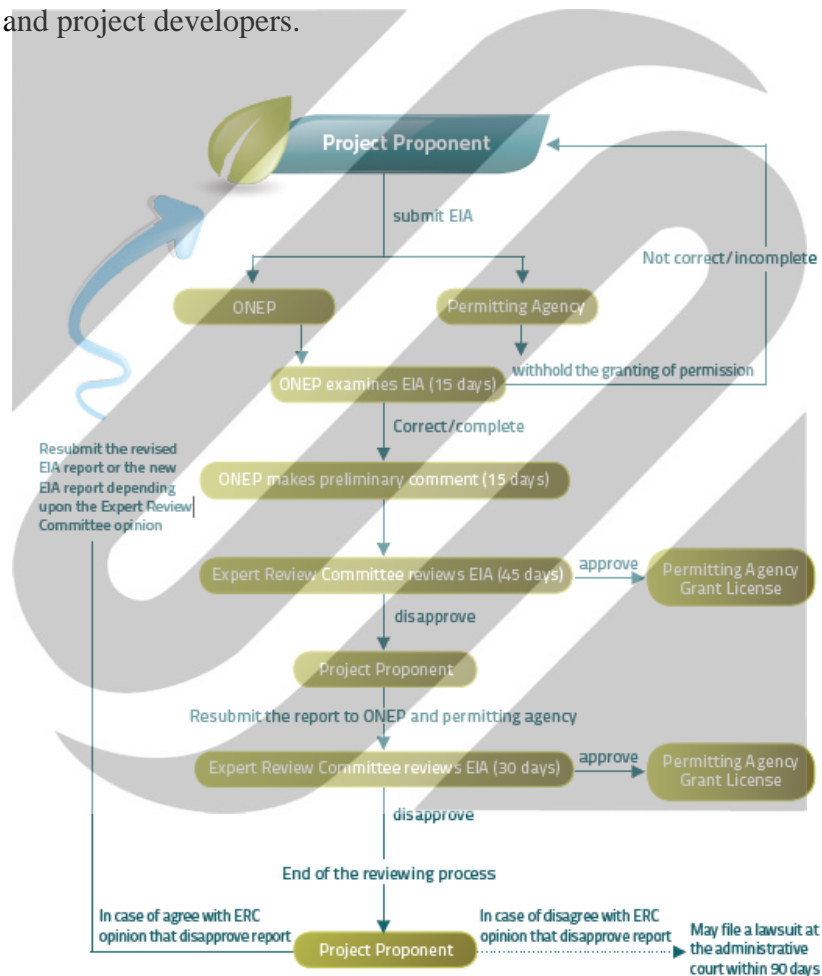
Furthermore, developers need to understand and recognize all risks and their consequences, involved in the real estate development projects. Nevertheless, they may not have sufficient information or a suitable method to assess all risks. Booth, Matysiak and Ormerod (2002) and Frodsham (2007) recommended that the optimistic risk assessment model which could evaluate risks, their impacts and compute results in a statistical format be utilized in the risk assessment, to support the managers to structure the decision-making process. Consequently, the risk management processes shall include a mixture of “Quantitative statistical framework” and various procedures such as stress testing and a rigorous analysis to evaluate the individual issues (Booth, et al. 2002). In current practice, decision makers favor Risk Assessment Matrix (RAM) or an Analytic Network Process (ANP) model, to simplify the factors and provide an approximation of the results of risks in real estate development business (Chen & Khumpaisal, 2009).

#### **2.4 Environmental Impact Assessment (EIA) in Thailand**

EIA is an evaluation process to predict the possible weakness and opportunities, which can impact the environment in the immediate vicinity of the real estate project. EIA is created to implement appropriate guidelines to reduce the environmental issues from the real estate project. In Thailand, the Office of Natural Resources and Environmental Policy and Planning is in charged to administer and guide the EIA procedures (Office of Natural Resources and Environmental Policy and Planning [ONEP], 2012). Pearmain (2008) referred to EIA as a formal procedure to forecast the impact of environment issues in condominium and resort projects. EIA is a worldwide tool for real estate and is becoming a requirement almost everywhere development is carried out.

Stavon (n.d.) pointed out that the initial planning data and very specific analysis of the effect of construction on environment are required for EIA approval. The requirements by EIA can be very costly and time consuming to real estate

developer. As a result, many developers refuse to apply for EIA by choosing to make smaller project as they do not want to waste time and money. However, the developers are reluctant to see in a big picture that buyers want to pay for a green project. Instead of seeing the opportunity to do a green project, the developers choose to finish project quickly. In addition, Morgan (2012:12) suggested that the requirements by EIA should be considered since the initial stage of a project planning in order for the project designer to create a sustainable project which would meet the needs of customers and project developers.



**Figure: 2.3** Approval process for EIA

**Source:** ONEP, 2012.

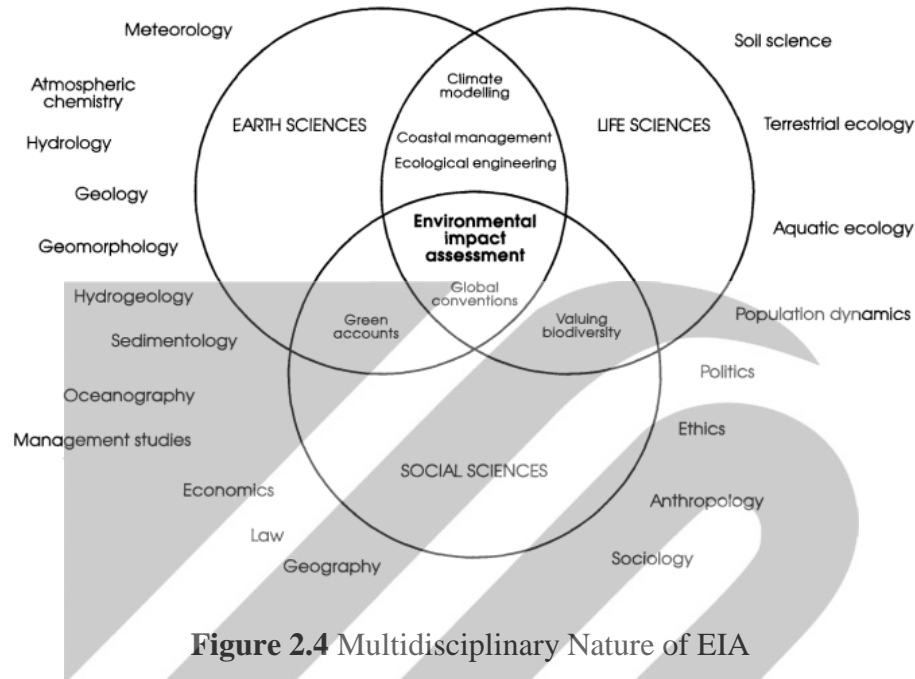
According to the approval process in figure 2.3, project developers have to first submit EIA report to be examined by ONEP. ONEP would take around 15 days to give feedback to the project owners. If the report is correct, ONEP would use 15 more

days to review it. However, if the EIA report meets all requirements it would be sent back to the project owners. In addition, the correct report would be passed on to the Expert Review Committee (ERC) to approve or disapprove the report. Once the report is approved, it would be sent to the Permitting Agency to grant a license to issue the EIA approval. However, if the report is disapproved, the report would be sent to the project owners to resubmit a new report to ONEP again, and resubmit to ERC for review. This would take another 30 days to find out whether the project has been approved or not.

Pearmain (2008) stated that the EIA is primarily a review of both positive and negative impacts of a development project. Once identified these potential environmental impacts are assessed and quantified and if problems are foreseen, corrective measure are taken. The report from the EIA consists of an assessment plan which provides information to be followed in order to enforce the environmental control and mechanism in construction or in operation stages of EIA. It allows participation of the public, Non-Governmental Organizations (NGOs) and other stakeholders affected by the projects. These stakeholders can give their inputs and comments, which will be incorporated in the project development and assessment. Li (2008) suggested that Thailand should pay more attention to EIA as the country is next to the Mekong River. She emphasized the needs to study the impact of water projects in order to control the danger of potential projects in the area. Due to lack of power control along Mekong River, large populations living nearby can be affected.

Furthermore, The Environmental Impact Evaluation Bureau (EIEB), Office of Natural Resources and Environmental Policy and Planning (ONEP) are responsible for the administration of the EIA process in Thailand. As guidance for the implementation of EIA, the Minister of ONEP is responsible for the issuance of ministerial notification detailing the procedures, methods and guidelines for preparation of Environmental Impact Assessment report (ONEP, 2012). Appendix C contains such EIA notification about the real estate industry. Different agencies are involved in the EIA procedure in Thailand, such as the project proponent, the permitting agency, expert review committee, and consultants. The report should be prepared as early as possible in the project cycle, in order to integrate all environmental improvement measures in evaluating the project. EIA is a

multidisciplinary undertaking that Morgan (1998) depicted well in his construction as in Figure 2.4



**Figure 2.4** Multidisciplinary Nature of EIA

**Source:** Adapted from O' Riordan, 1994

A comprehensive EIA process would involve the utilization of three major disciplines: Earth Science, Life Science and Social Science in general and broken down into their sets and subsets at the more specific subject areas. Various factors ranging from the central government, state government, NGOs, and local stakeholder could play an important role in the implementation of EIA or its formulation

### **Green Building Concept**

Developers who adopt Eco-design take many factors into considerations in their building. Tikul and Srichadr (2007) in their article on Eco-design suggested that property development ought to consider eco-design concepts in their building designs. According to them, a good eco-design architecture must integrate/consider “the whole life cycle of buildings: using land efficiently, having quality and durability, using water and energy efficiently, is concerned with indoor air and environmental quality choosing low-impact materials, design for reuse and recycling, standardization and modularity”. According to data survey made by Zhang et al. (2011), the top barrier in

building green technology in estate development is financial cost. The cost of green technology is three to four percent more than regular building materials. The two major barriers to develop green building: lack of interest from customer and lack of effort to implement appropriate policies. The challenge of green technology is limited as there are no obligations in the law to regulate real estate industry. Because of this, real estate developers are not enthusiastic or committed to launch green buildings. Therefore, government should set policies to motivate real estate developers by providing tax incentives for companies who choose to invest in green technology.

Venugopal, Krechowicz, Shinde, Singh, and Padamadan (2010) pointed out that investments on green technology can lower the impact of operational risks and ensure a higher return of investment, which can be passed on to their customers. For example, real estate operator can reduce their buildings' long run cost by using green technology such as solar energy for electricity and heating, water harvesting from rain. Currently, there are many green buildings being built all over in South and Southeast Asia. There is potential growth in the future for green building businesses, particularly since there is concern of the impact of water scarcity, climate change and shortage of fuel in the future. Therefore, financial institutions and real estate developers should be aware of this trend to benefit from it.

## **2.5 PESTLE Analysis for the Real Estate Industry**

PESTLE Analysis first proposed by Aguilar (1967) is a useful tool that developers could also use to identify external factors affecting their businesses. The analysis can be utilized to assist an organization to consider factors or issue under Political, Economic, Social, Technological, Legal, and Environmental categories. It is regularly used by business operators for product launch or new market entry when any latest goods or service is provided to penetrate new markets, for example. A real estate business can apply the PESTLE analysis to audit the environment of the company by completely analyzing and identifying each problem before making tactical implementation plans.

Teams FME (2013) recommended the PESTLE Analysis steps as follows:

1. Suggest and evaluate main external problems of the company's power.
2. Generally identify the proposition of each issue.

3. Rank the issue's relative significance to the organization (from very important to least important).
4. Predict the chance of it taking place (very likely, likely, problem etc.).
5. Concisely consider the propositions if the concern did occur.

Political factors enable the organization to know about the resilience of the country's leadership and how it may affect the company. Economic factors are concerned with inflation rate, monetary or fiscal policies, interest rates, and the foreign exchange, which show the direction of the economy. Social factors help an organization understand the mindset of businesses, and potential buyers. Technological factors show how the organization can use up-to-date technologies and consumer trends. Legal factors enable the business to understand the regulatory body that is set up for the business and what impact it has on them. Environmental factors consider location geographically and the feasibility of the area in which the business will operate, climatic and physical features of the location that can pose risks to the businesses or project (Aguilar, 1967). For example, according to a survey by Knight Frank (2015), half of their respondents of 500 top investment bankers and asset consultants around the world suggested that most of their clients were worried about the impacts of the Chinese market slowing down and the ongoing political crises or chaos in the Middle East and Ukraine.

According to Lucintel Consulting and Marketing Research (2012), Thailand is classified as a middle class economy in Southeast Asia. As a part of the Association of Southeast Asian Nations (ASEAN), Thailand maintains a close relationship with the ASEAN countries. Major drivers of the Thai economy are high exports, a vibrant domestic consumer market, a cost-effective work force, which attract foreign investors. The country has a government that promotes investment through business friendly policies focused on liberalization and free trade.

Cheewatrakoolpong and Manprasert (2010) stated that in 2007, even though the Thai financial institutions had limited direct exposure to foreign financial products, particularly the U.S. sub-prime mortgages, the country faces a serious slump from its dependence on its export sector as the engine of growth. The drastic drop in exports was due to cut back of demand from developed economies, especially the G3, resulting in a vulnerable economy. The principal cause being sub-prime loans in

mortgage lending, i.e. loans for low credit borrowers secured by a house. Commercial banks transferred much of the credit risk to enclose funds via securitization (Suthiwart-Narueput, 2007). The Thai domestic demand was also weakened by depressed consumer purchasing power due to lower income and rising unemployment and this development had affected the real estate businesses.

However, Suthiwart-Narueput (2007) mentioned that housing is an important component of household wealth. When housing prices appreciated during the period from 2000 to 2007, household wealth increased as well. Households noticed the increase in wealth and consumed more. However, due to the collapse of the US financial system due to the sub-prime, the US GDP contracted and unemployment increased. This is because when housing prices fall, mortgage lending and mortgage backed securities produce lesser future cash flows, which forces mortgage lenders to raise the interest rate to maintain the level of future cash flows. This leads to borrowers increasing their savings, which also slows down the economy (The Nation Business, 2010).

Bank of Thailand (2012) also reported that the Thai financial market faced volatility and the stock market crashed, reflecting global risk aversion and the requirement for liquidity increased globally. Since 2012, Thailand has encountered political instability and has had to deal with a series of anti-government protests. This unsteadiness is proving to be counterproductive not only of major business sectors in retailing and tourism but also to the real estate industry.

Knight Frank (2015) quoted Curt Richardson, founder of OtterBox that the technology in the developing market can be improved as there are still prospects to adapt the use of technology in the real estate business. The real estate market can be improved with continuously changing technology, which is still far behind those in developed countries.

## **2.6 ISO 31000:2009 Risk Management**

The ISO 31000:2009 is acknowledged as the international best practice in real estate development. ISO 31000:2009 is considered a new international standard for risk management, which consists of new related terminology from ISO Guide 7: 2009, approved by hundreds of worldwide risk management specialists. The new ISO

development is designed to determine uncertainties of meanings and approaches through basic perspective concerning risk and risk management (Purdy, 2010; Purdy & Lark, 2014). As referred by Purdy (2010), ISO is formed by a working group of chosen experts from 28 countries (maximum 3 experts from each country). Additionally, many experts from different organization were also responsible for forming the guidelines and terminology of ISO. Despite the fact that the specialists were sharing all types of risk management knowledge, the objectives were achieved, as each representative was able to contribute and input his understanding of a particular country or organization.

According to Bruehwiler and Tophoff (2014), the ISO 31000 can assist businesses to accomplish its goal more efficiently by looking after the likelihood of risks more closely. ISO 31000 allows companies to be able to compare its performances with international benchmarks. Therefore, top managers or board of directors can improve their companies by striving to meet the standard benchmarks for hazard management. Similarly, Knight (2009) also explained that businesses are likely to survive from 2009 worldwide monetary by following the ISO 31000's guidelines. To gain profits, businesses need to have a purpose and must consider any possible ways to protect the companies from the potential risk that could arise. The ISO 31000 provides guidelines for the business to be prepared and considered for any future risk. He also pointed out that ISO 3100 can assist to administer different types of risks for all sizes of industries. By following the ISO 3100's guidelines, top managers or board of directors are obliged to constantly keep the business strategies up to date in order to handle any potential risk that could affect the companies.

Likewise, Teixeira (2010) stated that ISO 31000 risk management is related to a company's internal governance practices as a whole in organize processes, tactic, preparation, management, reporting, rules, and principles which are the core of a company. In addition, ISO 31000 suggests the difference of all ambiguities on every purpose, at every stage. Top managers consider risks as a component in strategy. In their view each operating level should concentrate on their respective risks that could affect the overall company strategy to improve both its expansion and its implementation. To be certified, standards are designed to be open. For example, ISO 27000 is for data protection, while ISO 28000 is for supply chain protection and ISO

9000 for quality and etc. But ISO 31000 has combined them into one. ISO 31000 is developed to help all organizations to adapt risk management to mitigate exposure to risks or “unknown risks.” Also, it summarizes the organization’s technique for capturing threats; utilize opportunities, matches the desire for risk surrounded by the business, and it records the standards in opposition to which the organization functions.

## **2.7 The Climate Change**

Real estate industries around the globe are turning their business concentrations in building greener buildings and management to comply with government regulations as well as to be socially responsible by concentrating on climate change issue and the standard space requirement (RREEF, 2008).

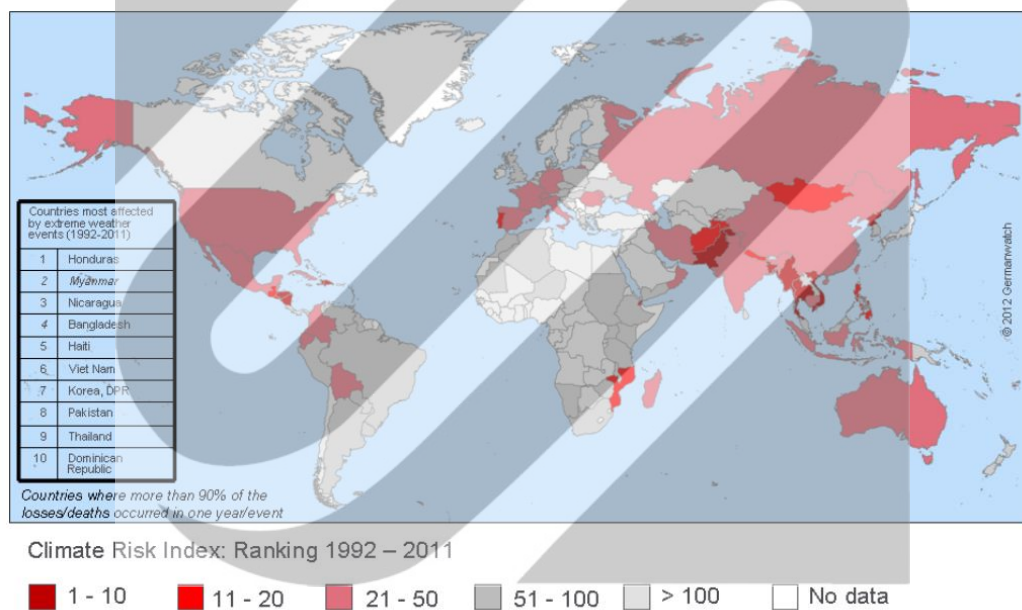
Over the past hundred years, the average global temperature has increased by about 0.6 Celsius (Richeek, 2007). The global temperature was approximately 14 Celsius at the end of recent ice age around 11,000 years ago. The average global temperature has risen compared to the climate during the previous ice age. In the twentieth century, the average global temperature has increased since the start of the Industrial Revolution. Human activities have caused a major rise in green gas emission resulting from the use of machinery and a rapid increase in population (Swiss Re, 2014).

According to NYCC, a climate change is an intense weather condition, which can be seen in the form of high temperature waves, flooding, storms, precipitation, frost, snowfall, and drought. These can cause damages to people, assets, buildings, land, and environment. The effect of hazards can be calculated in terms of measurement. For instance, the height of flood can be measured in feet, the speed of the wind can be measured in miles per hour, and rain can be measured in inches, while ice and snow can be measured by its thickness during a time period (New York City Panel on Climate Change, 2013).

To reduce the global warming effect, Lacey (2010, p. 29) suggested that the real estate, transportation and industry sectors should focus on the power produced from high temperature of the globe’s inner surface, sunlight, and breeze or renewable energy instead of the usage of fossil fuels so that the amount of CO<sub>2</sub> emissions can be

trimmed down. He also recommended that a badly insulated residence should increase ventilation to reduce the large amount of heat escaping through wall, roof and window so that approximately forty percent of the energy can be saved (Lacey, 2010).

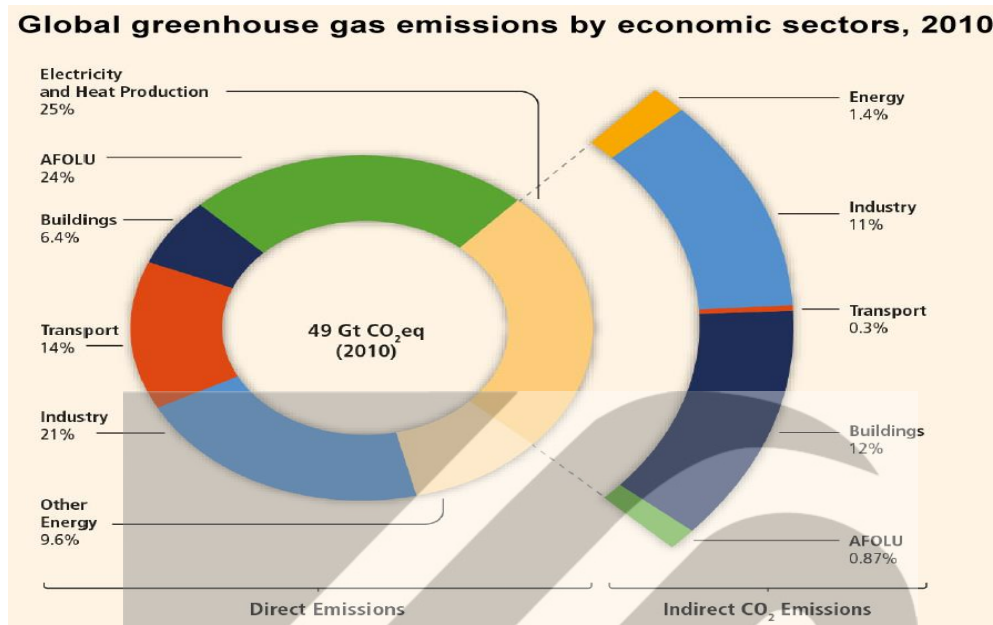
Harmeling and Eckstein (2013) analyzed Thailand as one of the most affected countries in 2011 by the impact of climate change. The 2011 devastating flood has caused the risk index to rise since 892 people were killed and 13 million people were affected by the worst intense flooding in history. The total damage caused by Thailand's flooding was approximately 75 million US dollars, accounting for the world most costly climate change related disaster in 2011.



**Figure 2.5** World Map of Global Climate Risk Index 1992-2011

**Source:** Harmeling and Eckstein, 2013:11

According to the Global Climate Risk Index for 1992-2011, developing countries are more prone to climate change than developed countries (Harmeling & Eckstein, 2013). Figure 2.5, Thailand's map is colored as dark red, implying Thailand as one of the most affected countries by extreme weather events between 1992 and 2011. The 2011 flood has caused Thailand to be one of the top countries affected by climate change.



**Figure: 2.6** Global Greenhouse Gas Emissions by Economic Sector, 2010

Source: IPCC, 2014

Figure 2.6 shows the world's greenhouse gasses emitted by different sectors in percentages. The direct emission by the real estate sector accounted for 6.4% of total emission, whereas the indirect emission by the sector, mostly from the heat produced from electricity generation, is 12%, which is considered significant. These figures reflect increasing energy consumption due to higher population and increasing consumption per capita.

According to IPCC (2014), a majority of studies have shown that the use of energy varied across different standard of living of various households, locations, technology and migrant population size in a city. Household energy consumption has increased also due to an ageing population and smaller family units.

## 2.8 Previous Studies

There is hardly any research done on the impact of global risks factors on residential real estate in Thailand covering all topics in this research paper. However, there are a number of related research papers on residential real estate in Thailand regarding value added price in Thailand's real estate, for example a research study by Jeewasuvan, Tochaiwat, & Veratpreyagurat (n.d.) discussed the factors helping real

estate project owners to add value to their projects and promote customers' buying decisions through promotions such as installing CCTV, breaker, air-conditioners, and built in interior such as furniture and kitchen in order to promote sales of residential housing projects. Another paper, Sirikolkarn (2008) explained that the price of real estate has increased, especially of the projects near to BTS and MRT as buyers are happy to spend more for their convenience, saving on living and travelling expenses.

Another related research on residential real estate in Thailand is on the use of prefabricated US products and methods for residential construction in Thailand. It includes in-depth data regarding prefabricated construction. According to Ngoenchuklin (2014:54), prefabrication is gaining popularity in Thailand's housing sector, but not fully integrated in Thailand's construction business as a whole. Ngoenchuklin (2014:61) stated that the weather in Thailand is humid and extremely warm with an average temperature of approximately thirty degree Celsius to thirty-five degree Celsius, and sometimes reaching forty degree Celsius during summer. She also pointed out that the majority of residential units in Thailand do not have suitable insulation to cope with the extreme hot weather. Even though many residential projects are equipped with air conditioning, it cannot help to reduce the heat in the building and the electric bills can be exceedingly high during the extreme weather. Ngoenchuklin (2014:1) also suggested that prefabrication method can assist the construction business in Thailand by helping to control waste management system throughout the construction period, including power conservation and on-site protection. Thailand's prefabrication business for housing project has not taken off over the past twenty years. However the method has been expanding quickly in the last 5 years as the cost of labor has gone up. She continued that real estate project developers and residential contractors are likely to change from conventional building method to prefabrication in order to reduce their construction costs in the Thai housing sector (Ngoenchuklin (2014:37). Moreover, according to Ngoenchuklin (2014:61), many leading real estate developers and contractors are ready to change from mortars and bricks to prefabricated residential projects.

Another paper from Berkeley Investment Advisors (2005) discussed in their newsletter the summary of their findings to investors regarding real estate risks in Thailand by evaluating the potential risks of the political or legal factors, exchange

rate risk, market risk, natural disaster risk, terrorism risk, and disease risk in order to find opportunities and good returns in real estate investment. According to Berkley Investment Advisors (2005), foreign investors can be impacted significantly if they do not track the current regulations of the country.

Another research *Comparison Of Building Management Service Of Residential Condominiums Offered by Cherdasak Soisuwan (2005)* stated that the condominiums which are managed by foreign companies are likely to attract more buyers for investment as the quality of buildings are high compared to condominiums that are managed by the Thai companies. Most of the units in these condos are for foreign rentals rather than unit buyers as they are better financially managed as well as staffed with experienced and better qualified employees than their Thai counterparts with international standards.

A research *The Strategic Crisis Management in Real Estate Sector: A Study of Housing Development and Condominium Business by Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011)* stated that the launch of housing and condominium projects is very complicated in which the real estate developers must study the fundamental needs of the market by analyzing the demand of customers and keeping up with new technologies. The real estate developer must be well financed for investment in order to hire employees to carry out marketing research. The most important aspect of real estate business is to build a quality residential property and provide good services during, before and after sales as well as risk management in order to meet customers' highest expectations. A strategic crisis management model that can be used in the real estate business is known as (F I M M A): F stands for Finance, I for Innovation, M for Management, M for Marketing, and A stands for Accountability. Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011) suggested funding from the developer's own saving is considered the best. The real estate company can be well known among customers as the project does not have to stop its operation if there is an economic crisis. Since the project rely on cash flow from its own operation rather than on loans from the financial institutions. The self-funding project can be sold faster as compared to other companies, which depend on their cash flow from the financial institutions. During economic crisis, the interest rate might increase and the buyers may postpone their real estate purchasing. The threat

to real estate developers is the possibility that the financial industries might stop their loans to buyers and project owners during the economic crisis. The risk during economic crisis is that the project owner may not be able to pay loan on time. The financial institution's interest rate can be increased and this can affect the real estate company, as the cost of project would increase during any economic crisis. Therefore, the real estate companies can be sued if the company cannot sell their projects on time. The most important strength for the real estate developer is budgeting, and the debt and equity ratio (D/E Ratio) should be approximately 1 to 1. The project owner should not utilize or input 100 percent of his cash into the project and should not work on more than one project at a time by following the strategy of sufficient economy. The real estate company should have strong points and credibility to employees and customers by cutting losses in order to survive. The company should be managed in every area thoroughly, especially in accounting, and construction management by hiring competent workers who can analyze and update trends and situations with regards to the financial institution's policies. According to Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011), the top 10 companies with good performances are found to utilize similar strategy such as debt restructuring and partly different strategies during economic crisis by negotiating with the financial institutions. The companies are found to reduce their price in residential properties, liquidate their current assets to cash in order to facilitate their company's liquidity, reduce their liabilities, and increase income by developing projects to meet the needs of customers. They differentiate from their competitors and build readymade houses to create positive first impression on customers. Each company has its own clear product positioning by using marketing strategy to analyze customer's need and their behaviors in order to create brands that are well known among customers in Bangkok and vicinities. Many companies aim to build their projects near to the public utilities with design to meet their customers' preferences by developing a design center to find new channels such as the blue ocean strategy in order to reach their niche market through CRM or Customer Relationship Management. Some real estate companies use Rc Lord Bearing Wall Prefabrication in their constructions and that the procedures can be testified and evaluated through notification by QC.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

From the study of global risks that impact newcomers in the residential real estate industry in Bangkok and vicinity, the researcher has developed interview questions by using the most important concerns of global risks as a focus to set up questions. Therefore, the methodology include interviewing scopes of the study, population and sample size, research planning process, hypotheses of the study, research design and instrument, data collecting procedure, and data analysis

#### **3.1 Population and Sample Size**

Locations of the projects were used as the criterion to select companies for the sample of this study. For the sample, 10 managing directors or CEOs of Thai residential real estate project companies in Bangkok and vicinity of both genders, over 20 years old were randomly chosen from the database from the Real Estate Information Center (2012) which has 885 residential real estate companies listed in the REIC directory. The researcher selected 4 famous residential real estate companies: Pieumsuk Development Co., Ltd, Rasika Property Co., Ltd, Suetrong Group Co., Ltd, and Chalerm Nakorn Co., Ltd (Interviewees 1, 4, 5 and 6, respectively) from the directory to represent Phrathum Thani and Nonthaburi District, which was severely affected by the devastating flood of 2011. The reason for choosing these four companies is to evaluate the effect of flood on real estate companies in the flood prone areas and how they plan to cope with potential future disasters.

The second location chosen is central Bangkok area projects between upper and middle Sukhumvit roads to represent the area affected by political unrest. The two companies that are listed in the REIC directory chosen are Apollo Asset Co., Ltd and Ocean Co., Ltd (Interviewees 8 and 3). The researcher also chose Quest Development Co., Ltd (Interviewee 2) as the third company, which is unlisted in the REIC, to represent the political turmoil area. Quest Co., Ltd is a newly setup residential real estate company that has a project on Sukhumvit Soi 16 Road.

The third location from the REIC directory is outer area. The researcher chose Patanakarn Road. The Patanarkarn area is considered to have land with reasonable pricing for residential real estate development. The two companies that are listed in REIC directory that were selected are Pieamsuk Co., Ltd and Sirin Estate Co., Ltd (Interviewees 1 and 10). The researcher also chose unlisted Exclusive Estate Co., Ltd (Interviewee 9) as third company because the company is newly setup and it is not listed in REIC database.

The fourth location is Chaophraya riverbank. The researcher randomly chose only one company Menam Residence Co., Ltd (Interviewee 7) because the company is a luxury residential real estate developer that well known which is located at the prime CBD area to represent companies affected by flood and political turmoil.

### **3.2 Research Methodology**

Qualitative research is designed to capture and analyze different perceptions of people in terms of words rather than statistics. The purpose and process of qualitative research may appear unfocused due to sample size, which is too small and does not seem to represent the majority of citizens' opinions. Therefore, it is complicated to know whether the results are accurate as the data may not be solid. The opinions of the research may be biased with their findings (Patton & Cochran, 2002).

### **3.3 Data Collection**

A period of 3 months, October-November 2014, was used to execute the research from concept to the final interview of the real estate business operators and further 24 months to complete the write-up. The interview is the method used to obtain data for analysis. Records of each interview and its analysis are compiled in Appendix A. The interview database is then analyzed using thematic qualitative analysis.

According to Yin (2003:106), interview is considered one of the most significant tools to gather data. For the purpose of this study an in-depth semi-structure interview was conducted with selected top manager of the residential real estate companies. The interviews were conducted by asking open-ended questions, which enabled the interviewee to explain the topic and express their opinions (Yin,

2003). This allows us to understand their perspective of the specific issues in a deep thoughtful matter. The researcher uses for face-to-face interviews.

Direct Observation can be carried out since the interviewer has the opportunity to observe each interviewee face-to-face. Therefore, the important behaviors of interviewee can be observed and can be used in the case study to weight the importance of their responses (Yin, 2003:109).

By doing the interview, the researcher can obtain in-depth knowledge and explanation from the people directly involved in the residential real estate industry. Some information was confidential that were requested not to be printed. The interviewees gave insight knowledge but do not wish the information to be published because they did mention other companies' practices and did not wish to defame other companies in anyway.

The information given by the interviewees was eye opening and interesting. Some interviewee would draw illustration to explain the effect of flood to their projects and how they had taken preventive measures for future problem. Many interviewees were very helpful and patiently explained the data they gave in detail by drawing illustrations to explain their thought or the steps they took. For example, the interviewees brought out maps of MRT to explain the problems caused by flooding and the impact on land prices after the disaster.

By doing interviews, the researcher was able to ask questions in order to cross check the information given by other interviewees for accuracy. Therefore, various data given by interview can be useful to ask for other interviewees' opinions regarding their views on the similar topic.

A total of 10 companies participated in research interview process on a one to one basis (Table 3.1)

**Table 3.1** Number of Interviews and Companies Researched

<b>Company</b>	<b>Position</b>	<b>Number</b>
Pieamsuk Development Co., Ltd.	<b>Managing Director</b>	<b>1</b>
Quest Development Co., Ltd	<b>Managing Director</b>	<b>1</b>
Ocean Property Co, Ltd.	<b>Deputy MD</b>	<b>1</b>
Rasika Property Co., Ltd Ocean	<b>Managing Director</b>	<b>1</b>
Suetrong Group Co., Ltd	<b>Managing Director</b>	<b>1</b>

**Table 3.1** Number of Interviews and Companies Researched (Cont.)

Company	Position	Number
Chalerm Nakorn Co., Ltd	Managing Director	1
Menam Residences Co., Ltd	CEO	1
Apollo Asset Co., Ltd	Managing Director	1
Exclusive Estate Co., Ltd	Managing Director	1
Premthep Group (Sirin Estate Co., Ltd)	Managing Director	1
Total		10

The interviewees' feedbacks were all noted down and presented in Appendix A. Most of the interviews lasted 60 minutes to 70 minutes, a substantial amount of time which allows the interviewee to give an-in-depth overview global risk in the Thai residential real estate. Most of the interviews took place in the MD's office, in meeting room and at coffee areas where there were minimal distractions.

### 3.4 Data Analysis

In this research, the thematic analysis in psychology Braun and Clarke (2006) is used. This approach captures significant information related to the research enquiry and shows some level of patterned response or drive a meaning within the data obtained from interview responses.

#### Thematic Qualitative Analysis

The guide to conduct thematic qualitative analysis is to look for similar ideas in responses to questions and identify issues of importance during information gathering. The result is to receive similar information reported by interviewees and group together in a theme (Braun & Clarke, 2006).

**Table 3.2** Phases of thematic analysis

Phase	Description of the Process
<b>1. Familiarizing yourself with your data</b>	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
<b>2. Generating initial codes:</b>	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code theme.

**Table 3.2** Phases of thematic analysis (Cont.)

Phase	Description of the Process
<b>3. Searching for themes:</b>	Collating codes into potential themes, gathering all data relevant to each potential
<b>4. Reviewing themes:</b>	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic ‘map’ of the analysis.
<b>5. Defining and naming themes:</b>	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
<b>6. Producing the report:</b>	Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

**Source:** Braun and Clarke, 2006:87

Table 3.1 shows the process which is used to do thematic analysis. It helps the researcher to look across a data set by observing the context from interviews, consider particular viewpoints, and find hidden themes that can be evaluated. The thematic analysis steps will ensure consistency and reliability of analysis. Thematic analysis is not a set of rules, but guidelines to find answer for any enquiry. The steps are not linear, as an analyst can shift back and forth at any step to change or redefine his theme or locate data. This process is time consuming as the researcher needs to read and re-read the responses or the data. For this reason only a small sample size of interviewees is recommended. The aim was to interview top management level people to understand their perceptions regarding the impact of global risk to residential real estate companies of Thailand.

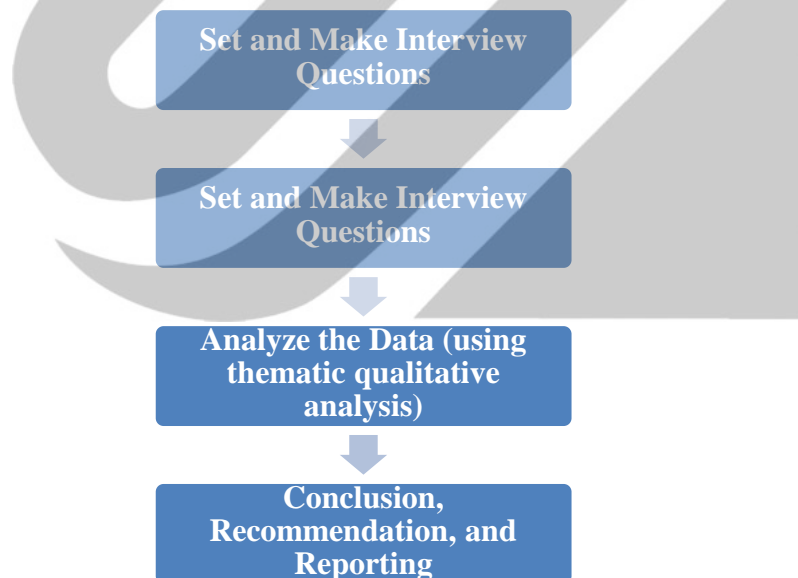
When the researcher met the interviewee for the first time, the interviewer introduced herself and then obtained permission to identify the interviewee by name and his/her company. The interviewees were completely supportive of the aim of the research and supplied information freely as needed. The process was conducted in approximately 1 hour.

While the interviewee was in progress, the interviewee took notes all significant feedback while observing the interviewees’ behaviors at the same time.

These notes are later reviewed, and documented on a computer file for each interviewee so they are all together 10 folders. At the later stage, the researcher used these files as the database to do the thematic qualitative analysis.

The advantage of Thematic Analysis is that it easy to implement as all the data are compiled from the interviewee and analyzed base on the question item individually to see a theme or pattern in the interviewee's responses that would give some insight to the research. This is the key point of the research to obtain some sort of consensus and also to see the outlier if there were any. The researcher could summarize ideas into themes and sub-themes which are used to conclude important implications to support the thesis topic. The disadvantage of Thematic Analysis is that the researcher must try to hidden message from the interviewee feedback in order to gather and match the information under each theme, which was very time consuming and tedious.

### 3.5 Data Collecting Procedure



**Figure 3.1** Step of the Research Process

To collect an adequate research is necessary to select an appropriate data and match with the scope of research study. This research study is designed to collect the data both from primary research and secondary sources.

## CHAPTER 4

### RESEARCH FINDINGS

This chapter summarizes the key themes and sub-themes that were derived from the feedbacks of the interviewees by data analysis (See appendix A for detailed coding and themes). The key areas embodied in the questions posed to the interviewees are namely: the impact of global risk on real estate were; the impact of economic crisis, the significant of flood disaster in 2011, the effect of political instability, climate change, unemployment rate, and disparity of income and green technology on residential real estate. Most data corroborate with major themes and are interrelated to global risk. After analyzing the data, it emerged that global risks impact on various areas of residential real estate business.

#### 4.1 Analysis and Conclusions

**Question 1:** *In your view, how do global risks affect new comers in the Thai residential real estate? In your view, which factor is the most important problem?*

**Analysis:** Majority of the respondent state that economic crisis is the most serious issue in global risk. From a total 10 interviewees, 8 interviewees (Interviewees 1,2,3,4,5,6,7 and 8) stated that economic crisis is considered the most serious problem to the Thai's residential real estate business. While 2 interviewees mentioned that political instability is considered the most critical global risk issue for newcomers in the Thai real estate industry (Interviewee 9 and 10).

*“Political instability...I feel that any change in politics can affect overall economy, not just the real estate market...the recent past situation shows that the political instability could affect the overall market...would delay buyers' decision as there are uncertainty of the outcome until all the rules and regulations are stable...”*

*(Interviewee 10)*

Among the 8 interviewees who said that economic crisis is the most serious issue, 6 interviewees agreed that global economic state has direct effect to real estate. Economic crisis in any part of the world can affect the Thai's residential real estate (Interviewees 1, 2,3,4,5, 6, and 9). Among these 6 interviewees, there were 2

interviewees who pointed out that the Thai's residential real estate developers need to watch out for interest rate fluctuations (Interviewees 1 and 6). Interviewee 6 stated that the slowdown of export could affect the Thai residential real estate. Additionally, there were other 2 interviewees who also viewed that the slowdown of export could affect the Thai residential real estate (Interviewees 4 and 8). Therefore, the total of 3 interviewees agreed that the Thai residential real estate can be affected by the slowdown of exports. Interviewee 4 and 6 thought that the slowdown of export would cause delay in buying decisions. Thailand's economic condition is generally down according to Interviewee 2. Meanwhile, Interviewee 2 is hoping for the government's policy to stimulate the overall market as the cost of land and basic costs of construction materials have gone up without the real demand. Internal financing is considered necessary for residential real estate company as mentioned by Interviewee 1. Furthermore, Interviewee 1 said loans for the residential real estate are hard to get as banks have tightened lending after the Hamburger crisis. Interviewee 3 said economic crisis is like a domino effect to all over the world if there is any economic crisis in any country. Similarly, Interviewee 5 also talked about the chain of events from other countries which can affect residential real estate.

**Conclusion:** The impact of economic crisis is considered the most serious issue in Thailand's residential estate. The problem of economic crisis can affect the Thai residential real estate from both domestic and international aspects. Since the world has become more globalized, the economic crisis from other countries can indirectly affect Thailand's residential real estate. The economic crisis can have a domino effect to all over the world if there is any economic crisis in any country. The problem of economic crisis is considered the chain of events from other countries which can indirectly and directly affect residential real estate of Thailand. The changes of interest rate can also impact the residential real estate industry. Developers need to watch out for interest rate fluctuations. Moreover, the slowdown of export due to the Hamburger crisis in the US can affect local purchasing power and delay buying decision. Internal financing is considered necessary for residential real estate company as loans are hard to get as banks have tightened lending after the Hamburger crisis. Currently, Thailand's economy is down particularly Bangkok and vicinity due to

political instability. The government should stimulate the overall market as the cost of land and basic costs of construction materials have gone up without the real demand.

**Question 2:** *In your view, how did the 2011 flood disaster affect the Thai residential real estate company? Can you please suggest ways to reduce the future impact of flood disaster to Thai residential real estate?*

**Analysis:** Almost half of the interviewees stated that the flood had affected their residential projects. Four interviewees (Interviewees 1, 4, 5 and 6) were directly affected because their projects are located in the flood areas such as Nonthaburi and Pratum Thani and Bang Yai. Buildings including the sites would have to be modified. In addition, these 4 interviewees all mentioned that the level of their first floors of their projects in flood prone areas have to be raised higher. The result of modification has pushed up their cost in preparation for future flood crisis. From these 4 interviewees, Interviewee 1 mentioned that condominiums are in demand after the flood crisis. Similarly, Interviewee 3 said the flood crisis has boosted the demand for condominium as more customers want to find second home that are not prone to flooding area. In addition, 2 interviewees claimed that the areas next to MRT purple line is becoming very popular for residential real estate after the recent completion of MRT purple line (Interviewees 1 and 6). All 10 Interviewees implied that customers have become more cautious and selective about purchasing residential property in Bangkok and vicinity, especially in flood prone location.

*“...operations of projects which are in the flooding zone should be alert and cautious more than in the past. The cost of houses in the flooding area has increased by 5 percent. The level of the ground has to be raised higher to avoid future disaster...” (Interviewee 1)*

Interviewees 2, 3, 7, 8 and 9 said their projects were not directly affected by the flood disaster; however they have become more aware of the risk of flood.

*“Fortunately, we did not get any effect on that. People end up buying our property and move to stay in condominiums” (Interviewee 3)*

Seven interviewees suggested that the government should invest in infrastructure in managing water level (Interviewees 2, 4, 5, 7, 8, 9, and 10). Interviewees 1 and 4 also mentioned that the selling price of units in flooded area had dropped.

**Conclusion:** The 2011 flood had affected the residential real estate projects. Many real estate developers were directly affected because their projects are located in the flood prone areas such as Nonthaburi and Prathum Thani and Bang Yai. The effect of flood has caused many project developers to modify their sites and buildings to avoid the future effect of flood. The selling price of units in flooded area had dropped temporarily. The level of first floors of the housing projects in the flooded areas has to be raised higher. The cost of construction in the flood prone area has become higher due to the cost of modification of sites and buildings. Therefore, the cost of new houses in the flooding area has increased by 5 percent for developers. Currently, condominiums are in demand after the flood crisis. The flood crisis in 2011 has caused higher demand for condominium as more customers want to find second home that are not prone to flooding area. The areas next to MRT purple line is becoming very popular for residential real estate after the recent completion of MRT purple line. Since the effect of flood in 2011, customers have become more cautious and selective about purchasing residential property in Bangkok and vicinity, especially in flood prone location. The residential real estate in the center area of Bangkok was not affected by the flood. The government should make better infrastructure in managing water level.

**Question 3:** *In your vision, does the recent political instability affect the sale or construction of your company? Why and Why not? Please suggest ways to reduce the impact of political instability to Thailand's residential real estate in future*

**Analysis:** Out of 10 interviewees, 9 interviewees stated that political instability has had much impact on the real estate industry; however one interviewee said it was a minor problem to the company.

*“...I hope we could live peacefully soon but imagine with these chaoses, land prices still keep shooting up. If there are none of these issues, price will be sky high”.*  
(Interviewee 8)

Accordingly, Interviewee 8 mentioned that political instability is a factor to slow down the land price in the center area of Bangkok as the prices of land in Bangkok's center area continue to rise. The effect of political instability helps to slow down land price rise somewhat, which benefits residential real estate business. Interviewees 2 and 8 thought Thai people are used to unstable political situation. On

the other hand, majority of interviewees thought the overall effect of political instability was a negative to their sales because most buyers have delayed their decision to purchase their houses or condominiums (Interviewees 1, 2, 3, 4, 5, 6, 7, 9, and 10). Out of 10 interviewees, 4 were looking for government's stimulus plan. Interviewee 1 suggested that current policies are not pro-business and government need to stimulate the real estate business by reducing transfer fee, lower interest rate and tax. Similarly, Interviewee 4 also suggested that government should stimulate the real estate business by lowering the transfer fee. Interviewees 1, 2, 4, 5 and 9 also recommended that government should help with new policies to stimulate the residential real estate market. However, one interviewee mentioned that the political instability could never be controlled (Interviewee 4). On the other hand, Interviewee 2 hoped the AEC in 2015 will open door to more investors from AEC countries.

**Conclusion:** Political instability has had much impact on the real estate industry. The political instability is a factor to slow down the land price in the center area of Bangkok as the prices of land in Bangkok's center area continue to rise. The effect of political instability helps to slow down land price rise somewhat, which benefits residential real estate business. However, Thai people are used to political situation. The effect of political crisis has been a negative to sales of property as most buyers would delay their decision to purchase residential real estate properties. The current government's policies are not pro-business, especially real estate industry. The developers hope that the government would stimulate the real estate business by reducing transfer fee, lower interest rate and tax. The political instability is difficult to be controlled as it is the government's responsibility to solve the turmoil. The AEC in 2015 will open door to more investors from AEC countries to buy real estate from Thailand, Bangkok and vicinity.

**Question 4:** *How can newcomers in residential real estate prepare for the future impact of global risk? (Please consider the problems of economic crisis in any part of the world which can affect Thailand's residential real estate.)*

**Analysis:** The threat of economic crisis from other countries can delay decision by potential buyer according to 4 interviewees out of 10 (Interviewees 2, 4, 5, and 6).

*"Crisis in any part of the world will affect Thailand due to globalization."*

*(Interviewee 2)*

Since the world has become globalized, any country can be affected by the impact of other countries' economic crises. Thailand's export can be affected by economic crisis in America. For example, Interviewee 4 stated that the economic crisis in US can affect Thailand's SME sector which trades with companies in the US. The effect of US's economic crisis can cause Thai's exports to slow down. While Interviewee 5 supported similar idea in which the economic crisis in the US can affect the worldwide economy. In addition, the economic crisis in Europe also affected exports in Thailand and this will cause an impact on the real estate business in Thailand. On the other hand, Interviewee 6 mentioned that the Hamburger crisis did not significantly affect Thailand's residential real estate properties, except on operators who focus their sales on foreign buyers. From a total of 10 interviewees, 3 interviewees stated that newcomers should focus on projects with lower risk in order to be less exposed to risk from economic crisis from any part of the world (Interviewees 1,3, and 10).

"...Self-financing will always soften the impact of any unforeseen risk. But one must remember "low risk low return"..." (Interviewee 10)

According to interviewee 10, newcomers should watch out for potential risk. Interviewee 3 also suggested that the best practice is to focus on low "risk, low return" to avoid the probability of unfavorable effect. Interviewee 3 proposed newcomers to adopt a quick sale strategy to save the project. In addition, Interviewee 2 said newcomers have to use penetration pricing to compete with established brands. In addition, newcomers need to work harder than established ones and should differentiate their products. Interviewee 1 said newcomers should be conservative in investing. Loans are hard to come by. They need to hire experts as advisers. Interviewees 4 and Interviewee 5 mentioned that the global economic crisis can lower Thailand's export. Interviewees 7 and Interviewee 9 stated that new comers must offer value added products to attract foreign buyers, such as projects with green concepts.

**Conclusion:** The threat of economic crisis from other countries can delay decision by potential buyer. Since the world has become more globalized, any country can be affected by the impact of other countries' economic crises. Thailand's export

can be affected by economic crisis in the US since many Thailand's SME sector trades with companies in the US. The economic crisis from not only US, but Europe also can cause Thai exports to slowdown and that can delay domestic buyers' decision to purchase residential real estate. During economic crisis, the developers can be affected due to lesser sales. For that reason, self-financing can be the key to soften the impact of any unforeseen risk such as the problem of economic crisis. Newcomers should have back up source of income instead of financing loans from the bank. The concept of "low risk low return" can help newcomers to avoid the probability of unfavorable effect as there are risks in doing business. Therefore, newcomers should focus on projects with lower risk in order to be less exposed to risk from economic crisis from any part of the world. A quick sale strategy and penetrating pricing can be adopted to make profit by trying to sell the project before the completion of the site and compete with established brands with value added property. The current residential real estate condition is very difficult for newcomers as they need to work harder than established ones and should differentiate their products. Newcomers should be conservative in investing as loans are hard to come by. Additionally, newcomers should hire experts as advisers.

**Question 5:** *Water scarcity is considered one of the top problems in global risk. Can you suggest ways to prepare for water scarcity and climate change in the Thai residential real estate in future? Does the problem of water scarcity and climate change affect your company?*

**Analysis:** All the interviewees stated that there is no water scarcity in Bangkok and vicinity.

*"Currently, there is no specific law regarding retention of water in Bangkok and vicinity areas. However, in the eastern part of Thailand, especially Sri Racha, Chonburi, Satthaip, operators are required to have water tanks available in the residential projects."* (Interviewee 5)

Interview 5 said there is no problem of scarcity at the present, but he is uncertain whether this problem would arise in another 10-20 years from now. However, two interviewees mentioned that the problem of water scarcity is not in Bangkok, but on a few islands and resorts (Interviewees 2, 3 and 10).

*“...The key is “where.” For example, Bangkok has no problem with water supply, whereas Pattaya, Phuket and Samui are all problem areas for water supply.”*  
(Interviewee 10)

Thus water scarcity is not an issue in Bangkok and vicinity. However, other parts of Thailand have this problem, especially the eastern area where the usage of water is needed for agricultural or residential purposes as mentioned by Interviewee 4. On the other hand, two interviewees stated that climate change is an issue (Interviewees 1 and 2).

*“...I see the problems of climate change in extreme storms. We have received many requests to fix the roofs of our projects from our customers.”* (Interviewee 1)

According to Interviewee 1, the roofs of a numbers of houses were damaged during heavy thunderstorms, causing leakages. The company needs to send technicians to fix them. Therefore, roofing structure should be properly constructed during initial construction period to make sure that the problem would not arise. According to Interviewee 2, the weather of Thailand is hotter than normal during summer nowadays. She suggested that the company should use sanitary ware that consumed less water to save utility bills for customers.

**Conclusion:** Water scarcity is not an issue in Bangkok and vicinity as there is no specific law regarding retention of water in Bangkok and vicinity areas. Water scarcity is an issue in the location of Sri Racha, Chonburi, and Satthaip which are located in the eastern part of Thailand. The eastern area where the usage of water is needed for agricultural or residential purposes also found the problem of water scarcity. The operators are to have water tanks available in the residential projects in these areas. The problem of water scarcity can also be found on few islands and resorts such as Pattaya, Phuket and Samui. However, climate is an issue in the Thai residential real estate. Thailand has extreme storms due to climate change. Roofing structure should be properly constructed during initial construction period to make sure that the roof will survive heavy thunderstorms. The weather of Thailand is a factor which real estate developers should consider since the weather is hotter than normal during summer nowadays. Companies should find ways to help lessen the heat inside the house and saved utility costs, for example, introduce sanitary ware that consumed less water to save utility bills for customers.

**Question 6:** *In your estimation, can you give specific ways to reduce global risk that may pose a threat in the Thai residential real estate projects in terms of unemployment and income disparity? Do the problems of unemployment and income disparity affect your company?*

**Analysis:** All interviewee shared common view that unemployment rate is not an issue, since Thailand has very low employment rate at the moment. Two interviewees mentioned that unemployment is not a problem to them because their companies target only upper middle income group (Interviewees 1 and 2). Three Interviewees mentioned that Thai real estate rely on workers from Laos, Cambodia and Burma (Interviewees 5, 6 and 8). Interviewee 4 stated that her company use prefabs to reduce labor force. Utilizing labor efficiently with technology is necessary in order to save time in project construction. Out of all the interviewees, there is only one who mentioned that there is a possibility lack of labor force shortage in real estate industry next year since the government has planned to launch several mega infrastructures projects (Interviewee 5).

*“Government should see the problem of labor shortage which is likely to happen sooner, by getting more labor from Laos, Cambodia and Burma. We will not have enough labor once the government starts its mega project....”* (Interviewee 5)

According to Interviewee 5, the government should prepare to bring more foreign laborers to meet the local demand since real estate properties depend on their foreign construction workers from Laos, Cambodia, and Burma. Two interviewees mentioned that unemployment rate is an issue to only companies which target lower income groups (Interviewees 1 and 7). Interviewees 3 and 5 stated that government spending on infrastructure can help to reduce unemployment issues in Thailand. Lastly, Interviewee 10 mentioned that political stability will create more jobs for Thai citizens. One interviewee said that income disparity is increasing, while middle income group has stagnated.

*“...Thailand’s income disparity has been increasing. While the poor becomes poorer, the rich becomes even richer...the price of commodity is down...the number of middle income people is not increasing as much as it should be.”* (Interview 2)

Interviewee 9 said income disparity can be reduced by enhancing the skills of the labor force. This will add value and productivity to the labor force of a company.

Interviewees (3, 4, 6, and 8) stated that the current minimum rate of Thailand is appropriate.

**Conclusion:** Unemployment rate is not an issue in Thailand since the country's unemployment is relatively low. The current minimum rate of Thailand is acceptable. Unemployment is not a problem to the Thai residential real estate. But, the problem of unemployment rate is an issue to the real estate company which target lower income customers. The government's spending on infrastructure can help to decrease unemployment in Thailand. However, Thailand residential real estate faces labor shortage issues, especially in the construction areas. The project developers face Thai labor shortages and have to hire labor force from Laos, Cambodia and Burma to work in the area. Given the problem of labor shortage, some companies use the prefab technology to minimize labor usage and save time in project construction. In 2015, there is a possible shortage of labor force in the real estate industry since the government has planned to launch several mega infrastructures projects in the coming years. Therefore, many workers would be diverted to work in these mega infrastructure projects and would cause the problem of labor shortage to the real estate companies. Therefore, the government should foresee the issue of labor shortage and prepare to bring more foreign labors to meet the future domestic demand. There is income disparity in Thailand whereby the majority of population of Thailand is working in agricultural sector and these groups of people have been affected by the rice scheme and become poorer while the rich become even richer. The number of middle income group is not lot as many as it should be. The problem of income disparity can be solved through enhancing the skills of labor force which will create value and increase productivity.

**Question 7:** *In your view, how can new comers in Thai residential real estate improve on their risk management in order to have more competitive advantage in terms of entry, construction, revenue and profits? Please describe the risks and suggest ways to have competitive advantage by considering the social, technological, economic/environment, and political.*

**Analysis:** Interviewees 1, 2, 9 and 10 expressed similar opinions that new comer should be innovative so they can differentiate their products from other competitors. Value added the product is the key to attract customers to buy the

residential housing. Interviewee 3 mentioned that owners of established brand; especially if that brand is listed on stock exchange can enjoy a lower cost of 2% in marketing and 3% in construction than newcomers. Newcomers should consider business alliances strategies to share cost and expertise. In addition, newcomers should offer differentiated products to survive. Similar idea is shared by to Interviewee 6. Interviewee 8 mentioned that newcomers would face more expenses than established brands. While Interview 9 advised newcomers to focus on small project as small projects can be sold out easily than big one. The idea of Interview 4 is also similar to Interview 9. Newcomers should focus on quality than quantity. Interview 4 mentioned that residential real estate can gain maximum of profit around 15 percent from investment. Newcomers should maintain reputation and credibility to survive in residential real estate industry.

*“Our target customer are middle to high income with regular salary of 50,000 or up as bank would give loans to them. The ones with salary of 30,000-40,000 are not capable to ask for loans easily. Construction is the heart of real estate and quality. Newcomers should not focus on quantity. A house without quality is useless. Newcomers should have ethics and do not over-price their products...”*  
(Interviewee 4)

Interviewee 10 suggested that newcomers should be less labor dependent as labor shortage could be a problem. Interview 7 advised newcomers to do market research in order to compete in the industry. Interviewee 5 also suggested that newcomers should be adaptable and responsible when doing business to maintain in the industry. Interviewee 5 also suggested newcomers to focus on branding their project to be known as the opportunity of AEC in 2015 will attract more foreign investors from neighboring countries and should hire risk managers to advice on risk. Interviewee 5 is the only one who talked about corruptions that newcomers might face in doing real estate project. Interviewee 2 emphasized the importance on controlling the cost of marketing.

**Conclusion:** Newcomers should focus on product differentiation and innovation in order to survive and compete with the established brand. Value adding the product is the key to attract customers to buy the residential housing. The established brands; especially those that are listed on stock exchange can enjoy a

lower cost of 2% in marketing and 3% in construction than newcomers. Since newcomers would face higher expenses than established brands, newcomers should focus on small project as small projects can be sold out easily than big ones and target customers who have a net income of 50,000 baht. Banks are more willing to extend loans to borrowers who have this range of income. The residential real estate project can gain maximum profit of around 15 percent from investment. Alternatively, newcomers should consider business alliances to share cost and expertise. Nevertheless, newcomers should maintain their reputation and credibility to sustain in the residential real estate industry and be less labour dependent as labour shortages could be a problem. Newcomers should practice proper market research in order to compete in the industry. Adaptability and responsiveness are essential for newcomers to maintain their credibility to buyers in the business. Given the opportunities of AEC in 2015, newcomer should focus on branding their project to attract more foreign investors from neighboring countries. Newcomers should hire professional such as a risk manager to give advice on the potential risk which could affect the newcomer's company. There are corruptions that newcomers might face in doing real estate business. Newcomers should be careful in managing marketing cost as some marketing campaign might not be effective.

**Question 8:** *In your vision, can the new comers in the Thai residential real estate create sustainability in real estate project or green building? Why and Why not? Are you aware of the green technology?*

**Analysis:** All of the interviewees are aware of green building projects, but only one company actually follows the EIA's guidelines to adopt green project. Interviewee 6 said that the cost of a green project would be only 3.5 percent more if the developer planned properly from the beginning of planning the project. He said the guidelines of EIA are not difficult to follow. The company can value add the project and the pricing of green project can be higher than average market price. In addition, the project can be differentiated from the average market. Additionally, Interviewee 7 also mentioned that newcomers should consider making green projects as many high income earners can afford them. Many high income earners would want to own a house which is surrounded in a friendly environment. One interviewee is in the process of trying solar system for their housing development (Interviewee 5).

Interviewees (8, 7 and 10) all support the idea of green project and suggested that newcomers should consider developing them with new technology. Interview 8 suggested that newcomers should develop green buildings as they can reduce the global warming issues. However, four interviewees mentioned that the cost of green building is expensive (Interviewees 1, 3, 4 and 9). In addition, Interviewee 2 suggested newcomers to adopt the green technology in the real estate project to save customers' expenses on utilities.

**Conclusion:** The green building concept is widely known among residential real estate developers. However, not many adopt the green technology as the cost of construction is considered expensive. Nevertheless, newcomers should develop green projects to differentiate from existing players and build their brands. The cost of a green project would be approximately 3.5 percent more than a conventional one if its construction is properly planned from initial stage of the project. Newcomers will have more room to value add the project as the pricing of green project can be higher than average market price. Green projects can capture the interest of high income earners who have higher purchasing power than the average income earners. The green building concept can help to reduce the effect of global warming issues in the long run. The project owners can adopt the green technology in the real estate project to save customers' expenses on utilities. For example, a project owner can invest in a solar system in their project to save electricity by working with EGAT. Currently, EGAT has a program to purchase excess electricity generated from household based solar system. If a house has installed a solar system in cooperation with EGAT, the electricity generated from that house can be transferred and sold to EGAT, which can reduce the cost of electricity for the owners in the long term.

**Question:9** *What is your outlook on Thai residential real estate policy and how do you think it can be improved in order to respond to the impact of global risk and create a competitive advantage for Thailand's residential real estate business in future?*

**Analysis:** Interviewees 2, 4 and 8 suggested that government should focus more on making policies to stimulate the real estate industry. From listening to all three of the interviewees, all had similar idea that the government has not really been involved in boosting the residential real estate industries as much as in other

industries. All three interviewees expected the government to reduce the property transfer fee to attract more customers. While Interviewee 3 suggested that the development of R&D is necessary. The company needs to study the market and forecast the future trend through R&D. Interviewee 3 thought about her company regarding this question, instead of the local residential real estate as a general discussion. Interviewee 3 really felt that a good R&D would benefit the real estate company in a long run. The company should consider the possible of global risk and its effect to the company's project in coming future.

Interviewee 6 suggested that the Thai residential real estate still face problem of management by juristic, especially when the project owner no longer manages the property. Interviewee 6 strongly explained that there are loop holes in the juristic management regulations. For example, management fee needs to be paid by owners of property. All housing developments and condominiums are required to pay management fee. However, certain owners choose to avoid the fee. Many owners who live in the condominiums and housing development are reluctant to see the importance of management fee. According to the current juristic regulations, owners can decide to pay the fee only they would want to sell their property. These owners contradicted themselves and chose to pay the requirement fee because if the outstanding fee is not paid, they would not be able to sell their property according to the regulations of juristic. Interview 1 also found that the juristic management still has loop holes and thought that the problem still needed to be solved. However, he did not want the punishment to be too harsh for property owners.

*“The current policy for juristic management in the 3-4 years is better. However, we do not have a solid punishment (not too harsh punishment) to those who avoid paying the manage fee...” (Interviewee 6)*

Similar to Interviewee 6, Interviewee 5 also thought the current juristic policy is loose. Interviewee 6 suggested that the government should improve city planning. Currently, the city planning is haphazard. Interviewee 5 said that there are loop holes in the regulations in residential real estate which allows the government officials to take bribes. Meanwhile, Interviewee 7 suggested that the government should allow foreigners to buy land. On the other hand, Interviewee 10 believed that the

government is too sluggish in implementing measures or policy to improve the state of real estate industry.

**Conclusion:** The government should focus on the residential real estate more by making policies to stimulate the industry. The government has not really been serious in boosting the residential real estate. It could reduce the transfer fee to attract more customers for example. The R&D can be a significant department in the company to research and forecast the future trends of real estate business. The real estate company can consider the possible of global risk and its effect to the company's project. Currently, Thai residential real estate still face problem of management by juristic. There are problems in juristic management when the project owner no longer manages the property for their customers. The loop holes in the juristic management regulations create unfair situations among units owners. Since all housing developments and condominiums require unit owners to pay management fee. However, certain owners choose to avoid the fee. According to the current juristic regulations, owners can wait to pay the fee without any fine. Therefore, some unit owners decide to pay the outstanding fee only when they decide to sell their properties. The current juristic management regulations allow unit owners to become reluctant to pay the management fee. These owners have choices and can choose to pay the requirement fee because if the outstanding fee is not paid, they would be prohibited to sell their property according to the regulations of juristic, unless the outstanding balance is clear. There should be punishments to control the unit owners to be disciplined in paying the management fee, not harsh law.

Accordingly, the government should make a better city planning. Currently, the city planning is haphazard. There are loop holes in the regulations in residential real estate which allows governments to make corruptions. The government should allow foreigners to buy land. The government is very slow in making any measure to improve the state of real estate industry.

**Question 10:** *In your view, what do you think the situation of Thailand's residential real estate would be in the next 5-15 years from now? How would the situation be different from now?*

**Analysis:** Interviewee 2 pointed out that the real estate market in Thailand has gradually recovered from the 1997 financial crisis. He believed there could be some

adjustments in the coming year. He said that if there is no negative impact of war or global crisis, the adjustment period should be a short.

*“There would be many “mini urbanizations” in Bangkok and CBD areas. There will be many downtowns in the cities that are closely located to Thailand’s border and these areas will be transformed into residential areas and business districts. There will be many downtown locations in the provinces near to the border area of Thailand...” (Interviewee 6 predicted)*

Interviewee 6 also said that majority of people from the provinces who usually come to find work in Bangkok will not be as many as now because works would also be available in the new downtowns and mini urban areas outside of Bangkok. However, Interviewee 9 said that it is very difficult to forecast the future as everything has to do with future factors. On the other hand, Interviewees 1, 5 and 8 voiced similar opinions. They thought that the lifestyle of people would be different as many would choose to live in the city and save on commuting time. Therefore there will likely be more condominiums in the future. Interviewee 1 also mentioned that the price of oil will be a lot higher than at present. Interviewee 10 considered the shortage of labor to be a future issue. Interviewees 3 and 7 gave a positive outlook regarding AEC 2015, which would attract more foreign investors to Thailand. Interviewee 4 mentioned that technology will keep on changing. If the green technology gets cheaper, more companies will go green. Currently 60% of Thais do not own a house. This has a huge implication for the real estate industry in the future.

**Conclusion:** The real estate market has been up for more than 17 years since the Asian financial crisis in 1997. Therefore, there could be some corrections in the near future. When the market has gained for over a long period of time, the possibility a correction of can be expected. The expected adjustment would temporary barring the breakout of a war or global financial crisis. The correction might take longer if these occur. In future, the Thai residential real estate industry would be boosted by many “mini urbanizations” at numerous places at border towns and cities. The mini urbanizations are the downtowns areas of Bangkok and CBD. The concept of these mini urbanizations would be similar to the center area of Bangkok, with similar infrastructures to Bangkok’s center area which has businesses, hotels, schools, hospitals, and shopping malls. There would be many urbanizations or CBD in

Bangkok. In addition, there would be many downtowns “mini urbanizations” in the cities that are closely located to Thailand’s border, eventually these areas will turn to residential areas and business districts. Therefore, there will be many downtown locations in the provinces near to border of Thailand. The majority of people who usually migrate from provinces or who usually go to find work in Bangkok would not migrate as much since works can be found in the new downtown or mini urbanization areas there.

More condos will be built in Bangkok as the future lifestyle of people would be different. People would desire to live in the city for convenience and lower cost, since in the future the price of oil will be much higher than at present. The real estate industry would face shortage of labor. The integration of AEC in 2015 would attract more foreign investors to Thailand. And since technology would improve the price of green technology will be cheaper, so many companies can go green in the future. Currently 60% of Thais do not own a house, which means there is a huge potential for demand in housing.

**Question: 11** *Does your company require a maximum return from investment without considering on risks in each project? Why and Why not?*

**Analysis:** All the interviewees said they are considered risks in all of their projects. However, the majority of interviewees have different view regarding the maximum rates of return and risk. Interviewee 6 mentioned that his real estate company is able to pay dividend or premium of 6-7% to the company’s shareholders as a result the maximum return is not an issue for the company. While Interviewee 3 said that her company is very conservative in doing business. Earning maximum profits are not the company’s main concern since her company is not so profit focused. It looks closely at risks. Similarly, Interviewee 9 also stated that his company concentrates in focusing on risk adverse environment than maximum rate of return. Interviewee 8 mentioned that the average rate of MLR that her company is getting from the bank at 6.75% is sufficient. Her company does not expect to maximize the return and gain maximum profit. She also mentioned that her company adopts a motto to balance risk with an acceptable rate of return.

Interviewee 8 mentioned that he is very careful in doing business; therefore he has recently hired a risk manager to assist him to look at overall risk or future risk

which he might not know. Interviewee 8's company is looking forward to be a listed company on the stock exchange of Thailand. Meanwhile, Interviewee 7 said the maximum rate of return cannot be easily achieved by evaluating the project.

*"We cannot evaluate the maximum rate of return of a project proposal; rather a better and more accurate analysis would be to go for low risk and a fair return."*  
(Interviewee 7)

Interviewee 10 supported that the company should consider risk when doing projects and not blinded in making the maximum rate of return. Interviewee 4 explained that risk should be considered from project planning stage from the decision to buy a land. Price, location must firstly be considered in order to realize that there is no risk in purchasing in order to reduce the probability of loss in the project.

Interviewee 1 said that he is satisfied to work in a sustainable environment which he is in right now. His focus is to enjoy his work rather than getting maximum profits without considering all the risks. Interviewee 2 mentioned that he watches out for risk and follow the term "*Less risk, less return*" to control the future uncertainty.

Interviewee 5 stated that his company has a risk management team to help his company to look at risk closely and forecast future risk which can impact residential real estate.

**Conclusion:** Most real estate companies should consider risk factors instead of gaining the maximum rate of return. In the current business environmental maximum rate of return is not the ideal measure of success since the real estate company is making profits and can pay dividends to shareholders. Real estate companies cannot be overly voracious and expect maximum return without looking at risks and their consequences closely. The maximum rate of return is not a main concern, but risk is. A return close to MLR of 6.75% is sufficient for some companies. The real estate company has to be very careful in doing business by hiring risk manager to look at risks closely and forecast the future risk which can impact residential real estate. The maximum rate of return of a project cannot be evaluated. However, future risk can be evaluated and analyzed to minimize the consequences by focusing on low risk and fair return projects. The real estate company should consider risk when doing their projects and not be blinded in making maximum return. All risks to the real estate's project should be considered from the project planning stage

including decision making to buy a plot of land. Price and location must be considered in order to ensure that there is no risk in purchasing in order to reduce the probability of loss in the project. One should be satisfied with the environment which one is working in instead of focusing on maximum profits. The term “Less risk, less return” is a motto which real estate company can follow in order to control the future uncertainty.

**Question: 12** *lastly, do you wish to add any thoughts or additional information to make Thai residential real estate become more competitive?*

**Analysis:** Interviewee 10 suggested that the government should implement laws to solve core issues of construction and labor supply which are linked to the real estate industry. Interviewee 6 suggested that real estate developers should focus on making mega project or dream town and the government should improve city planning to create better zoning for residential area according to EIA. Interviewee 8 forecasted that the price of condominiums will increase as people desire to live in the city. Interviewee 1 also agreed with Interviewee 8 that condominium will continue to be the leading product in demand..

*“...more demand from consumers. Condominiums can be owned by foreigner and will be attractive to foreign investors who would choose to live in Thailand...”*  
(Interviewee 8)

Interviewee 8 mentioned that there will be more demands in condominiums as foreigners can buy condominiums; the introduction of AEC 2015 will attract more foreign investors from neighboring countries.

Interviewee 7 said government should allow foreigners to invest more in the real estate to boost the economy such as buying land. Interviewee 2 stated that the residential real estate is very competitive as all are fighting in the same market share.

Interviewee 7 suggested that the government reduce their tightening on regulations regarding foreign investment in Thailand’s real estate industry.

*“...create sincerity and trust to customers. We want to deliver good quality products and with their trust...Thailand residential real estate will gain respect dignity and we should be proud of it. We don’t want foreigner to say that real estate development standards are poor...”* (Interviewee 3)

Interviewee 3 suggested that real estate developers should offer strive to gain the trust of customers by offering quality product to them. Thailand real estate developers should maintain their dignity to foreign investors and gain praises instead of being known as a poor developing country. In addition, Interviewee 4 recommended that real estate developers should provide quality product and be ethical. Quality product lasts longer.

*“The current situation of Thai real estate market is that there are much corruption in the government agencies.. Also, the law of city planning is too complicated. I hope we the government will support one stop service with a timeframe of 30 days as real estate companies have to contact with at least 10 government departments and local agencies in order to have an approval of residential project approval...”(Interviewee 5)*

Interview 5 suggested that the AEC will attract foreign investors from neighboring countries and the government should close loopholes so there will be lesser corruptions from government agencies.

**Conclusion:** The government should implement laws to solve core issues of construction and labor supply especially those linked to the real estate industry. Real estate developers should focus on making mega project or dream towns and the government should improve city planning to create better zoning for residential areas based in EIA guideline. The price of condominiums will increase as people desire to live in the city. There will be more demands in condominiums as foreigners can buy condominiums. The introduction of AEC 2015 will attract more foreign investors from neighboring countries. The government should allow foreigners to invest more in the real estate to boost the economy such as buying land. The residential real estate is very competitive as all are fighting in the same market share. The government should reduce their tightening on regulations regarding foreign investment in Thailand’s real estate industry. Real estate developers should be sincere and offer good quality products to customers. Therefore Thailand can maintain their fame as a reliable and stable market. Thailand real estate developers should maintain their dignity to foreign investors and receive phrase instead of being known as a poor developing country. In addition, the real estate developers should provide quality and be ethical. Given the quality of product, the product can last very long. The current

situation of Thai real estate market is that there are many corruptions. Also, the law of city planning is too complicated. The government should offer one stop service with timeframe of 30 days as real estate companies have to contact at least 10 government department and local agencies in order to have an approval of residential project. The AEC will attract foreign investors from neighboring countries and the government should close loops holes so there will be lesser corruptions from government agencies.



## **CHAPTER 5**

### **SUMMARY, RECOMMENDATION AND CONCLUSION**

#### **5.1 Summary & Conclusion**

The purpose of this study is to determine global risks that impact newcomers in the real estate industry in Bangkok and vicinity. This thesis considers the top 10 global risks that can affect the residential real estate business. To eliminate the potential impacts of global risks, the real estate industry needs to consider important factors and issues facing it.

From the point of view of this thesis, economic crisis is considered the most important risk than all other global risk types according to most Interviewees. The overall economic crisis around the world can have a direct and an indirect effect on residential real estate because the sales and revenues of many developers depend on the wellbeing of the Small and Medium Size Enterprises (SMEs). The SME sector is considered one of the backbones of the Thai economy as many companies in this category employ a large workforce who makes up the middle class. SMEs are mostly exporters and when the level of exports drops, then people's purchasing power will also drop as could be seen during the Hamburger crisis in 2007, when the banks in the US and Thailand tightened loans and curtailed credit extension. Owners and employees could suffer during a decline of exports which could delay their decisions to make big items purchases such as a house or a residential property (condominiums, townhomes, or single houses).

Interest rate fluctuation is a risk that can affect residential real estate businesses directly. A high interest rate is certainly not favorable to real estate businesses as the project owners would have to pay higher cost and consumers would delay their purchasing decision due to higher cost of loans. Additionally, the European credit crisis has impacted the number of Europeans coming over to Thailand or funds flowing to Thailand from Europe. Usually many European investors especially Scandinavians, travel to live in Thailand during the winter season which boasted business investment and individual investment in real estate. Moreover, Thai exports also were drastically affected.

With regards to the political problem in Ukraine, which pitted the Europeans against the Russians, it has created fear in the world community. The fear has spread all around the globe creating loss of confidence in the real estate market. This global risk issue can have contagion effect on Thailand residential real estate industry. The political situation overseas as well as local can impact fund flows from foreign countries to invest in real estate in Thailand.

Practically, all the interviewees have confirmed that the flood crisis of 2011 has created a new mind set among property buyers, the government as well as other agencies. Many householders, factories, and businesses have suffered huge losses during the disaster. This was one of the worst disasters in Thailand's history. Even the tsunami destruction in 2004 was not comparable to the 2011 flood crisis in terms of monetary value. So, a flight to safety consumer attitude still prevails.

According to all interviewees, water scarcity is not a main issue in Bangkok and vicinity. Operators in Bangkok and vicinity do not have to reserve water as operators in the Eastern seaboard region where developers are required to reserve water in tanks for their projects (Interviewee 4). Water scarcity is an issue in the provinces, a number of islands, and resorts (Interviewee 2, 3 and 10). The North Eastern region of Thailand frequently suffers from drought which mostly affects the agriculture sector rather than the real estate sector (Interviewee 4). However, climate change is an issue to real estate operators because Thailand weather conditions have changed as there are more extreme conditions, such as extreme storms which could cause huge destruction to projects. This implies that residential projects must be studied and well-constructed.

As stated by the interviewees in Chapter 4, unemployment is not an issue to Thai residential real estate sector as the rate of unemployment is low in Thailand compared to other countries. By contrast, Thai residential real estate industry may face a shortage of labor in the near future due to many new government infrastructure projects coming on stream in 2015. Thailand residential real estate depends on neighboring countries for the supply of labor but policies to facilitate the import of labor have not been forthcoming.

From the interviewees' perspective in Chapter 4 and the literature in Chapter 2, the greatest impact of local political crisis was delayed buying decision by

consumers due to uncertainty which causes sales in residential real estate to drop (Bank of Thailand, 2012). Construction works also usually gets bogged down due to delay of government permit or licensing approvals during times of social upheaval as was the case in past street rallies in Bangkok.

Also, the issue of most concern about global risk to the residential real estate industry is the state of the global economy, which is closely linked with financial shocks, interest rates, exchange rate risk, and oil price. Political turmoil in Thailand would be the second concern within Thailand according to the interviewees. While water scarcity is found not to be a major issue in the Thai residential real estate, except for the agriculture sector in the north eastern part of Thailand.

It is not surprising that some of the real estate developers hope that the government will provide the stimulus to the real estate business due to the current political situation and economic condition. One of the ways suggested by the interviewees is to reduce the property transfer fee which currently stands at 2.5 percent compared to 0.01 percent in the past after the Asian crisis in 1997. The current perception among real estate industry is that the government has not done much to boost the sector. Another perception is that the government should have given priority to first home purchase than to first car purchase. Those consumers who have already purchased car do not have fund available to purchase residential houses as they are already in debts. In addition, the impact of labor force shortage in the future will come from government's infrastructure mega projects in the coming years. Competition for labor will increase; therefore wage rate is expected to increase the cost for real estate developers. This has a policy implication for the government to solve the coming labor shortage in order to improve sustainability of the industry.

Under the current state of nation, real estate operators need to carefully weigh and assess the potential impacts all the above risks to their industry both at macro and micro level on their companies in order to survive and prosper. Tools are available to be used including experts in risk management. For future detection of opportunities or threats (vis a vis risks) a competent R&D team would be indispensable. Innovative operators, adopting the green technology, have much room to differentiate themselves from competitors. Nevertheless, financial strength would ultimately override all other factors, so new operators and veteran operators for the matter must be sure of the

backing of a strong financial source before even thinking of participatory in the real estate business. Management could also use the F I M M A model mentioned in Chapter 2 to efficiently manage risks in case of economic crisis.

## **5.2 Discussion**

The viewpoint of 8 interviewees (Interviewees 1,2,3,4,5,6,7 and 8) including the literatures review have considered economic crisis to be the most serious global risk to the Thai's residential real estate business. This viewpoint is also supported by Hjelmgard (2014) who identified that fiscal crisis is the issue of most concern as the developing nations' credit growth in the past has increased quickly which ultimately affected the worldwide financial industry because most financial transactions in developing countries are linked to those in developed countries. Additionally, Hjelmgard (2014) explained that any financial crisis in a developed country could cause a global impact to the developing countries. Seven interviewees also supported the idea that the economic crisis in any part of the world can affect Thai's residential real estate (Interviewees 1, 2, 3, 4, 5, 6, and 9). According to Lucintel Consulting and Marketing Research (2012), the major drivers of Thai economy were high exports with business friendly policies, focusing on liberalization and free trade. Jitsuchon and Chalongphob (2009) had the same opinion which is shared with Interviewees 4 and 5 who stated that Thailand is mostly reliant on exports services and goods. Consequently, the economic crisis in US or Europe can affect worldwide economy and cause Thai's exports to drop. Employee and employers in exporting countries could possibly reduce their spending if their exports are affected and this in turn could impact on the real estate business in Thailand. In addition, Jitsuchon and Chalongphob (2009) claimed that loans to housing buyers and residential real estate developers from the financial institutions have been tightened, which is similar to the view of Interviewee 1 who believed that banks had tightened lending to real estate companies which consequently made it more difficult for customers and developers to obtain loans after the Hamburger crisis. Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011) also suggested that financial institutions can increase loans during any economic crisis to real estate companies. According to Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011), the interest rate might

increase during the economic crisis and the buyers may postpone their real estate purchasing. The threat for real estate developers are the possibility that the financial industries might stop giving further loans to buyers and project owners during the economic crisis. The risk during economic crisis is that the project owner may not be able to pay loan on time. The financial institution's interest rate can be increased and this can affect the real estate company as the cost of project would increase more during any economic crisis. Therefore, the real estate companies can be sued if the company cannot sell their projects on time.

On the contrary, 2 interviewees (Interviewee 9 and 10) pointed out that political instability is considered the most critical global risk issue for newcomers in the Thai real estate industry with regards to Thailand's residential real estate situation. Similarly, Kritayanavej (2009) also mentioned that domestic political crisis has caused a decline in the export sector. According to the Global Property Guide (2009), the report similarly supported the view that Thailand's political crisis had caused low confidence in buyers causing residential property prices in Thailand to drop further in 2009 since the government was overthrown by the military in 2006. While World Economic Forum (2014) categorized profound political/social instability to be the 10<sup>th</sup> of most concerning issue of global risk.

According to World Economic Forum (2014), unemployment and underemployment are the second most troubling issue on global risk. To Thailand residential real estate sector, unemployment is not an issue as all interviewees shared a common view that sector may face a shortage of labour. Thailand's overall rate of unemployment is relatively low compared to other countries. Developers expect Thai residential real estate industry to face a shortage of labour in the near future due to the many new government infrastructure projects coming on stream in 2015. Thailand residential real estate depends on neighbouring countries for the supply of labour, but policies to facilitate the import of labour has not been forthcoming.

World Economic Forum (2014) categorized water crisis as the third most serious problem of global risk. Chloe (2013) suggested that projects in areas facing water shortages could face a decline in price and possibly losses on investment. Consequently, property developers should look at the location of their projects more closely when they plan to invest in an area. Chloe (2013) advised that investment in

residential projects in drought prone sites could be prohibited in the future. Projects in Bangkok and vicinity do not face such issue according to most interviewees.

The fourth most serious issue of global risk according to World Economic Forum (2014) is severe income disparity. However, Mitrchob et al. (2012) mentioned that the issue of Thailand's income disparity is considered of lesser importance in the recent 5 years as a result of higher minimum wages for workers. The quality of life of the people is better in general as people are more satisfied with their jobs security. In addition, Bird et al. (2011) stated that the rate of poverty has continued to drop, from approximately 33 percent in 1988 to 9.0 percent in 2008. When compared to other middle-income nations, Thailand's poverty rate is considered low.

With regard to climate change, the World Economic Forum (2014) has selected it as the 5<sup>th</sup> most serious problem of global risk. The Global Climate Risk Index for 1992-2011 shows that developing countries are more prone to climate change than developed countries (Harmeling & Eckstein, 2013). On the same climate issue, Ngoenchuklin (2014, p. 61) stated that the weather in Thailand is humid and extremely warm with an average temperature of approximately thirty degree Celsius to thirty five degree Celsius, and sometimes reaching forty degree Celsius during the summer. She also pointed out that the majority of residential units in Thailand do not have suitable insulation to cope with the extremely hot weather. Even though many residential projects are equipped with air conditioning, it cannot help to reduce the heat in the building and the electric bills can be exceedingly high during the extreme weather. She suggested that prefabrication can help to save energy. Similarly, two interviewees (1 and 2) also confirmed that climate change is an issue. According to interviewee 2, the weather of Thailand is hotter than normal during summer and she suggested that the company should use sanitary ware that consumed less water to save utility bills for customers.

The sixth most serious issue of global risk on the World Economic Forum (2014) list is extreme weather events such as storms, fires, and flood. Regarding Thailand's situation, Harmeling and Eckstein (2013) analyzed and concluded that Thailand was one of the countries most affected in 2011 due to the impact of flooding from climate change. Almost half of the interviewees mentioned that the 2011 flooding had affected their residential projects (Interviewees 1, 4, 5 and 6), while all

10 interviewees implied that customers had become more cautious and selective about purchasing residential property in Bangkok and vicinity especially in flood prone area. This idea is also supported by the viewpoint of 7 interviewees who suggested that the government should invest and build better infrastructure to manage discharging of flood water (Interviewees 2, 4, 5, 7, 8, 9, and 10).

According to the study of Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011), the top 10 real estate companies studied are found to have reduced their prices of units during economic crisis. They also liquidated their current assets in order to facilitate their company's liquidity. They boosted their income by developing projects to meet the needs of customers and by differentiating from their competitors. They built readymade houses to create positive first impression to customers. Each company has its own product positioning which is clear by using marketing strategy to analyze customer's need and their behaviours in order to create branding that is well known among customers in Bangkok and vicinities. Many companies choose to build their projects near to the public utilities with design to meet their customers' preferences. They set up a design centre to find new selling channels. Interviewee 1, 2, 9, and 10 suggested that newcomers should focus on product differentiation and innovation in order to survive and compete with the established brands. Interviewee 2 suggested controlling the cost of marketing which is similar to Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011). While Interviewee 4 and 9 recommended that the newcomers should focus on quality than on quantity which is similar to the research of Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011). In the same manner to Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011), Interviewee 5 also suggested that a real estate company or newcomer should focus on branding their projects to capitalize on the opportunity of AEC in 2015 and to hire professionals such as risk managers and marketing managers to give advice on the potential risk and marketing cost which could affect the newcomers in the residential real estate business.

In line with the previous research by Ittisak Chutimaworaphan and Nattaphan Kecharananta (2011), all interviewees said they have considered risks in all their projects. Most of the 10 interviewees considered risks factors instead of gaining maximum rate of return. Interviewee 2 and Interviewee 5 suggested the concept "Less

risk, less return” to control the future uncertainty. Interviewee 4 emphasized that the risk should be considered from project planning stage starting from the decision to buy a land plot. Price and location must be considered first in order to reduce the probability of a loss in the project. This also revealed that newcomers with different types of housing projects are no different in their views with regard to risk issues.

Tikul and Srichardr (2007) recommended that property development should consider eco-design concepts in their building design. According to data from a survey made by Zhang et al. (2011), the top barrier in building green technology in real estate development is financial cost. The cost of green building is three to four percent more than the regular cost of normal building. The two major barriers to develop green building are (1) lack of interest from customers and lack of effort to implement appropriate policies. There was only one interviewee who actually adopts the green technology and follows the EIA's guidelines (Interviewee 6). According to Interviewee 6, the cost of a green project would be approximately 3.5 percent more than a conventional one if its construction is properly planned from the initial stage of the project. He also suggested the project value can be added through green project. Stavon (n.d.) stated that many developers avoided EIA by choosing to launch smaller projects as they do not want to waste time and money. They are reluctant to meet the needs of buyers who want to invest in green projects. The other four interviewees (Interviewee 1, 3, 4 and 9) also agreed that the cost of green building is expensive. In contrast, Krechowicz et al. (2010) pointed out that investments on green technology can lower the impact of operational risk and ensure a higher return of investment which can be passed on to their customers. For instance, real estate developer can reduce their buildings' long run cost by using green technology such as solar energy for electricity and heating, or water harvesting from rain. The idea of using solar energy is also being developed by Interviewee 5 who is in the process of trying solar system for his housing development by working with EGAT. Currently, EGAT has a program to purchase excess electricity generated from household based solar system. If a house has installed a solar system in cooperation with EGAT, the electricity generated from the house can be transferred and sold to EGAT, which can reduce the cost of electricity for the owners in the long term.

The effects of globalization on real estate studied by Keivani (2010) found

globalization to be an important means of stimulating the prices of land and properties in a country as the world becomes more integrated. In addition, the prices of properties tend to increase if foreign investors choose to purchase properties outside the central area. Laurin et al. (2010) shares similar idea by stating that foreign direct investments inflow has a positive impact on the price of property, but the evaluation of country risk needs to be done properly. Similarly, a report from CBRE Global investors (2014) suggested that the economic growth in the Asia Pacific region has reinforced tenant demand in the commercial sector. With regard to Thailand's residential real estate outlook and policy, half of the interviewees (2, 4, 7, 8, and 10) believed that the government needs to focus more on making policies to stimulate the real estate industry. (Interviewee 7) suggested that the government should allow foreigners to buy land.

In addition, Interviewee 6 and Interviewee 5 shared similar idea regarding the problem of real estate management by the juristic regulations because there are loopholes in the Thai juristic management regulations, which create unfair situations among unit owners. In Thailand, all housing developments and condominiums require unit owners to pay management fee. However, certain owners choose to avoid the fee. According to the current juristic regulations, owners can wait to pay the fee without any fine resulting in some unit owners paying the outstanding fee only when they decide to sell their properties. The current juristic management regulations have allowed unit owners to become reluctant to pay the management fee. Correspondingly, Cherdsak Soisuwan (2005) suggested that the condominiums which are managed by foreign companies are likely to attract more buyers for investment as the quality of the buildings are high compared to condominiums that are managed by Thai companies. Most of the units in these condos are for foreign rentals rather than unit buyers as they are better financially managed as well as staffed with experienced and better qualified employees than their Thai counterparts.

### **5.3 Advice to Thai Residential Real Estate Newcomers**

Newcomers should be aware that the Thai residential real estate is not immune from global risks because of globalization. Almost every country can feel the effect of global risk and this has become a paradigm. The important step in doing real estate

business is to reduce the risk exposure to the company. This can be achieved with proper planning from the very beginning of any project undertaking. This implies that the newcomers must be very familiar with the market which they plan to target their project from the stage of land acquisition to project completion. Every expense should be accounted for to evaluate risk and return and then compared with the company risk taking appetite. R&D can be a powerful tool to solve this problem. R&D has a very important role in market research, paying particular attention to customers' needs and satisfactions. Hiring risk manager is another way to mitigate exposure to risk. In real estate business, marketing has a very responsible function to attract customers or buyers. Cost of management and marketing and promotion should all be tightly controlled, especially of marketing because not all promotional tools would give satisfactory result.

Newcomers should have strong financial backup before entering the real estate business in Thailand. The best is to start a business with a very strong financial standing which enable newcomers to operate for 2 years or more without significant income. Real estate developers should have their own internally generated working capital rather than rely on lending or borrowing from the bank. Instead of working alone, some can bring new partners in to inject new capital, but being able to control the operation. Another way is to work together on joint venture basis in order to avoid the interest rate risk or liquidity problem. Therefore the newcomer might need to work on partnership or joint venture if capital is insufficient. Foreign newcomers can opt to form joint ventures or look for local partners so they can benefit from local know how and connection. Newcomers, especially foreigners must get acquainted with the Thai business culture. The best option for foreign companies to work in Thailand is to find a local business partner and work in a partnership or as a joint venture. On the other hand, the local newcomers should merge with strong partners to co-invest. Newcomers must maintain their credibility with customers and financial institutions in order to create sustainable relationship. The reputation of business newcomers must be maintained from the very beginning of business operation because word of mouth news can spread your reputation for good or bad very quickly. In real estate business, marketing has a very responsible function to attract customers or buyers. The cost of

management and marketing and promotion should all be tightly controlled because not all promotional tools would give satisfactory result.

Middle income group with a net income of 50,000 baht and up is the best target for newcomers to focus on as this group can easily afford to buy residential housing and condominiums, priced in the range of 3,000,000-4,000,000 baht. This may take approximately 25 years for a customer to finish paying up his mortgage. In contrast, the lower target group with an average net monthly income 30,000 baht can afford to buy a house of 1,000,000-2,000,000 baht. Meanwhile, a net income earner of 70,000 baht per month can also afford to pay for a unit of around 4,000,000-6,000,000 baht. The number of years can be known by assuming that 30% of a buyer's net income would be paid to the bank for his mortgage.

A case example of a unit sale estimate:

Net income = 50,000

Monthly mortgage payment = 30% of NI

Condominium price (Single Unit) = 4 Million Baht

Average Pay Back Time = 25 years

Monthly Payment =  $0.3 \times 50,000 = 15,000$

With an income of 50,000, a customer can easily afford to pay 15,000 baht every month to buy a residential housing or project, assuming that the buyer does not have any other heavy obligation.

Newcomers should focus to develop smaller projects because the attractive land within the city limit can still be acquired and these can be developed and sold easily. The CBD is currently saturated. Newcomers should look at potential project sites in areas such as area along Pattanakarn, Bearing, Rattanatibhet, Jangwattana, Bang Khae, Bangna where there are still land plots available at acceptable prices. Moreover, marketing and promotional cost will be manageable, especially those in good locations, near the mass transit lines. In order to compete with established real estate companies, newcomers should set their prices lower than established competitors' products, even though the quality of their product is similar to established companies' products. Newcomers will face problem of economy of scale in residential real estate. The established real estate companies are able to receive better deals from banks with their long-term credibility, while the newcomers will face learning curve effect,

except a foreign company which is already experienced. However, all real estate companies face similar corporate tax of 15 to 20 percent. Newcomers should target to sell their housing products or condominiums at 20-30 percent cheaper than the product of established real estate companies. Penetrating pricing strategy should be adopted. The product should be differentiated from those of the competitors by using green technology in their construction. The prices of green projects would normally be 3-5 percent higher than conventional projects if a developer decides to invest from initial planning stage. By contrast, if the newcomers decide to develop green technology later in the construction stage, the cost would be 7-10 percent higher than conventional projects. The real estate newcomers can add value to their product and charge at higher price if they decide to develop green technology.

In order to prepare for future flood disaster, developers or projects in areas prone to flooding should make the plot of land for the housing project should be raised adequately. They should also consider creating “flood walls” or reservoirs around their projects.

#### **5.4 Recommendation for further Research**

This research is a qualitative research based on thematic qualitative analysis which could be biased or incomplete, even though this research is exhaustive and quite comprehensive but it may lack certain analysis from consumer's point of view regarding the impact of global risk in Thailand residential real estate. Therefore the researcher suggests that more research should be done in finding information regarding the consumers' preference and perspective in order to have a more complete two sides of the residential real estate industry of supply and demand side. Therefore, the market players can learn to adapt to changing trends and consumers behavior. In addition, more research should be done on regulatory body to promote beneficial policies for residential sector. The researcher also suggests that the impact of labor shortage in the residential real estate industry should be done in order to look for other sources such as importing more immigrants' workers to match the rising demands in the industry or how the shortage of labor will impact construction method by studying whether prefabrication is worthwhile in cost saving, construction time, and durability compared to the traditional labor intensive construction type.

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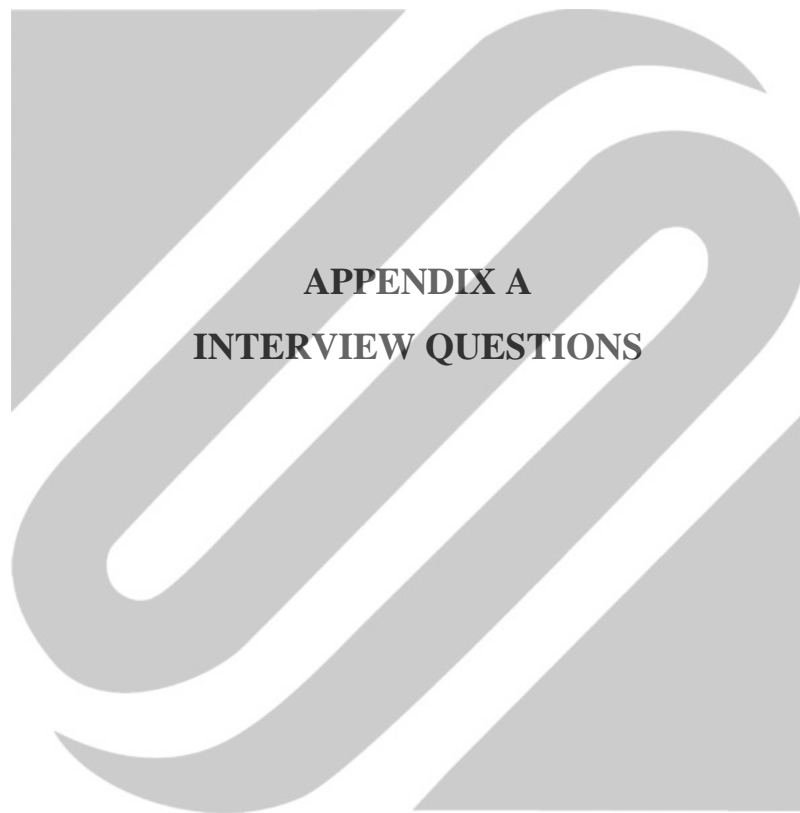
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**APPENDIX A**  
**INTERVIEW QUESTIONS**

## **Interview questions Global Risk that Impact Newcomers in the Real Estate Industry. Case Study: Thailand Residential Real Estate**

1. In your view, how do global risks affect newcomers in the Thai residential real estate? In your view, which factor is the most important problem?

2. In your view, how did the 2011 flood disaster affect the Thai residential real estate company? Can you please suggest ways to reduce the future impact of flood disaster to Thai residential real estate?

3. In your vision, does the recent political instability affect the sale or construction of your company? Why and Why not? Please suggest ways to reduce the impact of political instability to Thailand's residential real estate in future.

4. How can newcomers in residential real estate be prepared for the future impact of global risk? (Please consider the problems of economic crisis in any part of the world which can affect Thailand's residential real estate.)

5. Water scarcity is considered one of the top concerning problems in global risk. Can you suggest ways to prepare for water scarcity and climate change in the Thai residential real estate in future? Does the problem of water scarcity and climate change affect your company? Why and Why not?

6. In your estimation, can you give specific ways to reduce global risk that may pose a threat in the Thai residential real estate projects in terms of unemployment and income disparity? Do the problems of unemployment and income disparity affect your company? Why and Why not?

7. In your view, how can newcomers in Thai residential real estate improve on their risk management in order to become more competitive advantage in terms of entry, construction, revenue and profits? Please describe the risks and suggest ways to become competitive advantage by considering the social, technological, economic/environment, and political.

8. In your vision, can the newcomers in the Thai residential real estate create sustainability real estate project or green building? Why and Why not? Are you aware of the green technology?

9. What is your outlook on Thai residential real estate policy and how do you think it can be improved in order to respond to the impact of global risk and create a competitive advantage of Thailand's residential real estate business in future?

10. In your view, what do you think the situation of Thailand's residential of real estate would be for the next 5-15 years from now? How would the situation be different from now?

11. Does your company require a maximum return from investment without considering on risks in each project? Why and Why not?

12. Lastly, do you wish to add any thoughts or additional information to make Thai residential real estate become more competitive?



Q	Interviewee 1's Answer
1.	Economic crisis is the most critical problem, especially the impact of interest rate. The residential real estate will be affected as it will be more difficult since the consumers will not able to borrow money easily. Since the Hamburger Crisis, banks have tightened lending to real estate. It is more difficult for customers and developers to obtain loans now. Therefore, developers have to rely on financing themselves instead of borrowing money from the bank. For example, some developers may find partner to run the project together. However, one must maintain the power in management.
2.	The recent flood tremendously affected the vicinity area of Bangkok, especially Nonthaburi and Phratum Thani. We estimated that the effect of the flood disaster would take approximately 1-2 years. Condominiums became popular in Bangkok and vicinity area. We never have so many condominiums in Bangkok's vicinity area. Since the completion of MRT purple, there are many condominium projects around to the MRT. Our price dropped around 10% after the impact of flood. It took us 6-8 months to recover our sales. The projects which are in the flooding zone should be alert and cautious more than before. The cost of houses in the flooding area is increased by 5 percent. The level of the ground has to be adjusted to be higher to avoid future disaster. The level of first floor should be higher than during the crisis. We need a strong wall with <u>concrete around the project to make our buyers feel comfortable.</u>
3.	The residential real estate also affected the Thai residential real estate due to the problems anti-protestors. We are hoping for a new policy to support business. The regulations that are implemented by the current government are not for business people. We are looking forward for a decrease in tax, or transfer fee, better interest rate for loans. To avoid future political, we might want to invest more in the inner area of Bangkok. Some of the good locations that I am doing now are Ratanatibet, Jangwatana, Pattanakam, Bang Kae, Ramindra, and Barring. I do not focus in making big project housing. We only make 50-70-100 units, therefore we can still find land in the inner area of Bangkok as our project require small area of land.
4.	Newcomers should be very conservative and ready in term of money for investment. As for now, it is not easy for the newcomers as we do not get loans easily like before since the Hamburger Crisis. Banks have tightened regulations on pre and pos loans. Newcomers need to be more professional in their management by experts who able to handle problems and manage the uncertainty efficiently.
5.	I do not really see the problem of water scarcity. I see the problems of climate change with extremely storm. We have received many requests to fix the roofs. Small projects can't really work on water recycle system as it is very expensive.
6.	The problem of unemployment is very low. I do not find the problem of unemployment as really a problem. The unemployment problem will be for those who sell houses that are cheap. We are selling at a relatively high price. Therefore we do not really face this problem. Our main concern is finding labor.
7.	New comers need to be prepared their financial efficiently as the cost is very high. The possibility of profits in this industry is approximately 10-15 percent. For example, the cost of construction can be fixed since the beginning of project. At the moment, our company manages our own marketing and we could do very well. New comers have to be careful in marketing expenses, as some of the projects we did marketing but did not receive good response. Our marketing channels are billboards, events, and internet. We prepare our sale team with materials to meet our target.
8.	I know about the green building. However, the cost is very expensive. I use some of the materials such as glass to protect the hot heat in some of my projects.
9.	The current policy for juristic management in the past 3-4 years is better. However, we do not have a solid punishment (not too harsh punishment) to those who avoid paying the management fee as they would decide to pay only when want to sell their property.
10.	In future, the environment, city planning, housing development, and management should be better. There will be more products in the market. In particular, there will be more condominiums as people would want to live in condominium which <u>is closed by to their office or school. The price of oil will be increased much more than today.</u>
11.	Risks are always our main concern. I have proposal to consider of going stock market. However, I am still deciding with my partners whether we should go on stock market. We should consider all types of factors before doing anything as there are consequences in any decision. I am happy where my company is right now. I look forward to work in a sustainable <u>environment which I am currently satisfied with what I have got today.</u>
12.	Condominium is continued to be the leading product in residential real estate.

Q	Interviewee 3's Answer
1.	The issue affecting new comers in Thai residential real estate begins from the economic problem. The current condition of Thailand's economy generally is not an upside. Basic construction materials and land has gone up ahead of line without the real demand. So if there is no big improvement in the coming time or years, the market cannot hold. People will not be able to afford. Bank will not give loan. Market will be more down. We are waiting for government to make stimulus plan. The political uncertainty in Thailand seems like a honeymoon period at the moment. The coming future is unknown and nothing is happening. The government keeps tight first of everything. There is co inflation problem. Government should stimulus economy to give opportunity to SME companies so that they can improve the overall economy.
2.	The real estate company has to find their selling point such as the opportunity in flooding in this development area is less compared to other locations. People are more careful choosing the location but in general most people who were affected by the recent crisis are living normal life now so there is no threat at the moment. However, low lying area is still a threat and government has not made a concrete water management system. Our country needs concrete manage system plan that is practical.
3.	Right now it is like honeymoon period. It affects condominium projects because foreigners are reluctant. Housing is catered to local Thai people. Everyone is waiting for ASEAN 2015 to open up. People look forward to that. Political situation take it as it comes. Now it's honeymoon period. There is no way to avoid and accept the risk as nobody can control. Monetary policy is more concerning than political issues. The most important thing is monetary policy of Thailand. Thai people are used to political instability situation.
4.	Crisis in any part of the world will affect Thailand due to globalization. Newcomers are expected to have new product at lower price than established one in bad time. They can have something that is differentiated than established ones. New comers are tired. Newcomers sell 20-30% cheaper than established one like Sansiri even same quality. People are reluctant to take the risk with newcomers. All the deals have to make them comfortable with the new comers.
5.	People do not apprehend that there is a problem in Thailand residential market except for the few islands which face problem with fresh water problem. You can improve the situation by using the products that consume less water in sanitation. Agriculture faces water scarcity. During the summer season, the hot became hotter. The product in construction should be better insulation and also designed a good flow of nature air without having to use air-conditions all the time.
6.	According to the past experiences, Thailand's disparity income has been increasing. While the poor becomes poorer, the rich becomes even richer. The current situation of Thailand's agriculture is at its worst. Price of community is down. There is less new middle income people, whereas the one who can affords to purchase residential real estate are the middle income people. The amount of middle income people are not increasing as much as it should be. Change of business from lower income people to middle income people. Our company caters upper middle income and foreigners therefore we do not face the problems of unemployment rate or income disparity. Thailand's employment in general is not a crisis as Thailand requires labor from neighbors' countries. There is still demand for labor. Economy crisis in European market is in its down trend. This affects overall market in Thailand and neighboring countries.
7.	Newcomers have to go out of their way to make buyers comfortable in investing. Products must be comparable and better than established one to make buyers see the different. Newcomers have to educate customers about their selling product about their product differentiation. First thing construction cost is higher than established one. They have to trim their management expense at. Newcomer must utilize the cost of marketing efficiently and make it the most worthwhile. In general if general economy is better, real estate also will be better as well.
8.	The real estate market has been up over 10 years. Therefore we have to watch out for the bottom side of market such as last year stagnation on political crisis market did not crash and slight improvement after the coup. There is up and down in real estate. In each cycle last 5-10 years. This cycle has been about 10 years and there will be some adjustment in the near future if there is no negative global impact in either war or global crisis, the adjustment will be shorter.
9.	Yes I am aware of the green technology. The newcomer can crate sustainability green building. I have seen example of Singapore company such as Fragrant group whose focus in creating green environment in every of their projects as their selling point. For example, their projects save customer electricity bills as customers can use hot water without using electricity.
10.	Government cannot reduce their tax in real estate. The range of tax in Thailand is somewhat the same if compared with neighbor countries. In general if the economy is better, real estate also will be better as well.
11.	No, my company looks at risk closely and the future uncertainty. We follow the term "Less risk, less return" to control the future of uncertainty.
12.	It is very competitive. There are so many newcomers fighting at the same market

Q	Interviewee 4's Answer
1.	Financial problem should be considered closely. For example, if there is problem in the United States, our export would be affected. SME would delay their spending and this might affect the Thai residential real estate. For example, the one who is staying in townhome and thinking of buying a house would delay their decision to purchase.
2.	We cannot control flood. Our company was affected by the flood crisis before. We have to create reservoir around the project to protect water from leaking inside the project. We have to increase our cost by adjusting the land surface to be higher, we also made the level of house on the first floor to be higher, and therefore our project at Saimai will not be affected by flood.
3.	The impact of political instability can never be controlled. It always affects real estate. Perhaps, the government should reduce the transfer fee, which allows us to build houses that consumers can buy very cheap. In 2007, government reduced the transfer fee from 2.5 percent to 0.01 percent for 203 years. We hope that government will do the same policy again.
4.	Economic crisis in America can affect real estate property as the SME sector will slow down their spending since their exports are slow. Sometimes, even the economy is at its worst, real estate property still runs. Real estate property is not really affected by the economic crisis. If there is problem in foreign countries, only financial institutions would be panic as they have invested in bonds.
5.	Thai people do not really think about water scarcity. Thai people do not seriously think of ways to reserve water. They wait till there is drought and use artesian water from artesian aquifer. Farmers do not really think of way to reserve the rain water. For example, if they seriously need water, they should buy a water jar to reserve water. For example, they should buy a water jar each year and put it all around their houses if can in order to reserve water when there is drought. Therefore, people will not face the problem of drought.
6.	Our company does not affect by unemployment rate or lack of labor. We were concerned of this issue therefore we try to make everything by ourselves. It takes us 4 months to complete a house by using 10 workers. If we really lack workers, then it might take us 6 months with 4 workers. We maintain our labor workers to efficiently develop our project. Our human resource follows Thailand's regulations. We do not overpay at the same time we do not pay too less. However, the new generation Gen X Gen Y like to change work environment to the place that is giving them better pay and better environment. We always get new employee to replace the old one who wish to resign. The ones who wish to resign would have to report us a month in advance so we have time to find a new worker. We think of us as a school to develop competent worker. If any of workers believe they can find better place, we also support them. We use prefab technology to create our house. Therefore we can minimize the use of labor force. We usually more than 40 prefabs for a house. The prefab technology is saved and can be used with middle range house. Prueksa Property also use prefab. For expensive houses, we use readymade PIS. PIS are the readymade floors for houses which help to cool down the house.
7.	Our target customer who are middle to high income with regular salary of 50,000 or up as bank would give loans to them. The ones with salary of 30,000-40,000 are not capable to ask for loans easily. Construction is the heart of real estate and quality. Newcomers should not focus of quantity. A house without quality is useless. Newcomers should have ethics and do not sell over the price. In the past, we were able to receive 200-300 percent in profit. Now the most we can receive is 30 percent, but after tax and everything we would get only 15 percent as there are many expenses. Connection and creditability is very important in doing real estate business. If you have good credibility, banks will be happy and easily give loans when you need to make a project.
8.	The reputation of project owner is very important. Housing development is relied on money sources. The newcomers need to complete the project first in order to sell since the project owner's name is not recognized by customers. It took us 9 years to create our name. For the past 2 years, we can sell our property before the completion of project. Our product is similar to land and house but we sell cheaper. The price of a house in Land and House is 20 million baht, but we are selling 7 million baht with almost the same quality. The target group of land is higher, therefore people who choose to buy house from land and are those with higher income. We facilitate loans from the banks for our clients if they have all the required documents. Some of the clients may choose to contact banks by themselves. The reputation of project owner is very important. Housing development is relied on money sources. The newcomers need to complete the project first in order to sell since the project owner's name is not recognized by customers. It took us 9 years to create our name. For the past 2 years, we can sell our property before the completion of project. Our product is similar to land and house but we sell cheaper. The price of a house in Land and House is 20 million baht, but we are selling 7 million baht with almost the same quality. The target group of land is higher, therefore people who choose to buy house from land and are those with higher income. We facilitate loans from the banks for our clients if they have all the required documents. Some of the clients may choose to contact banks by themselves.
9.	Government should be involved to stimulate the residential real estate market. However, government are not supporting as much as they should. We pay our tax regularly but we do not receive any return. The benefits are only available to their particular group.
10.	The residential real estate is still needed as 60% of Thais do not have their own houses. There are changes in technology. If the cost is cheaper, then real estate developers can "Go Green" more. In order to make condominium, there are required spaces to be green. Developers have to spend lots of money to grow trees and screen testing the pollution. As for houses, we also require to grow trees in the center area.
11.	Risk should be considered since the first decision to purchase a land. The land's location and price must be considered before purchasing. The price of land need to be considered closely to make sure that the price is reasonable and that there is no risk in buying, and to eliminate the possibility loss in the project. We have to oversee everything when land broker offer us a piece of land and the price.
12.	I want to see ethical and good quality of people and companies. Good quality product will last for long period of time and worth the investment.

Q	Interviewee 5's Answer
1.	Economic risk is the most concerning risk. Economic crisis can be the rising price of oil or falling of stock market. Residential real estate can be affected by any chain of these problems and from other countries.
2.	Two of my projects got affected by the recent flood. One of my projects is in Nonthaburi, and another one in Phrathum Thani. The water leaked inside the house but not so much. My projects are next to the main road. We never have problems of flood before as our roads are high. Therefore, the leakage of flood was very little as compared to other projects in the vicinity area. After the flood crisis, we had to adjust our ground and made it higher than the previous level to avoid any risk of future flood disaster. People still stay at their own area. It is very difficult for people who live in Nonthaburi to change their living to inner Bangkok or Chonburi. People who were affected tremendously by the flood disaster sold their house and bought our project instead. Some customers allowed the banks to take their houses as it was not worth to pay the fixing cost of 400,000-500,000 baht. Even though our project was affected by the flood for one month, we were able to sell our projects quickly as consumers see that our project was not affected by flood as much as others.
3.	Politic definitely affect the residential real estate industry in Thailand. People are uncertainty of the situation. Therefore they do not want to buy anything. Now, we are able to sell our projects, even though there were anti-government protestors. Real estate developers are waiting for new election. Currently, there is no new policy to support the business. All the policies are temporary. We do not want to be controlled by the coup like Burma or Cambodia with dictatorship. I am turning back to see myself to handle this current crisis of politic. My company does not expect that it will ease soon. We believe now is a crisis.
4.	For example, Hamburger Crisis in America. Crises in America can affect worldwide economy. In addition, the economic crisis in Europe also effect exports in Thailand and this also will hit real estate business in Thailand. For example, if export is not good, the business will not pay bonus, therefore employee might have to delay their decision in buying a new house.
5.	Currently, there is no specific law regarding retaining of water in Bangkok and vicinity area. However, in the eastern part of Thailand, especially Sri Racha, Chonburi, Sattahip, are regulated to have water tank available. Bangkok will not likely meet the problem of water scarcity as our rainy season is long. In the future of 10-20 years, I am not certain if the global warming will affect Thailand's water how. At the moment I do not see the problem concerning climate change so much.
6.	Government should see the problem of lack of labor which is likely to happen soon with Cambodia and Burma in order to bring more labors. We will not have enough labor once the government has started their mega project. The price of labor and materials will all be affected once the government starts the new infrastructure development as planned. Government need to manage materials labor which will be in shortage.
7.	Currently, Thai residential real estate has so many foreign players from China and Japan. The Chinese company TC Green from China is making mega residential project with 3-4 buildings. Not only just that, many Japanese are doing joint venture with real estate companies that are listed on the SET. This attracts many demands from customers. If the foreign developers keep flowing to Thailand, Newcomers need to focus on establishing the brand to be known. In housing project, Thai new comers should closely study the coming risks and look at it closely. Hiring a risk-management could be an option to look at possible risk that might affect the project. I look at newspaper every day and see how other developers are doing. I market my project by giving one baht gold to old customer who introduces new customer for me. I read newspaper everyday and see how other developers are doing. I market my project by giving one baht gold to old customer who introduces new customer to me. I also facilitate my project by financing 10 buses to pick up and drop residents of my project to MRT. I do not collect interest from them. On the other hand, they will advertise my project behind their van. Keeping customers satisfied is the main key as I still have many plots of lands available. Therefore, I make sure that my customers are satisfied with our services. During the recent flood crisis, I spent approximately 10 million baht to drop food and buy Mama, and dry food to people in my project as they were not able to come out due to high level of water on the main road in front of my project. We used to sell 10 houses now we can only sell 3 houses per month due to current circumstance. However, we have to survive with the situation. I get calls from reports from various newspapers regarding the current situation of Thai residential real estate. I always answer them that the effect of the situation will last till the end of next year. I look at any impact closely by having weekly meeting with employee in my company. We have to see which marketing plan we should implement to solve the current problem.
8.	We consider about green building idea. We also have invested in solar cell to put in four of our sample houses in our project. The solar cell is consisted of a meter from the Electricity Generating Authority of Thailand. It took us one year to get the meter for the solar cell from the EGAT with excuses that they were shut down by the anti-protestors and was not able to work. The price of solar cell is around 100,000 baht. According to government, we can save our expenses on electricity if we use solar cell. We will be testing whether the solar cell can actually provide 2000 baht of electricity as mentioned by the company who sold the solar cell to us.
9.	There are loop holes in residential real estate regulations which create corruption among government agencies. Government sees residential real estate owners as thieves and getting profits from customer. If we are deceivers, customers would not buy our product.
10.	In another 5-15 years, my outlook is that the coming 5 years will change a lot whether this government or new government. All the BTS and MRT will all be accessible. The price of condominium will be very expensive. People will choose to live in condominium or houses that are near to BTS or MRT instead of driving 2 hours to work. In another 10 years, people will be travelling by MRT and BTS more and the MRT
11.	We are concerned about risk. Our company hired risk manager to forecast risk for us. Therefore, we know we can be cautious when we make investment decision.
12.	The opening of AEC in 2015 will be a good opportunity to attract foreign investors to buy property in Thailand as Thailand is considered one of the leading countries with a good market-based. The current situation of Thai real estate market is that there are many corruptions. Therefore foreigner might not like to go through the problem.

Q	Interviewee 6's Answer
1.	Local demand is the internal risk. Monetary risk is the most concerning problem in real estate. The number one problem to effect real estate the most is the interest rate. For the past, real estate industry is good when the interest rate is low. During the 1997 ASEAN crisis, the baht was appreciated while the domestic interest was high. The Thai residential real estate can be affected when the dollar is strengthened and US's interest rate is low, causing our baht to be weakened with high interest rate. For the past 30 years, the growth of interest rate is approximately 5 percent every year. The effect of interest rate has very less impact and not very significant to the residential real estate industry. The impact of Thailand's export is considered another internal factor to affect the Thai residential real estate industry. The real estate industry dropped in 2013 as there was no purchasing power. Export was 60 percent while the GDP was accounted for 4 percent. In 2014, the overall GDP is approximately 2 percent causing negative to real estate industry. This year my company is better than last year as we have adjusted our product and concentrating in selling 3 million baht houses instead of 6 million baht houses. In 2011 also did not affect the residential real estate much as the effect of the problem was a shorter period. There was supposed to be problem of water scarcity in real estate of Hua Hin, however the problem has been solved by making reservoir in the area and making additional water tanks.
2.	Since the flood crisis in 2011, there is no sign of similar crisis, the GDP was -7 or -8 which lasted for only one year. This proves that our infrastructure is more concerning than the problem of flood disaster. The two provinces around Bangkok which affected by the recent flood the most are Nonthaburi and Pratum Thani. The problem of flood caused hesitancy of buyers in Nonthaburi and Pratum Thani area as the two areas were tremendously damaged and effected. As for now, the land in Nonthaburi has gained their popularity back because of the new completion of MRT purple line. On the other hand, the land in Pratum Thani is also gaining their popularity back since the red line agreement contract has been signed. Therefore, various construction projects are being built around and side the Pratum Thani area to serve the future demand. The effect of the recent flood has caused my project to create protection wall around the project area causing my company approximately 10 million baht. We had to increase the first floor level to 25 cm. which caused us 2 percent more in each house.
3.	During the anti-protestors in 2013, the political disaster has caused a slowdown in the Thai residential real estate. As a result, Thai residential real estate sales were slowed down due to 7 to 8 months of protest in Bangkok. Thai middle class were generally tolerant to the situation as they were hoping to create a new political environment. While the property business is generally strong enough to tolerate the effect of protests for 2 years long as gross margin in the real estate industry could cover to pay the cost of interest and employee's salary for 2 years.
4.	During the hamburger crisis, Thailand's property was not tremendously affected except to those who target their market for foreigners. For example, the exclusive district popular among foreigners are Sathorn Road, Sukhvit Road, and provincial provinces such as Chiangmai and Sri Racha area were used to be the main area for many Scandinavians to invest in properties. However, Scandinavians are no longer investing in Thai properties as much.
5.	In the area of Phatum Thani, there is no problem of water scarcity as there is enough water from water supply plants. During my construction, we consumed less water. Our company recycles water to water plants in the project. We make sure that our water is matched with the government's BOD requirement. We use 15 people to create a house in 6 months and their consumption of water is very less.
6.	The current situation of Thailand residential real estate is not interrupted by the lack of labor as our unemployment rate is relatively low. We can accept the minimum wage of 300 baht. Meanwhile, we continue to use foreign workers from neighbor countries. There are approximately 3,000,000 foreign workers in Thailand. In ASEAN, the countries with higher wages than Thailand are Malaysia, Brunei, and Singapore. Therefore, the unemployment factor does not affect Thailand residential real estate.
7.	Economy of scale is the factor that should be considered. The situation of Thailand residential real estate is very unfavorable to any newcomer. With economy of scale, established brands can save their marketing cost by 2 percent more than the newcomers in which the newcomers need to spend approximately percent on marketing, established brands need to spend only 2 percent. Additionally, established brand can also save their construction cost approximately 3 to percent more than the newcomers. However, we all face similar amount of tax rate of approximately 15 to 20 percent. The selling price of newcomers should be 20 to 30 percent lesser than established brand. Newcomers really need to cut their selling price to compete with established brands. My company target customer with an income of 50,000 baht. MY project which sells the most is in the range of 2,900,000-3,000,000 baht. The 6,000,000 baht project is slow.
8.	My company follows the guidelines of green building project eco village and receives prizes for this. If we initially plan since the beginning, our construction cost is about 3.5 percent more than regular housing development project. On the other hand, if we did not initially plan for green building since the beginning, the cost of project would be 7-10 percent more than normal housing development project. However, we plan to create green building project since the initial of planning as we want to differentiate our project from others. Therefore, we follow regulations of EIA. It is not too difficult for us to follow the regulations required by EIA. The EIA require us to consider various aspects of energy and environment conditions during our
9.	Seeing each country's infrastructure, Thailand residential project should excessively be improved on its city planning which has already excessively been misused. The current arrangements of city planning are seemingly mixed together and each infrastructure is closely located to one another. For instance,
10.	There would be many "mini urbanizations" in Bangkok and CBD or Central Business District. There will be many downtowns in the cities that are closely located to Thailand's border and these areas will turn to residential areas and business districts. There will be many downtown locations in the provinces near to border of Thailand. Some of the examples of the main provinces which are closely to border are Chiangmai and Nakorn Ratchasima. Therefore,
11.	The current real estate company can pay dividend or premium, price of 6% to 7% to shareholders and they are happy, therefore maximum return is not the main factor for property industry.
12.	I want the future of real estate to focus on turning an area to a mega project. I feel ashamed that the mega project such as Mueng Thong Thani and Sarin City were not successful. I do not want this idea to stop. I seriously hope and believe in creating a dream town. I hope government would take this issue seriously and support the idea. Bangkok will be a better place to live. As for now, the land in central area of Bangkok is being used to make condominiums. Whoever has land, they would turn the place into a condominium project. People will have less access to less green space if there are too many condominium buildings. Therefore, government should seriously create a better city planning in order to restrict zoning for residential area according to EIA. f there are too many continuum buildings. For example, government should give benefit to developers who focus on creating energy saving project.

<b>Interviewee 7's Answer</b>	
Q	
1.	Economic crisis certainly has an impact. The real estate industry is heavily affected because if the economy has a problem, it leads to severe problems to this industry too. Spending power and investment ability comes from a strong, stable economy.
2.	The flood disaster had a huge effect on the real estate industry as people do not want to purchase land or property that has risk of flooding. The government needs to play a significant role in minimizing this disaster so that the future does not repeat itself again.
3.	The political instability can hurt the real estate industry and it is a good idea to always be prepared for such cases. We can use our knowledge of the market to help us minimize the possible risks that can hurt our investments.
4.	We need to create a good product for investors and this includes increasing the quality on offer so that we can attract investments from expatriates and even foreigners living in other countries.
5.	The location of the real estate is highly important and there are many factors that can help create attractive features such as being near shopping centers and business areas. In places where the location is far from the central Bangkok such as up in the mountains there may be restrictions to access to water and natural resources etc. We need to analyze the area well before making the investment.
6.	The unemployment and income disparity can affect the real estate industry however this depends on which market we are targeting. Real estate developers may target the rich businessmen and foreign expats and so the income disparity will not hurt them. For those developers targeting the middle to lower income residents, this may be an issue.
7.	There are many instruments that can help us to create a better more accurate analysis. Market research and consumer analysis can help us to be competitive and develop a product which the market desires. In my opinion, the problem of the product itself is very minor.
8.	The management of real estate needs to take into consideration the innovative green technology because many wealth owners are quite conservative and they want to be environmentally friendly. The middle to lower income citizens may not care too much about this issue.
9.	I believe that there needs to be an allowance for foreigners and expats to buy the real estate of Thailand because their investments can help to strengthen our economy as well as our industry. Thailand is doing itself a disservice by not allowing foreigners to obtain similar purchasing rights as the local people.
10.	I believe that next year with the incoming AEC the real estate industry of Thailand will improve since the country is in an attractive location and has a very strong appeal to foreigners
11.	We can not evaluate the maximum return of a project proposal, rather a better and more accurate analysis would be to study the low risk and fair return
12.	My recommendation is for the Thai government to open up their real estate and properties to foreigners for investment. I believe that their investments will boost our economy as well as make our industry much more competitive.
<b>Interviewee 8's Answer</b>	
Q	
1.	I do think the global risk affects the Thai residential real estate, in my opinion the most important effect is economic crisis as consumers will slow down their purchasing decision.

2.	We should grow more trees to help absorbing water during the flood. This is government's responsibility to manage the water management and make sure that the level in the dam would not exceed the dam. The most important thing is that for the management to use water with agriculture.
3.	My view is that it only has minor effects as our country been through these problems many years, people get used to the thing which not much of the violence comparing to other country. Not that I am happy with the situation, I hope we could live peacefully soon but imagine with these chaos, land price keep shooting up. If there are none of these issues, price will be sky high.
4.	The best thing in preparation is to do some research and truly understand who your clients are before deciding to develop each project so you would not have unsold units when the project completed. The project should meet the demands and needs of your target customer. (Even in economic crisis if the right location, price, quality, it wouldn't affect much.)
5.	With the new technology which has been using in UAE and Singapore (converting sea to normal water) in my own opinion I don't see this as major problems. We could do the same to Thailand if we actually face the problem of scarcity.
6.	At the moment, we are not facing the lack of labor issues. The real estate developers are relied their workforce from Burma, Laos, and Cambodia. The introduction of ASEAN next year would open door to more workers from foreign countries to come and work in Thailand. Our unemployment rate in Thailand is very low. Therefore unemployment is not an issue for us. The minimum rate of 300 baht is appropriate.
7.	New comers will have to face more expenses in term of economy of scale comparing to established real estate developers. My target customers are the ones with income of 50,000 baht and above. Marketing could be tricky as you might not know whether you would give you the result that you were expected. Our company usually holds events at department store and property fair at Sirikij Convention Hall. We also advertise our project on prakard.com. Nowadays, people like to search on internet. Advertising on line can also help us to get new customers. We also rely on our old customers to introduce us their family and friends by giving some incentives to them. Many of my customers end up to be parents as they want to buy a place to live in the city since their children are going to university in the city New comers will have to face more expenses in term of economy of scale comparing to established real estate developers. My target customers are the ones with income of 50,000 baht and above. Marketing could be tricky as you might not know whether you would give you the result that you were expected. Our company usually holds events at department store and property fair at Sirikij Convention Hall. We also advertise our project on prakard.com. Nowadays, people like to search on internet. Advertising on line can also help us to get new customers. We also rely on our old customers to introduce us their family and friends by giving some incentives to them. Many of my customers end up to be parents as they want to buy a place to live in the city since their children are going to university in the city
8.	Green building will play a major role in the industry as the new law also gives lots of benefits to the developer when following the green standards. It will also improve living culture as we could reduce the global warming issues.
9.	Government should stimulate the real estate industry by reducing the tax and transfer fee. Buyers and sellers can benefit from the incentives.
10.	I think the lifestyle of people will change as living inside the city will be much easier due to the traveling time, security, etc. More condos will be built; price will be very high if the location is closed to mass transportations
11.	No, we have been in this line for over a decade, with our performance and experiences, the interest rate we got from the bank loan is moderate (MLR 6.75%) by all means we don't need to maximize the return to gain profit, We have a motto that we balance the risk with standard amount of return as sometimes too risky projects can cause major chaos.
12.	At the end, people who desire to live in the city as many jobs are mostly available in the center area with attractive pay. Condominiums price will definitely increase as there will be more demands from consumers. Condominiums can be owned by foreigner and will be attractive to foreign investors who would choose to live in Thailand. The price of condominium will

Q	Interviewee 9's Answer
1.	In general, global risks, especially the profound macroeconomic ones (For example, slow global environment and political instability), has direct impact on risk appetite. These curtail other businesses in entering Thailand, and thus reduce the pool of demand for residential real estate in the country.
2.	The recent flood had a major impact on the confidence in the infrastructure and management handling of the natural disaster. It affects consumers who doubt's Thai government's capabilities in managing flood crisis. This causes them to revise their decision to invest in Thai residential market. The ways to improve on this going forward is to enhance infrastructure mechanism as well as be informative in preventative measures as well as a create a well-structured crisis management team
3.	The political instability affects the overall confidence in the economy. The old backlogs are better off than new ones as present real estate investor think twice before investing. There is no real meaningful ways to reduce such systemic risk impact, but incentives can be given to investors such as low interest scheme to make it more attractive.
4.	Newcomers in residential estate can come more prepared in terms of ensuring sufficient capital to buffer volatility in appetite and weather long term adverse conditions. To strengthen this position, the new investor can also be innovative, create values, and be a cost leader to ensure an attractive value proposition to their prospective clients.
5.	At the moment, water scarcity does not affect our project as most of our projects are in urban areas where this factor is not an issue.
6.	The best ways to solve this issue sustainably is to provide for value added courses to labor. This can be an enhancement in skills, and translate to higher productivity. With higher productivity, the workers can earn more, more incentivize to work, and thus reduce income disparity
7.	Being a cost leader is crucial. If not, they have to be a value innovator such as the first mover advantage in being prefab technology in construction. Either model will enhance sustainable competitive advantage.
8.	At the moment, it would be very hard to get a foothold in RE as markets are saturated with supply and dwindling demands. Not many industry participants have tried to innovate through green technology as their budgets are tight and this factor can be very costly
9.	At the moment, it would be very hard to get a foothold in RE as markets are saturated with supply and dwindling demands. Not many industry participants have tried to innovate through green technology as their budgets are tight and this factor can be very costly
10.	Slowing global risk, I don't believe in the rosy picture of the RE market. Thailand needs an external push to assist in its jump start. Until then, I maintain a doom view on the sector.
11.	It is very difficult to project that long. Presently, it is not good. Whether it will improve has to do a lot with global factors.
12.	No, we prioritize more on risk in this risk adverse environment than return.

Q	Interviewee 10's Answer
1.	Political instability because I finished my degree in Political Science. I feel that any change in politic can affect overall economy, not just real estate market, also stock market. For example, many speculative stocks have gone up, especially companies that are related to ex-prime minister, Thaksin Shinawatra. I see that stocks that are related to government officials can have an impact on the stock market as there are always speculations going on regarding these stocks. From my personal experience, the past situation shows that the politics instability could affect an overall market. 1. Political instability would delay buyers' decision as there are uncertain of the outcome until all the rules and regulations are stable. At the moment, there are new rules regarding (transferable fee of fortune to be transferred from family member who passed away) Now, this is a hot issue which has been discussing. All these examples can hinder some of purchasing power of certain people. If anybody in the process of getting a fortune from their parents or family members, and was thinking to buy a house. They might hinder their decisions at the moment.
2.	There has been movement in land prices on both directions, namely non flooded area saw price jumped whereas affected area experienced depreciation. This is a problem where private sector has neither voice nor influence on the planning and handling of infrastructure management.
3.	Definitely. Political instability means future becomes uncertain in the aspect of income and economic growth. People want to hold onto what they have in hand.
4.	Global risk will always remain a threat to any undertaking, directly or indirectly. One should not depend too much on external financing, not literally implying foreign loan but loan from Thai bank as well. Self financing will always soften the impact of any unforeseen risk. But one must remember "low risk low return"
5.	Water scarcity has never been a risk for us. The key is "where " For example, Bangkok has no problem with water supply, whereas Pattaya, Phuket and Samui are all a problem area for water supply.
6.	Create more jobs and maintain political stability. Definitely it affects us because our clients are middle income group and they are sensitive.
7.	New comers will face higher risk than old players. Unless they can bring in new technologies which will fasten the construction process and become less dependant on labor. As we all know that Thailand has been facing shortage of labor supply in many sectors and distinctly, the residential sector.
8.	Yes, and why not. It all depends on technology. How good and how fast you can master it.
9.	Thailand is very poor and slow in initiating any measures that will benefit or safeguard the public. On problem is "Political Instability"
10.	There are more problems to come. The shortage of labor will be a big task to overcome.
11.	Definitely not. One should not be blinded by counting to make as highly yield as possible and turn blind on any risk involved with each project.
12.	The government should play more roles in solving the core issues of construction industry, labor supply and law associated with the residential sector.



**APPENDIX C**

**INTERVIEWEES' PROFILES**

**Interviewee 1's Profile**

**Company** : Pieamsuk Development Co., Ltd.  
**Name** : Mr. Kitipong Kulpaisalthum  
**Position** : Managing Director  
**Education** : Master of Housing Development 2006-2007  
 (Chulalongkorn University)  
 Master of Business Administration  
 (City University, Seattle, U.S.A)

**Interviewee 2's Profile**

**Company** : Quest Development Co., Ltd.  
**Name** : Anchal Pathela  
**Position** : Managing Director  
**Education** : Bachelor of Economics and Finance 2003  
 Minor in Management 2000  
 ISB (Thailand)  
**Work** : Quest Development Co.,Ltd  
 Country group 3 years  
 CIMB (Institutional Sale) 2 years  
 Siam City Securities (Analyst) 5 years

**Interviewee 3's Profile**

**Company** : Ocean Property Co., Ltd.  
**Name** : Mrs. Supatra Angkawinijwong  
**Position** : Deputy Managing Director  
**Experience** : **Ocean Property Co, Ltd.** Present  
 Deputy Managing Director  
**Education** : **Arthur D. Little School of Management** 1993  
**Currently Name: Hult International Business School**  
 Master of Science in Management  
 (Massachusetts, USA)

**Interviewee 4's Profile**

**Company** : Rasika Property Co., Ltd.  
**Name** : Patchareeya Coomprom  
**Age** : 65  
**Position** : Managing Director  
**Address** : 15fl Tararom Business Tower, 2445/24  
 New Petchburi Road Bangkapi Huakwang Bangkok  
 10315  
**Telephone** : 02-319-1564-6  
**Fax** : 02-319-7550  
**Website** : <http://www.rasika.co.th>  
**Experience** : **Rasika Property Co., Ltd.** 2005-Present  
 Managing Director  
**Education** : **Phatumwan College** 1972  
 (Srinakharinwirot University)

**Interviewee 5's Profile**

**Company** : Suetrong Group Co., Ltd  
**Position** : Managing Director  
**Name** : Mr. Roongrat Limthongthang  
**Address** : 101 Moo 3 Rattanathibets Road  
 Sai-Mar District, Muang Nonthaburi  
 11000  
**Website** : <http://www.suetrong.com>  
**Mobile** : 08-1839-8494  
**Telephone** : 0-2921-7693, 0-2595-1014  
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**Interviewee 6's Profile**

**Company** : Chalerm Nakorn Co., Ltd.  
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**Interviewee 7's Profile**

**Company** : Menam Residences Co., Ltd  
**Position** : CEO  
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**Interviewee 8's Profile**

**Company** : Voque Co., Ltd / Apollo Asset Co., Ltd  
**Name** : Premika Srichawla  
**Position** : Managing Director  
**Date of Birth** : 7 October 1982  
**Experience** : **Voque Co., Ltd.** 2009-Present  
 Managing Director  
**Sirintheep Co., Ltd.** 2004-Present  
 Managing Partner  
**Education** : **Leeds University**  
 Post Graduate in Advertising and Marketing  
**Assumption University**  
 Bachelor Degree in Advertising

**Interviewee 9's Profile**

**Company** : Exclusive Estate Co., Ltd.  
**Position** : Managing Director  
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**Education** : **Sasin (Chulalongkorn) and Kellogg (Chicago US)**  
 Post Graduate  
**Monash University**  
 (Joint Program Australia and Malaysia)  
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**Interviewee 10's Profile**

**Company** : Sirin Estate Co., Ltd. / Premthep Co., Ltd  
**Position** : Managing Director  
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**APPENDIX D**

**EXTRACT INTERVIEW DATA**

### Extract Interview Data

1. In your view, how do global risks affect new comers in the Thai residential real estate? In your view, which factor is the most important problem?

#### Data Extract from Pieamsuk Development Co., Ltd.

Data extract	Coded for
<p>Economic crisis is the most critical problem, especially the impact of interest rate. The residential real estate will be affected as it will be more difficult since the consumers will not able to borrow money easily. Since the Hamburger Crisis, banks have tightened lending to real estate. It is more difficult for customers and developers to obtain loans now. Therefore, developers have to rely on financing themselves instead of borrowing money from the bank. For ex., some developers may find partner to run the project together. However, one must maintain the power in management.</p>	<p>Loans are not easily obtained.</p> <ul style="list-style-type: none"> <li>- The Thai's residential real estate developer need to watch out for interest rate trend</li> <li>- Internal financing is important.</li> <li>- Economic crisis in any part of the world can affect the Thai's residential real estate.</li> <li>- Economic Crisis is a serious global risk issue</li> </ul>

#### Data Extract from Quest Development Co., Ltd

Data extract	Coded for
<p>The issue affecting new comers in Thai residential real estate begins from the economic problem. The current condition of Thailand's economy generally is down. Basic costs of construction materials and land have gone up despite a subdued real demand. So if there is no big improvement in the coming years, the market cannot hold. People will not be able to afford. Bank will not give loan. Market will be more down. We are waiting for government to make stimulus plan. Economy crisis in European market is in its down trend. This affects overall market in Thailand and neighboring countries. Government should stimulate the economy to give opportunity to SME companies so that they can improve the overall economy.</p>	<p>Thailand's economy is generally slowdown.</p> <ul style="list-style-type: none"> <li>Economic crisis in any part of the world can affect the Thai's residential real estate.</li> <li>Cost of land and materials have gone up not relative to the demand</li> <li>Expecting government policy as stimulus to the industry.</li> <li>Economic Crisis is a serious global risk issue</li> </ul>

#### Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
<p>I would say global risk will affect group of real estate development. Everyone (Buyer, Seller, Investor, and Developer.) The most serious problem is economic crisis. The economic crisis is like a domino. When there is any economic crisis, it is a domino effect to all over the world.</p>	<ul style="list-style-type: none"> <li>Economic crisis in any part of the world can affect the Thai's residential real estate.</li> <li>Economic Crisis is a serious global risk issue.</li> <li>Domino effect</li> </ul>

### Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
Financial problem should be considered closely. For example, if there is problem in the United States, our export would be affected. SME would delay their spending and this might affect the Thai residential real estate. For example, the one who is staying in townhome and thinking of buying a house would delay their decision to purchase.	<p>Economic crisis in any part of the world can affect the Thai's real estate</p> <p>The slowdown of export could affect the Thai residential real estate.</p> <p>Economic Crisis is a serious global risk issue</p> <p>Delayed decision on purchasing</p>

### Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
Economic risk is the most serious risk. Economic crisis can be the rising price of oil or falling of stock market. Residential real estate can be affected by any chain of these problems and from other countries.	<p>Economic crisis in any part of the world can affect the Thai's residential real estate.</p> <p>Economic Crisis is a serious global risk issue</p> <p>Chain of events</p>

### Data Extracted from Voque Co., Ltd

Data extract	Coded for
I do think the global risk affects the Thai residential real estate, in my opinion the most important effect is economic crisis as consumers will slow down their purchasing decision if their sales or exports are lower due to economic crisis in Thailand or other countries.	<ul style="list-style-type: none"> <li>- The slowdown of export could affect the Thai residential real estate.</li> <li>- Economic Crisis is a serious global risk issue</li> </ul>

### Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
Local demand is the internal risk. Monetary risk is the most critical problem in real estate. The number one problem to effect real estate the most is the interest rate. For the past, real estate industry is good when the interest rate is low. During the 1997 ASEAN crisis, the baht was appreciated while the domestic interest was high. The Thai residential real estate can be affected when the dollar is strengthened and US's interest rate is low, causing our baht to be weakened with high interest rate. For the past 30 years, the growth of interest rate is approximately 5 percent every year. The effect of interest rate has very less impact and not very significant to the residential real estate industry...export is considered another internal factor to affect the Thai residential real estate industry...	<ul style="list-style-type: none"> <li>- The Thai's residential real estate developer need to watch out for interest rate</li> <li>- Economic crisis in any part of the world can affect the Thai's residential real estate.</li> <li>- The slowdown of export could affect the Thai residential real estate.</li> <li>- Economic Crisis is a serious global risk issue</li> <li>- Impact purchasing power</li> </ul>

### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
Economics crisis certainly has an impact on residential real estate industry. The real estate industry is heavily affected because if the economy has a problem, it leads to severe problem to this industry too. Spending power and investment ability comes from a strong, stable economy.	<ul style="list-style-type: none"> <li>- Economic Crisis is a serious global risk issue</li> </ul>

### Data Extract from Exclusive Estate Co., Ltd.

Data extract	Coded for
In general, global risks, especially the profound macroeconomic ones. Example, slow global environment and political instability have direct impact on risk appetite. This curtails other businesses in entering Thailand, and thus reduces the pool of demand for residential real estate in the country.	<ul style="list-style-type: none"> <li>- Political Instability affects the Thai's residential real estate</li> <li>- Global economic state have direct effect</li> </ul>

### Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
Political instability because I finished my degree in Political Science. I feel that any change in politic can affect overall economy, not just real estate market, also stock market. For ex, many speculative stocks have gone up, especially companies that are related to ex-prime minister, Thaksin Shinawatra. I see that stocks that are related to government officials can have an impact on the stock market as there are always speculations going on regarding these stocks...the past situation shows that the politics instability could affect an overall market...would delay buyers' decision as there are uncertainty of the outcome until all the rules and regulations are stable...	<ul style="list-style-type: none"> <li>- Political Instability affects the Thai's residential real estate</li> <li>- Delayed decision</li> </ul>

2. In your view, how did the 2011 flood disaster affect the Thai residential real estate company? Can you please suggest ways to reduce the future impact of flood disaster to Thai residential real estate?

### Data Extract from Preamsuk Property Co., Ltd

Data extract	Coded for
The recent flood tremendously affected the vicinity area of Bangkok, especially Nonthaburi and Phratum Thani. ...Condominiums became popular in Bangkok and vicinity area. We never have so many condominiums in Bangkok's vicinity area. Since the completion of MRT purple, there are many condominium projects around to the MRT. Our price dropped around 10% after the impact of flood. It took us 6-8 months to recover our sales. The projects which are in the flooding zone should be alert and cautious more than before. The cost of houses in the flooding area is increased by 5 percent. The level of the ground has to be adjusted to be higher to avoid future disaster. The level of first floor should be higher than during the crisis...	<ul style="list-style-type: none"> <li>- Nonthaburi and Phratum Thani were tremendously affected by flood.</li> <li>- Condominiums became popular after the flood.</li> <li>- MRT Purple line creates opportunity to real estate developers to construct project along the line.</li> <li>- The level of the ground and first floor should be higher</li> <li>- The construction cost in the flood prone area is higher after the flood.</li> <li>- Flood affect their project</li> <li>- Selling price dropped.</li> </ul>

### Data Extract from Quest Development Co., Ltd

Data extract	Coded for
The real estate company has to find their selling point such as the opportunity in flooding in this development area is less compared to other locations. People are more careful choosing the location but in general most people who were affected by the recent crisis are living normal life now so there is no threat at the moment. However, low lying area is still a threat and the government has not made a concrete water management system. Our country needs concrete manage system plan that is practical.	<ul style="list-style-type: none"> <li>- Flood did not affect company</li> <li>- People are careful in choosing house location after flood crisis</li> <li>- Government should make better infrastructure system</li> </ul>

### Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
Fortunately, we did not get any affect on that. People end up buying our property and move to stay in condominium. They ended up buying our condominium in Pattaya as their second properties. Everyone should have a second place in a safety area. None of our project got affected by the recent disaster. We have two types of projects 1. Projects which are already sold 2. Projects which are in the process of developing. None of these got affected. O2 condominium did not get affected as it is located on Ploenchit Road.	<ul style="list-style-type: none"> <li>- Flood did not affect company</li> <li>- Condominiums became popular after the flood.</li> </ul>

### Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
We cannot control flood. Our company was affected by the flood crisis before. We have to create reservoir around the project to protect water from leaking inside the project. We have to increase our cost by adjusting the land surface to be higher, we also made the level of house on the first floor to be higher, and therefore our project at Saimai will not be affected by flood	<ul style="list-style-type: none"> <li>- The construction cost in the flood prone area is higher after the flood.</li> <li>- The level of the ground and first floor should be higher</li> <li>- Flood affect their project</li> <li>- Selling price dropped</li> </ul>

### Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
Two of my projects got affected by the recent flood. One of my projects is in Nonthaburi...Phrathum Thani... After the flood crisis, we had to adjust our ground and made it higher than the previous level to avoid any risk of future flood disaster. People still stay at their own area. It is very difficult for people who live in Nonthaburi to change their living to inner Bangkok or Chonburi. People who were affected tremendously by the flood disaster sold their house and bought our project instead...Even though our project was affected by the flood for one month, we were able to sell our projects quickly as consumers see that our project was not affected by flood as much as others.	<ul style="list-style-type: none"> <li>- Nonthaburi and Prathum Thani were tremendously affected by the flood crisis.</li> <li>- The level of the ground and first floor should be higher</li> <li>- Flood affect their project</li> <li>- Government should make better infrastructure system</li> <li>- People are careful in choosing house location after flood crisis.</li> <li>- People do not easily change their location</li> </ul>

### Data Extract from Chalerm Nakorn Co., Ltd.

Data extract	Coded for
<p>Since the flood crisis in 2011, there is no sign of similar crisis... The two provinces around Bangkok which affected by the recent flood the most are Nonthaburi and Prathum Thani. The problem of flood caused hesitancy of buyers in Nonthaburi and Prathum Thani area as the two areas were tremendously damaged and affected. As for now, the land in Nonthaburi has gained their popularity back because of the new completion of MRT purple line. On the other hand, the land in Prathum Thani is also gaining their popularity back since the red line agreement contract has been signed. Therefore, various construction projects are being built around and side the Prathum Thani area to serve the future demand. The effect of the recent flood has caused my project to create protection wall around the project area causing my company approximately 10 million baht. We had to increase the first floor level to 25 cm. which caused us 2 percent more in each house.</p>	<p>Nonthaburi and Prathum Thani were tremendously affected by the flood crisis.</p> <p>MRT Purple line creates opportunity to real estate developers to construct project along the line.</p> <p>The level of the ground and first floor should be higher</p> <p>The construction cost in the flood prone area is higher after the flood.</p> <ul style="list-style-type: none"> <li>- Flood affected their project</li> </ul>

### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
<p>The flood disaster had a huge effect on the real estate as people do not want to purchase land or property that has risk of flooding. The government needs to play a significant role in minimizing this disaster... Locations and roads that are badly affected by the flood will cause losses to real estate business in the area...</p>	<ul style="list-style-type: none"> <li>- People are careful in choosing house location after flood crisis</li> <li>- Government should make better infrastructure system</li> <li>- Aware of the crisis</li> </ul>

### Data Extracted from Voque Co., Ltd

Data extract	Coded for
<p>We should grow more trees to help absorbing water during the flood. This is government's responsibility to manage the water management and make sure that the level in the dam would not exceed the dam. The most important thing is that for the management to use water with agriculture.</p>	<p>People are careful in choosing house location after flood crisis</p> <p>Government should make better infrastructure system</p> <p>Aware of the crisis</p>

### Data Extract from Exclusive Estate Co., Ltd.

Data extract	Coded for
<p>The recent flood had a major impact on the confidence in the infrastructure and management handling of the natural disaster. It affects consumers who doubt's Thai government's capabilities in managing flood crisis. This causes them to revise their decision to invest in Thai residential market. The ways to improve on this going forward is to enhance infrastructure mechanism as well as be informative in preventative measures as well as creating a well-structured crisis management team.</p>	<ul style="list-style-type: none"> <li>- People are careful in choosing house location after flood crisis</li> <li>- Government should make better infrastructure system</li> <li>- Aware of the crisis</li> </ul>

### Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
There has been movement in land prices on both directions, namely non flooded area saw price jumped whereas affected area experienced depreciation. This is a problem where private sector has neither voice nor influence on the planning and handling of infrastructure management.	<ul style="list-style-type: none"> <li>- Cost of housing in flooding dropped.</li> <li>- Government should make better infrastructure system</li> <li>- Aware of the crisis</li> <li>- People are careful in choosing house location after flood crisis</li> </ul>

3. In your vision, does the recent political instability affect the sale or construction of your company? Why and Why not? Please suggest ways to reduce the impact of political instability to Thailand's residential real estate in future.

### Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
The political situation affected the Thai residential real estate due to the problem of anti-protestors. We are hoping for a new policy to support business. The regulations that are implemented by the current government are not for real estate industry. We are looking forward for a decrease in tax, or transfer fee, better interest rate for loans. To avoid future political, we might want to invest more in the inner area of Bangkok. Some of the good locations that I am doing now are Ratanatibet, Jangwatana, Pattanakarn, Bang Kae, Ramindra, and Barring. I do not focus on making big project housing. We only develop 50-70-100 units, therefore we can still find land in the inner area of Bangkok as our projects require small plot of land.	<ul style="list-style-type: none"> <li>- Politics hinders the real estate industry.</li> <li>- Current policies are not pro business.</li> <li>- Good locations for investment are Ratanatibet, Jangwatana, Pattanakarn, Bang Kae, Ramindra, and Barring.</li> <li>- Best to develop small project (50-100 houses) as land still available</li> <li>- Sales got affected</li> </ul>

### Data Extract from Quest Development Co., Ltd

Data extract	Coded for
Right now it is like honeymoon period. It affects condominium projects because foreigners are reluctant. Housing is catered to local Thai people. Everyone is waiting for ASEAN 2015 to open up. People look forward to that. Political situation take it as it comes. Now it's honeymoon period. There is no way to avoid and accept the risk as nobody can control. Monetary policy is more concerning than political issues. The most important thing is monetary policy of Thailand. Thai people are used to political instability situation.	<ul style="list-style-type: none"> <li>- Lack of foreign investor</li> <li>- Looking forward to ASEAN in 2015 to find more investors</li> <li>- Thai are used to political instability.</li> <li>- Gov. should help with policy to stimulus the industry</li> <li>- Sales got affected</li> <li>- Delayed buyers decision</li> </ul>

### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
The political instability can hurt the real estate industry and it is a good idea to always be prepared for such cases. We can use our knowledge of the market to help us minimize the possible risks that can hurt our investments.	<ul style="list-style-type: none"> <li>- Sales got affected</li> <li>- Delayed buyers' decision</li> </ul>

### Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
Yes, our sales got affected after the political crisis. Both Thais and foreigners were hesitant and hold their decisions to buy. Our customers are high-end (Grade A). Even though they did not have problem to pay but it affected their emotion and make them hold their decision. It is government level to handle the situation. I heard that the new government team, they are discussing the new constitution revision to protect coup data happen again. We don't really have any issue much. It hold decision foreign customer and they are scared from news on BBC as the condition got worst and worst. ...	<p>Delayed buyers decision</p> <p>Gov. should help with policy to stimulus the industry</p> <p>Sales got affected</p>

### Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
The impact of political instability can never be controlled. It always affects real estate. Perhaps, the government should reduce the transfer fee, which allows us to build houses that consumers can buy very cheap. In 2007, government reduced the transfer fee from 2.5 percent to 0.01 percent for 203 years. We hope that government will do the same policy again.	<p>Gov. should help with policy to stimulus the industry\</p> <p>Sales got affected</p> <p>Delayed buyers decision</p>

### Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
Politic definitely affect the residential real estate industry in Thailand. People are uncertainty of the situation. Therefore they do not want to buy anything. Now, we are able to sell our projects, even though there were anti-government protestors. Real estate developers are waiting for new election. Currently, there is no new policy to support the business. All the policies are temporary. We do not want to be controlled by the coup like Burma or Cambodia with dictatorship. I am turning back to see myself to handle this current crisis of politic. My company does not expect that it will ease soon. We believe now is a crisis.	<ul style="list-style-type: none"> <li>- Sales got affected</li> <li>- Delayed buyers' decision</li> <li>- Gov. should help with policy to stimulus the industry</li> </ul>

### Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
During the anti-protestors in 2013, the political disaster has caused a slowdown in the Thai residential real estate. As a result, Thai residential real estate sales were slowed down due to 7 to 8 months of protest in Bangkok. Thai middle class were generally tolerant to the situation as they were hoping to create a new political environment. While the property business is generally strong enough to tolerate the effect of protests for 2 years long as gross margin in the real estate industry could cover to pay the cost of interest and employee's salary for 2 years.	<ul style="list-style-type: none"> <li>- Sales got affected</li> <li>- Delayed buyers' decision</li> </ul>

### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
The political instability can hurt the real estate industry and it is a good idea to always be prepared for such cases. We can use our knowledge of the market to help us minimize the possible risks that can hurt our investments.	<ul style="list-style-type: none"> <li>- Sales got affected</li> <li>- Delayed buyers' decision</li> </ul>

### Data Extracted from Voque Co., Ltd

Data extract	Coded for
My view is that it only has minor effects as our country been through these problems many years, people get used to the thing which not much of the violence comparing to other country. Not that I am happy with the situation, I hope we could live peacefully soon but imagine with these chaos, land price keep shooting up. If there are none of these issues, price will be sky high.	<ul style="list-style-type: none"> <li>- Politic has minor effect on real estate</li> <li>- Price of land has gone up even though there is a problem.</li> <li>- Thai are used to political instability.</li> </ul>

### Data Extract from Exclusive Estate Co., Ltd.

Data extract	Coded for
The political instability affects the overall confidence in the economy. The old backlogs are better off than new ones as present real estate investor think twice before investing. There is no real meaningful ways to reduce such systemic risk impact, but incentives can be given to investors such as low interest scheme to make it more attractive.	<ul style="list-style-type: none"> <li>- Sales got affected</li> <li>- Delayed buyers' decision</li> <li>- Gov. should help with policy to stimulus the industry</li> </ul>

### Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
Definitely. Political instability means future becomes uncertain in the aspect of income and economic growth. People want to hold onto what they have in hand.	<ul style="list-style-type: none"> <li>- Sales got affected</li> <li>- Delayed buyers' decision</li> </ul>

4. How can newcomers in residential real estate be prepared for the future impact of global risk? (Please consider the problems of economic crisis in any part of the world which can affect Thailand's residential real estate.)

### Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
Newcomers should be very conservative and ready in term of money for investment. As for now, it is not easy for the newcomers as we do not get loans easily like before since the Hamburger Crisis. Banks have tightened regulations on pre and pos loans. Newcomers need to be more professional in their management by experts who able to handle problems and manage the uncertainty efficiently.	<ul style="list-style-type: none"> <li>- Newcomers should be risk averse</li> <li>- Loans are hard to get</li> <li>- Need expert advice</li> </ul>

### Data Extract from Quest Co., Ltd.

Data extract	Coded for
Crisis in any part of the world will affect Thailand due to globalization. Newcomers are expected to have new product at lower price than established one in bad time. They can have something that is differentiated than established ones. New comers are tired. Newcomers sell 20-30% cheaper than established one like Sansiri even same quality. People are reluctant to take the risk with newcomers. All the deals have to make them comfortable with the new comers.	<ul style="list-style-type: none"> <li>- Thailand cannot escape globalization because we are an open economy.</li> <li>- Newcomers must differentiate and work harder than established brand.</li> <li>- Use penetration pricing.</li> </ul>

### Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
Sustainability project, it will be better “low risk low return” to try to avoid the sustainability project in a new product. We should try to sell quickly as possible. (Sell off plan) Sell before the building is finished to rescue our project.	<ul style="list-style-type: none"> <li>- Low risk, Low return</li> <li>- Sell off plan</li> </ul>

### Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
Economic crisis in America can affect real estate property as the SME sector will slow down their spending since their exports are slow. Sometimes, even the economy is at its worst, real estate property still runs. Real estate property is not really affected by the economic crisis. If there is problem in foreign countries, only financial institutions would be panic as they have invested in bonds.	<ul style="list-style-type: none"> <li>- Economic crisis from other countries delay buyer's decision</li> <li>- Less export</li> </ul>

### Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
For example, Hamburger Crisis in America. Crises in America can affect worldwide economy. In addition, the economic crisis in Europe also effect exports in Thailand and this also will hit real estate business in Thailand. For example, if export is not good, the business will not pay bonus, therefore employee might have to delay their decision in buying a new house.	<ul style="list-style-type: none"> <li>- Economic crisis from other countries delay buyer's decision</li> <li>- Less export</li> </ul>

### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
In order to reduce the future impact of global risk, we need to create a good product for investors and this includes increasing the quality on offer so that we can attract investments from expatriates and even foreigners living in other countries.	<ul style="list-style-type: none"> <li>- Newcomers need to value added product to attract foreigners.</li> </ul>

### Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
During the hamburger crisis, Thailand's property was not tremendously affected except to those who target their market for foreigners. For example, the exclusive district popular among foreigners are Sathorn Road, Sukhvit Road, and provincial provinces such as Chiangmai and Sri Racha area were used to be the main area for many Scandinavians to invest in properties. However, Scandinavians are no longer investing in Thai properties as much. Consequently, those developers who have targeted Scandinavian customers were definitely affected by problem of global financial crisis. However, the current market target of Sriracha has shifted from Scandinavian to Japanese as now there are a lot of Japanese factories in Sriracha. The current condition of real estate in Sri Racha has become extremely better with a lot of Japanese white-collar businessmen living in the area.	- Economic crisis from other countries delay foreign buyer's decision

### Data Extracted from Voque Co., Ltd

Data extract	Coded for
The best thing in preparation is to do some research and truly understand who your clients are before deciding to develop each project so you would not have unsold units when the project completed. The project should meet the demands and needs of your target customer. (Even in economic crisis if the right location, price, quality, it wouldn't affect much.)	- Newcomers should target the right customer and right time by studying the needs of the customer

### Data from Exclusive Estate Co., Ltd

Data extract	Coded for
New comers in residential estate can come more prepared in terms of ensuring sufficient capital to buffer volatility in appetite and weather long term adverse conditions. To strengthen this position, the new investor can also be innovative, create values, and be a cost leader to ensure an attractive value proposition to their prospective clients.	- New comers need to control cost. - New comers need to value added products to attract customers.

### Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
Global risk will always remain a threat to any undertaking, directly or indirectly. One should not depend too much on external financing, not literally implying foreign loan but loan from Thai bank as well. Self financing will always soften the impact of any unforeseen risk. But one must remember "low risk low return	Low risk, low return New comers should not rely on loans from bank.

5. Water scarcity is considered one of the top problems in global risk. Can you suggest ways to prepare for water scarcity and climate change in the Thai residential real estate in future? Does the problem of water scarcity and climate change affect your company?

### Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
I do not really see the problem of water scarcity. I see the problems of climate change with extremely storm. We have received many requests to fix the roofs from our customers. Small projects cannot really work on water recycle system as it is very expensive.	<ul style="list-style-type: none"> <li>- Water scarcity is not an issue to Bangkok and vicinity</li> <li>- Climate is the problem (extreme storm)</li> </ul>

### Data Extract from Quest Development Co., Ltd

Data extract	Coded for
People do not apprehend that there is a problem in Thailand residential market except for the few islands which face problem with fresh water problem. You can improve the situation by using the products that consume less water in sanitation. Agriculture faces water scarcity. During the summer season, the hot became hotter. The product in construction should be better insulation and also designed a good flow of nature air without having to use air-conditions all the time.	<ul style="list-style-type: none"> <li>Water scarcity is not an issue to Bangkok and vicinity</li> <li>Water scarcity is an issue on few islands that lack fresh water.</li> <li>Climate is the problem (Hot weather)</li> <li>Need better sanitary ware to save water</li> </ul>

### Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
We don't really have water scarcity. Just north eastern alone have water scarcity during harvest season. I don't see much of problem in other part of Thailand. Hua Hin is not far from Bangkok but they a facing a problem of water scarcity. In the month of April, we have to buy water from municipality or from private sector. They have their trucks nearby and we have to buy from them as they might get water from the nearby reservoir. This is the problem which we can not solve problem. Because we have hotel in that area. This is not a local issue. When they lack of water, they can make use of the sea and turn it to fresh water as like other countries. In future, we might have to get that to solve the problem. Thai people need to get cooperation to use less water and recycle water...	<ul style="list-style-type: none"> <li>Water scarcity is not an issue to Bangkok and vicinity.</li> <li>Water scarcity in Hua hin</li> <li>Can recycle water from the sea and convert to fresh water</li> </ul>

### Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
Thai people do not really think about water scarcity. Thai people do not seriously think of ways to reserve water. They wait till there is drought and use artesian water from artesian aquifer. Farmers do not really think of way to reserve the rain water. For example, if they seriously need water, they should buy a water jar to reserve water. For example, they should buy a water jar each year and put it all around their houses if can in order to reserve water when there is drought. Therefore, people will not face the problem of drought.	<ul style="list-style-type: none"> <li>- Water scarcity is not an issue to Bangkok and vicinity</li> </ul>

### Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
Currently, there is no specific law regarding retaining of water in Bangkok and vicinity area. However, in the eastern part of Thailand, especially Sri Racha, Chonburi, Sattahip, are regulated to have water tank available. Bangkok will not likely meet the problem of water scarcity as our rainy season is long. In future of 10-20 years, I am not certain if the global warming will affect Thailand's water how. At the moment, I do not see the problem concerning climate change so much.	Water scarcity is not an issue to Bangkok and vicinity

### Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
In the area of Phatum Thani, there is no problem of water scarcity as there is enough water from water supply plants. During my construction, we consumed less water. Our company recycles water to water plants in the project. We make sure that our water is matched with the government's BOD requirement. We use 15 people to create a house in 6 months and their consumption of water is very less.	<ul style="list-style-type: none"> <li>- Water scarcity is not an issue to Bangkok and vicinity</li> <li>- Construction consumed less water</li> </ul>

### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
The location of the real estate is highly important and there are many factors that can help creating attractive features such as being near shopping centers and business areas. In places where the location is far from the central Bangkok such as up in the mountains there may be restrictions to access to water and natural resources etc. We need to analyze the area well before making the investment.	- Water scarcity is not an issue to Bangkok and vicinity

### Data Extracted from Voque Co., Ltd

Data extract	Coded for
With the new technology which has been using in UAE and Singapore (converting sea to normal water) in my own opinion I don't see this as major problems. We could do the same to Thailand if we actually face the problem of scarcity.	<ul style="list-style-type: none"> <li>- Water scarcity is not an issue to Bangkok and vicinity</li> <li>- Can convert sea to fresh water</li> </ul>

### Data from Exclusive Estate Co., Ltd

Data extract	Coded for
At the moment, water scarcity does not affect our project as most of our projects are in urban areas where this factor is not an issue. The problem is not the factor. I am not concerned of the problem.	- Water scarcity is not an issue to Bangkok and vicinity

### Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
Water scarcity has never been a risk for us. The key is "where " For example, Bangkok has no problem with water supply, whereas Pattaya, Phuket and Samui are all a problem area for water supply.	<ul style="list-style-type: none"> <li>- Water scarcity is not an issue to Bangkok and vicinity</li> <li>- Problems on islands</li> </ul>

6. In your estimation, can you give specific ways to reduce global risk that may pose a threat in the Thai residential real estate projects in terms of unemployment and income disparity? Do the problems of unemployment and income disparity affect your company?

### Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
The problem of unemployment is very low. I do not find the problem of unemployment as really a problem. The unemployment problem will be for those who sell houses that are cheap. We are selling at a relatively high price. Therefore we do not really face this problem. Our main concern is finding labor.	<ul style="list-style-type: none"> <li>- Thailand has very low unemployment rate</li> <li>- Problem to company which target low income groups.</li> </ul>

### Data Extract from Quest Co., Ltd.

Data extract	Coded for
According to the past experiences, Thailand's disparity income has been increasing. While the poor becomes poorer, the rich becomes even richer. The current situation of Thailand's agriculture is at its worst. Price of community is down. There is less new middle income people, whereas the one who can afford to purchase residential real estate are the middle income people. The amount of middle income people are not increasing as much as it should be. Change of business from lower income people to middle income people. Our company caters upper middle income and foreigners therefore we do not face the problems of unemployment rate or income disparity.	<ul style="list-style-type: none"> <li>- Thailand faces income disparity issue</li> <li>- Very Poor Vs Very Rich (less middle income)</li> </ul>

### Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
To avoid the problem of unemployment, it has to be subsidy in government plan to increase infrastructure development (both government and businesses) will need to employ the employees. The government already guaranteed the minimum income level. We adjust the salary along with government. This suffers the company as they have to pay more but getting the same quality of work.	<ul style="list-style-type: none"> <li>- Government spending can reduce unemployment rate</li> <li>- The current minimum wage is acceptable</li> </ul>

### Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
Government should see the problem of lack of labor which is likely to happen soon with Cambodia and Burma in order to bring more labors. We will not have enough labor once the government has started their mega project. The price of labor and materials will all be affected once the government starts the new infrastructure development as planned. Government need to manage materials labor.	<ul style="list-style-type: none"> <li>- Thailand has very low unemployment rate</li> <li>- Developers source labor force from Cambodia and Burma</li> <li>- Government should prepare to bring more foreign labors to meet the demand</li> </ul>

### Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
<p>Our company does not affect by unemployment rate or lack of labor. We were concerned of this issue therefore we try to make everything by ourselves. It takes us 4 months to complete a house by using 10 workers. If we really lack workers, then it might take us 6 months with 4 workers. We maintain our labor workers to efficiently develop our project. Our human resource follows Thailand's regulations. We do not overpay at the same time we do not pay too less. However, the new generation Gen X Gen Y like to change work environment to the place that is giving them better pay and better environment. We always get new employee to replace the old one who wish to resign. The ones who wish to resign would have to report us a month in advance so we have time to find a new worker. We think of us as a school to develop competent worker. If any of workers believe they can find better place, we also support them. We use prefab technology to create our house. Therefore we can minimize the use of labor force. We usually more than 40 prefabs for a house. The prefab technology is saved and can be used with middle range house. Prueksa Property also use prefab. For expensive houses, we use ready made PIS. PIS are the ready made floors for houses which help to cool down the house.</p>	<ul style="list-style-type: none"> <li>- Use prefab to reduce labor force</li> <li>- The current minimum wage is acceptable</li> </ul>

#### Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
<p>The current situation of Thailand residential real estate is not interrupted by the lack of labor as our unemployment rate is relatively low. We can accept the minimum wage of 300 baht. Meanwhile, we continue to use foreign workers from neighbor countries. There are approximately 3,000,000 foreign workers in Thailand. In ASEAN, the countries with higher wages than Thailand are Malaysia, Brunei, and Singapore. Therefore, the unemployment factor does not affect Thailand residential real estate.</p>	<ul style="list-style-type: none"> <li>- Thailand has very low unemployment rate.</li> <li>- The current minimum wage is acceptable</li> </ul>

#### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
<p>The unemployment and income disparity can affect the real estate industry however this depends on which market we are targeting. Real estate developers may target the rich businessmen and foreign expats and so the income disparity will not hurt them. For those developers targeting the middle to lower income residents, this may be an issue. Market Analysis is able to help reduce the risk in the market. With efficient market analysis, new comers can create for real estate that matches the needs of the market.</p>	<ul style="list-style-type: none"> <li>- Depends on the target customer</li> <li>- Market Analysis is necessary to reduce the risk</li> </ul>

#### Data Extracted from Voque Co., Ltd

Data extract	Coded for
<p>At the moment, we are not facing the lack of labor issues. The real estate developers are relied their workforce from Burma, Laos, and Cambodia. The introduction of ASEAN next year would open door to more workers from foreign countries to come and work in Thailand. Our unemployment rate in Thailand is very low. Therefore unemployment is not an issue for us. The minimum rate of 300 baht is appropriate.</p>	<ul style="list-style-type: none"> <li>- Not an issue (lack of labor)</li> <li>- Thailand has very low unemployment rate.</li> <li>- The current minimum wage is acceptable</li> </ul>

#### Data Extract from Exclusive Estate Co., Ltd

Data extract	Coded for
Our company does not face shortage of labor. We got the workers to be more value added. We enhance skills with on the job training plus formal training for head roles, thus increase productivity The best ways to solve this issue sustainably is to provide for value added courses to labor. This can be an enhancement in skills, and translate to higher productivity. With higher productivity, the workers can earn more, more incentivize to work, and thus reduce income disparity.	Enhance workers to develop skills to minimize income disparity

#### Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
Create more jobs and maintain political stability. Definitely it affects us because our clients are middle income group and they are sensitive	Government need to create more job and maintain politics

7. In your view, how can new comers in Thai residential real estate improve on their risk management in order to have more competitive advantage in terms of entry, construction, revenue and profits? Please describe the risks and suggest ways for newcomer to gain competitive advantage by considering the social, technological, economic/environmental, and political aspects

#### Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
New comers need to be prepared their financially as the cost is very high. The possibility of profits in this industry is approximately 10-15 percent. For example, the cost of construction can be fixed since the beginning of project. At the moment, our company manages our own marketing and we could do very well. New comers have to be careful in marketing expenses, as some of the projects we did marketing but did not receive good response. Our marketing channels are billboards, events, and internet. We prepare our sale team with materials to meet our target.	<ul style="list-style-type: none"> <li>- Financial Strength is necessary</li> <li>- Construction cost usually fix since the beginning of project</li> <li>- Proper marketing</li> </ul>

#### Data Extract from Quest Development Co., Ltd

Data extract	Coded for
Newcomers have to go out of their way to make buyers comfortable in investing. Products must be comparable and better than established one to make buyers see the different. Newcomers have to educate customers about their selling product about their product differentiation. First thing construction cost is higher than established one. They have to trim their management expense at. Newcomer must utilize the cost of marketing efficiently and make it the most worthwhile. In general if general economy is better, real estate also will be better as well.	<ul style="list-style-type: none"> <li>- Normally face higher entry cost</li> <li>- Must trim their management expense</li> <li>- Use cost efficiently</li> <li>- Must differently their projects from established one</li> </ul>

## Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
The project can reduce the risk in this business. They should consider business alliances or joint venture. I have seen example of mega project which is partnered by 3 groups of businesses of different types of businesses work together. They mix together to reduce the risk. We need to be differentiated to survive and gain better profits and fewer competitors. Joint venture or alliances can earn advantage by sharing technology, expertise, and investment.	<ul style="list-style-type: none"> <li>- Should consider business alliances strategies to share cost/expertise</li> <li>- Differentiate to survive</li> </ul>

## Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
Our target customer who are middle to high income with regular salary of 50,000 or up as bank would give loans to them. The ones with salary of 30,000-40,000 are not capable to ask for loans easily. Construction is the heart of real estate and quality. Newcomers should not focus of quantity. A house without quality is useless. Newcomers should have ethics and do not sell over the price. In the past, we were able to receive 200-300 percent in profit. Now the most we can receive is 30 percent, but after tax and everything we would get only 15 percent as there are many expenses. Connection and creditability is very important in doing real estate business. If you have good creditability, banks will be happy and easily give loans when you need to make a project. The reputation of project owner is very important. Housing development is relied on money sources. The newcomers need to complete the project first in order to sell since the project owner's name is not recognized by customers...	<ul style="list-style-type: none"> <li>- Target customer with net income of 50,000 baht</li> <li>- Maintain reputation and credibility</li> <li>- Focus on quality than quantity</li> <li>- Maintain good credit standing with banks.</li> <li>- Complete project first ahead of sale.</li> <li>- Target profits around 15 percent</li> </ul>

## Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
Economy of scale is the factor that should be considered. The situation of Thailand residential real estate is very unfavorable to any newcomer. With economy of scale, established brands can save their marketing cost by 2 percent more than the newcomers in which the newcomers need to spend approximately percent on marketing, established brands need to spend only 2 percent. Additionally, established brand can also save their construction cost approximately 3 to percent more than the newcomers. However, we all face similar amount of tax rate of approximately 15 to 20 percent. The selling price of newcomers should be 20 to 30 percent lesser than established brand. Newcomers really need to cut their selling price to compete with established brands. My company target customer with an income of 50,000 baht. MY project which sells the most is in the range of 2,900,000-3,000,000 baht. The 6,000,000 baht project is slow.	<ul style="list-style-type: none"> <li>- Established players enjoy 2 percent cost advantage than newcomers in marketing and 3 percent cost advantage in construction cost</li> <li>- Newcomers must lower price VS established competitors</li> <li>- Focus on mid-level pricing project (3,000,000) baht</li> </ul>

## Data Extract from Suetrong Co.,Ltd.

Data extract	Coded for
<p>Currently, Thai residential real estate has so many foreign players from China and Japan. The Chinese company TC Green from China is making mega residential project with 3-4 buildings. Not only just that, many Japanese are doing joint venture with real estate companies that are listed on the SET. This attracts many demands from customers. If the foreign developers keep flowing to Thailand, Newcomers need to focus on establishing the brand to be known. The opening of AEC in 2015 will be a good opportunity to attract foreign investors to buy property in Thailand as Thailand ...there are many corruptions...In housing project, Thai new comers should closely study the coming risks and look at it closely. Hiring a risk-management could be an option to look at possible risk that might affect the project. I look at newspaper everyday and see how other developers are doing. I market my project by giving one baht gold to old customer who introduces new customer for me. I read newspaper everyday and see how other developers are doing. I market my project by giving one baht gold to old customer who introduces new customer to me. I also facilitate my project by financing 10 buses to pick up and drop residents of my project to MRT. I do not collect interest from them. On the other hand, they will advertise my project behind their van. Keeping customers satisfied is the main key as I still have many plots of lands available. Therefore, I make sure that my customers are satisfied with our services. During the recent flood crisis, I spent approximately 10 million baht to drop food and buy Mama, and dry food to people in my project as they were not able to come out due to high level of water on the main road in front of my project. We used to sell 10 houses now we can only sell 3 houses per month due to current circumstance. However, we have to survive with the situation. I get calls from reports from various newspapers regarding the current situation of Thai residential real estate. I always answer them that the effect of the situation will last till the end of next year. I look at any impact closely by having weekly meeting with employee in my company. We have to see which marketing plan we should implement to solve the current problem.</p>	<ul style="list-style-type: none"> <li>- Many foreign developers are coming to do business in Thailand.</li> <li>- Need to focus in branding their project</li> <li>- AEC good opportunity to attract foreign investors</li> <li>- Should hire a risk manager to look at risk closely</li> <li>- Many corruptions in the government system</li> <li>- Customer satisfaction is the key</li> <li>- Be adaptable and responsive</li> </ul>

## Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
<p>There are many instruments that can help newcomers to create a better more accurate analysis. Market research and consumer analysis can help newcomers to be competitive and develop a product which the market desires. In my opinion, the problem of the product itself is very minor.</p>	<p>Market research is the key</p>

## Data Extracted from Voque Co., Ltd

Data extract	Coded for
<p>New comers will have to face more expenses comparing to established real estate developers. My target customers are the ones with income of 50,000 baht and above. Marketing could be tricky as you might not know whether you would give you the result that you were expected. Our company usually holds events at department store and property fair at Sirikij Convention Hall. We also advertise our project on prakard.com. Nowadays, people like to search on internet. Advertising on line can also help us to get new customers. We also rely on our old customers to introduce us their family and friends by giving some incentives to them. Many of my customers end up to be parents as they want to buy a place to live in the city since their children are going to university in the city</p>	<ul style="list-style-type: none"> <li>- Newcomers face more expenses VS. Established brand.</li> <li>- Hold events/expo to promote/Internet advertising/words of mouth</li> </ul>

## Data Extract from Exclusive Estate Co., Ltd

Data extract	Coded for
Being a cost leader is crucial. If not, they have to be a value innovator such as the first mover advantage in being prefab technology in construction. Either model will enhance sustainable competitive advantage. I have been in this business for 5 years and I never concentrate on spending my cost on marketing. My project usually is known by word of mouth either by people who lived near the zone, and told their relatives to come and buy my property. We usually request to ask permission to check their credibility with credit bureau. Our target group is the person with net income of approximately 30,000-40,000 baht. Our selling price in townhome project is approximately 4,000,000-5,000,000 baht. We usually focus on building small project with 30-40 houses. One of our projects is at Patanakarn Road Soi 38 called Pinely. We also have townhome project in Pattaya, the price is approximately 2,800,000-4,000,000 baht.	<ul style="list-style-type: none"> <li>- Be cost leader or be a value innovator like prefab to build competitive advantage</li> <li>- Focus on small projects</li> <li>- Townhome 4-5 million/unit</li> </ul>

## Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
New comers will face higher risk than old players. Unless they can bring in new technologies which will fasten the construction process and become less dependant on labor. As we all know that Thailand has been facing shortage of labor supply in many sectors and distinctly, the residential sector.	<ul style="list-style-type: none"> <li>- New technology is the key to success</li> <li>- Less labor dependent as labor shortage can be serious</li> </ul>

8. In your vision, can the new comers in the Thai residential real estate create sustainability real estate project or green building? Why and Why not? Are you aware of the green technology?

## Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
I know about the green building. However, the cost is very expensive. I use some of the materials such as glass to protect the hot heat in some of my projects	<ul style="list-style-type: none"> <li>- Cost of green building is expensive</li> </ul>

## Data Extract from Quest Development Co., Ltd

Data extract	Coded for
Yes I am aware of the green technology. The newcomer can crate sustainability green building. I have seen example of Singapore company such as Fragrant group whose focus in creating green environment in every of their projects as their selling point. For example, their projects save customer electricity bills as customers can use hot water without using electricity.	<ul style="list-style-type: none"> <li>- Create sustainability by saving water if use proper sanitary ware that consumed less water.</li> </ul>

## Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
Green building is costly for developer. The government should set in to subsidize the system of green building.	- Cost of green building is expensive.

## Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
We know about green technology but we cannot work on it 100 percent. The cost of investing is high. Project developers follow green technology as selling point to attract customer. We see other project developers who follow green technology such as, Nusasiri and Crystal Ramindra. For ex., Nusasiri once people enter the house, the electricity will be switched on only if you clap your hands together to make noise. The cost of project is 50 million baht. Crystal Ramindra project is 50-150 million baht which has different selling point to attract customers.	- Cost of green building is expensive - Differentiate

## Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
We consider about green building idea. We also have invested in solar cell to put in four of our sample houses in our project. The solar cell is consisted of a meter from the Electricity Generating Authority of Thailand. It took us one year to get the meter for the solar cell from the EGAT with excuses that they were shut down by the anti-protestors ...The price of solar cell is around 100,000 baht...we can save our expenses on electricity...We will be testing whether the solar cell can actually provide 2000 baht of electricity...	Consider to do green building Differentiate

## Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
My company follows the guidelines of green building project eco village and receives prizes for this. If we initially plan since the beginning, our construction cost will be about 3.5 % more than regular housing development project...if we did not initially plan for green building from the beginning, the cost of project would be 7-10 % more than normal housing development project... we plan to create green building project since the initial of planning as we want to differentiate our project from others...we follow regulations of EIA. It is not too difficult for us to follow the regulations required by EIA. The EIA require us to consider various aspects of energy and environment conditions during our construction...By saving energy cost, we can value added our project and able to sell our project higher than regular housing development.	Differentiate The cost of green project would be only 3.5% more since the initial project planning It is not difficult to follow EIA guidelines. Value added to project

## Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
The management of real estate needs to take into consideration the innovative green technology because many wealth owners are quite conservative and they want to be environmentally friendly. The middle to lower income citizens may not care too much about the issue.	Should consider green technology. Differentiate Perfect for High incomer group

## Data Extracted from Voque Co., Ltd

Data extract	Coded for
Green building will play a major role in the industry as the new law also gives lots of benefits to the developer when following the green standards. It will also improve living culture as we could reduce the global warming issues	- Should consider green building

#### Data Extract from Exclusive Estate Co., Ltd

Data extract	Coded for
At the moment, it would be very hard to get a foothold in real estate as markets are saturated with supply and dwindling demands. Not many industry participants have tried to innovate through green technology as their budgets are tight and this factor can be very costly.	Cost of green building is expensive

#### Sample Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
Yes and why not. It all depends on technology. How good and how fast you can master it.	- Should consider green building

9. What is your outlook on Thai residential real estate policy and how do you think it can be improved in order to respond to the impact of global risk and create a competitive advantage of Thailand's residential real estate business in future?

#### Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
The current policy for juristic management in the past 3-4 years is better. However, we do not have a solid punishment (not too harsh punishment) to those who avoid paying the management fee as they would decide to pay only when want to sell their property.	Avoid paying management fee Required not too harsh punishment

#### Data Extract from Quest Co., Ltd.

Data extract	Coded for
Government cannot reduce their tax in real estate. The range of tax in Thailand is somewhat the same if compared with neighbor countries. In general if the economy is better, real estate also will be better as well.	Government should reduce transfer fee to stimulus the economy.

#### Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
I feel we need a good R&D development in our company to support information and innovation to make future project visible. We need to apply risk management and know what will happen in future. We need proper team to study past experiences. We should be alert and aware more of future.	R&D is necessary to forecast the coming trend.

#### Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
Government should be involved to stimulate the residential real estate market. However, government are not supporting as much as they should. We pay our tax regularly but we do not receive any return. The benefits are only available to their particular group.	Government should reduce transfer fee or tax to stimulate the real estate industry.

### Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
There are loop holes in residential real estate regulations which create corruption among government agencies. Government sees residential real estate owners as thieves and getting profits from customer. If we are deceivers, customers would not buy our product.	There are loop holes in residential real estate regulations (corruptions)

### Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
.... The current arrangements of city planning are seemingly mixed together and each infrastructure is closely located to one another. For instance, the locations of hotels, schools, hospitals, and retails should be arranged to be in the same vicinity...warehouses, factories, power plants should not be in the same vicinity of the residential area....need to correct our city planning ...to create a dream town...Thailand residential real estate also needs a competent juristic property management to ensure long-term convenience and quality of residential lives in a clean environment. A number of issues have been raised when the project owners are no longer responsible in charge of juristic committee...	Need long term rule for juristic management after project owner no longer manages the property. Government should make a better city planning

### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
I believe that there needs to be an allowance for foreigners and expats to buy the real estate of Thailand because their investments can help to strengthen our economy as well as our industry. Thailand is doing itself a disservice by not allowing foreigners to obtain similar purchasing rights as local people.	Foreigners should be able to obtain real estate with similar purchasing rights

### Data Extracted from Voque Co., Ltd

Data extract	Coded for
Government should stimulate the real estate industry by reducing the tax and transfer fee. Buyers and sellers can benefit from the incentives.	Government should reduce transfer fee to stimulus the economy.

### Data Extract from Exclusive Estate Co., Ltd

Data extract	Coded for
Slowing global risk, I don't believe in the rosy picture of the RE market. Thailand needs an external push to assist in its jump start. Until then, I maintain a doom view on the sector.	Thailand's real estate needs external factors to stimulate the business.

### Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
Thailand is very poor and slow in initiating any measures that will benefit or safeguard the public. On problem is "Political Instability"	Thailand is slow in making measures to benefit general population.

**10.** In your view, what do you think the situation of Thailand's residential of real estate would be for the next 5-15 years from now? How would the situation be different from now?

#### Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
In future, the environment, city planning, housing development, and management should be better. There will be more products in the market. In particular, there will be more condominiums as people would want to live in condominium which is closed by to their office or school. The price of oil will be increased much more than today.	<ul style="list-style-type: none"> <li>- More condominiums</li> <li>- The city planning and environment, management will be better</li> </ul>

#### Data Extract from Quest Development Co., Ltd

Data extract	Coded for
The real estate market has been up over 10 years. Therefore we have to watch out for the bottom side of market such as last year stagnation on political crisis market did not crash and slight improvement after the coup. There is up and down in real estate. In each cycle last 5-10 years. This cycle has been about 10 years and there will be some adjustment in the near future if there is no negative global impact in either war or global crisis, the adjustment will be shorter.	<ul style="list-style-type: none"> <li>- Watch out for downside of the market as the market has been up for so long</li> </ul>

#### Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
The real estate should get the better quality of product. We will not have enough land to develop project. In future, it will be very competitive. It is already competitive now. Buyer will get better negotiation in future. They learn from mistake they will know which materials should be used. I wonder what will happen if we don't have land to develop real estate. In future, the market for the demand will be saturated. If we don't have anymore population how will people buy property? AEC, Expat are good opportunity as this create inflow of new group of people, which is good.	<ul style="list-style-type: none"> <li>- Better quality of product</li> <li>- Not enough land in center area to invest</li> <li>- More foreigner investors</li> </ul>

## Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
The residential real estate is still needed as 60% of Thais do not have their own houses. There are changes in technology. If the cost is cheaper, then real estate developers can "Go Green" more. In order to make condominium, there are required spaces to be green. Developers have to spend lots of money to grow trees and screen testing the pollution. As for houses, we also require to grow trees in the center area.	<ul style="list-style-type: none"> <li>- 60% of Thai do not have their own houses.</li> <li>- Changes in technology.</li> <li>- If the cost is cheaper, more can go green</li> </ul>

## Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
In another 5-15 years, my outlook is that the coming 5 years will change a lot whether this government or new government. All the BTS and MRT will all be accessible. The price of condominium will be very expensive. People will choose to live in condominium or houses that are near to BTS or MRT instead of driving 2 hours to work. In another 10 years, people will be travelling by MRT and BTS more and the MRT purple lines will be full of condominium projects	<ul style="list-style-type: none"> <li>- More condominiums</li> <li>- Price of condominiums will be more expensive</li> <li>- People prefer houses near BTS or MRT</li> </ul>

## Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
There would be many "mini urbanizations" in Bangkok and CBD or Central Business District. There will be many downtowns in the cities that are closely located to Thailand's border and these areas will turn to residential areas and business districts. There will be many downtown locations in the provinces near to border of Thailand. Some of the examples of the main provinces which are closely to border are Chiangmai and Nakorn Ratchasima. Therefore, the location which is closest to border will become a downtown. Eventually, people will not migrate into only Bangkok as there would be more availability of works around the future downtown and mini urbanization area, therefore the rate of migration to the capital will be less in the future.	<ul style="list-style-type: none"> <li>- Many urbanizations and downtown outside Bangkok in the provinces</li> </ul>

## Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
I believe that next year with the incoming AEC the real estate industry of Thailand will improve since the country is in an attractive location and has a very strong appeal to foreigners.	<ul style="list-style-type: none"> <li>- There will be more foreign investors in the future</li> </ul>

## Sample Data Extracted from Voque Co., Ltd

Data extract	Coded for
I think the lifestyle of people will change as living inside the city will be much easier due to the traveling time, security, etc. More condos will be built; price will be very high if the location is closed to mass transportations.	<ul style="list-style-type: none"> <li>- More condominium in the future</li> <li>- Price of condominiums will go up</li> </ul>

## Sample Data Extract from Exclusive Estate Co., Ltd

Data extract	Coded for
It is very difficult to project that long. Presently, it is not good. Whether it will improve has to do a lot with global factors.	- Very difficult to forecast the future, factors keep changing

## Sample Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
There are more problems to come. The shortage of labor will be a big task to overcome.	- Shortage of labo

11. Does your company require a maximum return from investment without considering on risks in each project?

## Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
Risks are always our main concern. I have proposal to consider of going stock market. However, I am still deciding with my partners whether we should go on stock market. We should consider all types of factors before doing anything as there are consequences in any decision. I am happy where my company is right now. I look forward to work in a sustainable environment which I am currently satisfied with what I have got today.	- Risks should be considered - All factors should considered before making an investment decision - Risk>Maximum Return

## Data Extract from Quest Co., Ltd.

Data extract	Coded for
No, my company looks at risk closely and the future uncertainty. We follow the term "Less risk, Less return" to control the future of uncertainty.	- "Less risk, less return" - Risk>Maximum Return

## Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
We are very conservative company. We are not greedy. We have level of satisfaction. We have target, but we do consider risk closely.	- Conservative company - Look at risk closely - Risk>Maximum Return

## Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
We are concerned about risk. Our company hired risk manager to forecast risk for us. Therefore, we know we can be cautious when we make investment decision.	Risk Cautious>maximum return

## Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
Risk should be considered since the first decision to purchase a land. The land's location and price must be considered before purchasing. The price of land need to be considered closely to make sure that the price is reasonable and that there is no risk in buying, and to eliminate the possibility loss in the project. We have to oversee everything when land broker offer us a piece of land and the price.	<ul style="list-style-type: none"> <li>- Risk should be considered since the initial planning to avoid failure</li> <li>- Risk&gt;Maximum Return</li> </ul>

#### Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
The current real estate company can pay dividend or premium, price of 6% to 7% to shareholders and they are happy, therefore maximum return is not the main factor for property industry.	<ul style="list-style-type: none"> <li>- Maximum return is not the main factor</li> <li>- Shareholders are satisfied with returns</li> <li>- Risk Cautious&gt;maximum return</li> </ul>

#### Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
We can not evaluate the maximum return of a project proposal; rather a better and more accurate analysis would be to study the low risk and fair return.	<ul style="list-style-type: none"> <li>- Maximum return cannot be evaluated, but evaluation of risk can be analyzed to lower the potential risk with fair return</li> <li>- Risk Cautious&gt;Maximum Return</li> </ul>

#### Data Extracted from Voque Co., Ltd

Data extract	Coded for
We have been in this line for over a decade, with our performance and experiences, the interest rate we got from the bank loan is moderate (MLR 6.75%) by all means we don't need to maximize the return to gain profit, We have a motto that we balance the risk with standard amount of return as sometimes too risky projects can cause major chaos.	<ul style="list-style-type: none"> <li>- Risk Cautious&gt;Maximum Return</li> <li>- Shareholders are satisfied with their returns</li> </ul>

#### Data Extract from Exclusive Estate Co., Ltd

Data extract	Coded for
No, we prioritize more on risk in this risk adverse environment than return.	<ul style="list-style-type: none"> <li>- Be risk adverse</li> <li>- Risk Cautious&gt;Maximum Return</li> </ul>

## Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
Definitely not. One should not be blinded by counting to make as highly yield as possible and turn blind on any risk involved with each project.	<ul style="list-style-type: none"> <li>- Be aware of risk and not be blinded</li> <li>- Risk Cautious&gt;Maximum Return</li> </ul>

12. Lastly, do you wish to add any thoughts or additional information to make Thai residential real estate become more competitive?

## Data Extract from Preamsuk Property Co., Ltd.

Data extract	Coded for
Condominium is continued to be the leading product in residential real estate.	<ul style="list-style-type: none"> <li>- Condominium will continue to be the leading product</li> </ul>

## Data Extract from Quest Co., Ltd.

Data extract	Coded for
It is very competitive. There are so many newcomers fighting at the same market	<ul style="list-style-type: none"> <li>- Residential real estate is very competitive fighting at the same market</li> </ul>

## Data Extract from Ocean Property Co., Ltd.

Data extract	Coded for
Residential real estate businesses should create sincerity and trust to customers. We want to delivery good quality of products and give them with trust. If we can do that Thailand residential real estate will be in a dignity way and we are proud of it. We don't want foreigner to say that Thailand development is a very poor country	<ul style="list-style-type: none"> <li>- Thai residential real estate should provide trust and sincerity.</li> </ul>

## Data Extract from Suetrong Group Co., Ltd.

Data extract	Coded for
The opening of AEC in 2015 will be a good opportunity to attract foreign investors to buy property in Thailand as Thailand is considered one of the leading countries with a good market-based. The current situation of Thai real estate market is that there are many corruptions. Also, the law of city planning is too complicated. I hope we the government will support one stop service with timeframe of 30 days as real estate companies have to contact at least 10 government department and local agencies in order to have an approval of residential project.	<ul style="list-style-type: none"> <li>- AEC attract foreign investors from neighboring countries.</li> <li>- Government should close loops holes so there will be lesser corruptions from government agencies.</li> <li>- One stop service</li> </ul>

## Data Extract from Rasika Property Co., Ltd.

Data extract	Coded for
I want to see ethical and good quality of people and companies. Good quality product will last for long period of time and worth the investment.	<ul style="list-style-type: none"> <li>- Should provide quality and be ethical</li> <li>- Quality of product last</li> </ul>

## Data Extract from Chalerm Nakorn Co., Ltd

Data extract	Coded for
I want the future of real estate to focus on turning an area to a mega project. I feel ashamed that the mega project such as Mueng Thong Thani and Sarin City were not successful. I do not want this idea to stop. I seriously hope and believe in creating a dream town. I hope government would take this issue seriously and support the idea. Bangkok will be a better place to live. As for now, the land in central area of Bangkok is being used to make condominiums. Whoever has land, they would turn the place into a condominium project. People will have less access to less green space if there are too many condominium buildings. Therefore, government should seriously create a better city planning in order to restrict zoning for residential area according to EIA. For example, government should give benefit to developers who focus on creating energy saving project.	<ul style="list-style-type: none"> <li>- Real estate should focus on making mega project or dream town.</li> <li>- Government should improve city planning to create better zoning for residential area according to EIA</li> <li>- Too many condominiums in Bangkok</li> </ul>

## Data Extracted from Menam Residences Co., Ltd

Data extract	Coded for
My recommendation is for the Thai government to open up their real estate and properties to foreigners for investment. I believe that their investments will boost our economy as well as make our industry much more competitive.	<ul style="list-style-type: none"> <li>- Open door for foreigners to boost economy</li> </ul>

## Data Extracted from Voque Co., Ltd

Data extract	Coded for
At the end, people who desire to live in the city as many jobs are mostly available in the center area with attractive pay. Condominiums price will definitely increase as there will be more demands from consumers. Condominiums can be owned by foreigner and will be attractive to foreign investors who would choose to live in Thailand, especially after AEC 2015. The price of condominium will go up along with land prices.	<ul style="list-style-type: none"> <li>- Condominium price will increase</li> <li>- More people will live in the city</li> </ul>

## Data Extract from Exclusive Estate Co., Ltd

Data extract	Coded for
(N.A.)	(N.A.)

## Data Extract from Sirin Estate Co., Ltd

Data extract	Coded for
The government should play more roles in solving the core issues of construction industry, labor supply and law associated with the residential sector.	<ul style="list-style-type: none"> <li>- Gov. should implement laws to solve cores issues of construction, labor supply which link to RE</li> </ul>



**APPENDIX E**

LETTER OF CONDUCT RESEARCH

146/3 Soi Soonvijai 8/1  
New Petchburi Road  
Huakwang, Bangkok10320  
9 Novemberr 2014  
To whom it may concerned,

**Request to interview you about your company**

I am a MBA student at Stamford International University. As part of my course, I am in the process of writing my dissertation on the topic “Global Risk that Impact New Comers in the Real Estate Industry. Case Study: Thailand Residential Real Estate” My thesis is to create awareness of global risks and how to avoid project losses in real estate businesses. I choose the focus on new comers in real estate as I would like to create awareness among newcomers in property business to the potential losses due to uncertainty risks associated with global risk and to gain competitive advantage for the future of residential real estate.

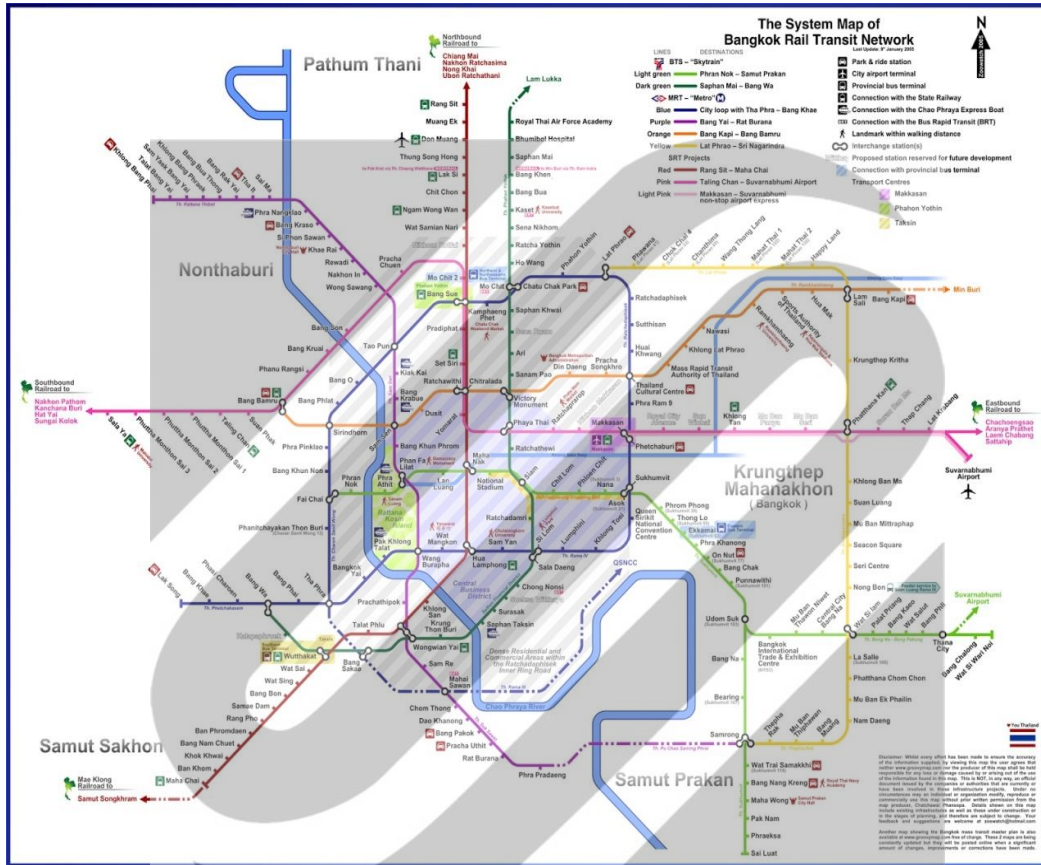
The purpose of this letter is to kindly ask for your assistance to serve as one of my interviewees as I am especially interested in your views regarding the impacts of global risk in the real estate industry. Your expertise in real estate industry could help me achieve my goal for this thesis. I sincerely hope that you will consider participating in this commitment.

In line with this, I would like to set an appointment with you at the time and date you are free as I am collecting information for my thesis. If you have question, you can directly contact me through my mobile phone number at 0819329806. Thank you and I am hoping for your positive response.

Yours sincerely,  
Rajkumari Srikuruwal  
Student of Stamford International University



# The System Map of Bangkok Rail Transit Network





**APPENDIX G**  
NOTIFICATION OF MINISTRY OF NATURAL RESOURCES AND  
ENVIRONMENT

**Notification of Ministry of Natural Resources and Environment**  
**Subject: Criteria, procedure, regulation and guideline to prepare**  
**environmental impact assessment report for a project or an activity that may**  
**cause severe impact to quality of environment, natural resources and health of**  
**a community**

\*\*\*\*\*

Due to a specific characteristic in preparing and considering the Environmental Impact Assessment (EIA) report for a project or an activity that may cause severe impact to a community, which has a different consideration view from other general projects or activities, and in order to conform to Article 67 of the Constitution of the Kingdom of Thailand; by the virtue of Article 46 and 51 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535, Minister of Natural Resources and Environment, by an approval from the National Environment Board, hereby announces criteria, procedure, regulation and guideline to prepare environmental impact assessment report for a project or an activity that may cause severe impact to quality of environment, natural resources and health of a community as follows:

Article 1 A project or an activity of the government agency, state enterprise or a private sector that may cause severe impact to a community, as specified in 1.1 and 1.2 of this Notification, shall prepare the EIA report for a project or an activity that may cause severe impact to quality of environment, natural resources and health of a community, and shall arrange a public hearing for people and stakeholders, as well as shall contain a comment from an independence agency. These shall be conducted in line with criteria and procedure specified in the annex of this Notification.

1.1 Any project or activity that is specified or announced by this Notification or other laws as a project or an activity that may cause severe impact to quality of environment, natural resources and health of a community.

1.2 Any project or activity that is judged by a subcommittee, which is appointed by the National Environment Board, within 30 days after receiving a petition that such project or activity may cause severe impact to quality of environment, natural resources and health of a community.

Article 2 A person who is legitimate to conduct the EIA report specified in this Notification shall be permitted and registered with Office of Natural Resources and Environmental Policy and Planning (ONEP) as a legitimate person to conduct the EIA report. If there are other laws already specifying about a permission and procedure for a legitimate person to conduct such EIA report, a legitimate person shall also get permission by those laws.

Article 3 After ONEP receives the EIA report from a person mentioned in Article 2, ONEP shall perform an action required by the Article 48 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535 by submitting the EIA report to the expert committee to consider the report according to the Article 49 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535.

Article 4 After the expert committee approves the EIA report, ONEP shall send a result of consideration of a committee to the government agency responsible

for that project or activity or to the government agency responsible for approval such project for further arrangement of a public hearing for people and stakeholders. A public hearing shall be arranged in according to a public hearing procedure specified in the annex of this Notification.

Article 5 After the expert committee approves the EIA report for a project or an activity that may cause severe impact to quality of environment, natural resources and health of a community, ONEP shall send the approved EIA report together with a comment of the expert committee and a conclusion of environmental impact prevention and reduction measures to an independence agency to give comment before proceeding to further step or to a permission procedure by a responsible government agency.

Article 6 In case of a project or an activity specified in Article 1 that belongs to the government agency, state enterprise, or a co-project with private sector, which shall be submitted for approval to the cabinet, ONEP shall submit comments from the expert committee, an independence agency, and a public hearing report to the National Environment Board for giving comment for the cabinet's consideration.

Article 7 This Notification shall be effective a day after published in the Government Gazette.

Announced on 29<sup>th</sup> December 2009

Suwit Kunkitti

Minister of Natural Resources and Environment

(This Notification was published in the Government Gazette No. 126, Special part 188 Ngor, dated 29<sup>th</sup> December 2009)

**Report of Significant Impact to Environment  
Prevention and Mitigation Measures  
And Monitoring Measures of Environmental Impacts**

<b>Environmental Element and Values</b>	<b>Significant Impact to Environment</b>	<b>Prevention and Mitigation Measures</b>	<b>Monitoring Measures</b>
Abiotic resources			
Biotic resources			
Biological system			
Human use value			
Quality of life value			

**Environmental Impact Assessment Report**

Name of the Project .....

The Project Site .....

The Project Proponent .....

Address of the Project Proponent .....

Power of Attorney

The project proponent authorizes .....  
to submit the EIA report on our behalf as a letter of authorization is shown in the  
attachment.

The project proponent has not authorized to any parties.

Prepared by

.....  
(Legal entity that prepares the report)

**BIOGRAPHY**

**NAME** Rajkumari Srikuruwal

**DATE OF BIRHT** 25<sup>th</sup> JULY 1981

**EDUCATION**

**2014** Master of Business Administration  
Stamford International University

**2003** Southern New Hampshire University  
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Economics And Finance

**1999** Ruamrudee International School

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