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The goal of the *ASEAN Journal of Management & Innovation* (AJMI) is to publish insightful, original and timely research that describes or potentially impacts management and/or innovation that has the potential to be applied in the ASEAN context. Topics that are either distinctly ASEAN-related, or are regional or international in scope are encouraged. AJMI is multidisciplinary in scope and interdisciplinary in research methodology and content. AJMI accepts papers that initiate or redirect a line of inquiry as well as papers that provide new insights into previous work.

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Editorial

Dear reader,

It is my pleasure to present this edition of the AJMI. As the new Editor-In-Chief it is an hounor to build on the legacy that was built by Dr. Dolly Sampson. It is also an honor to work with the amazing authors that have contributed to this edition of the journal. Each and every one has dedicated a tremendous amount of time and energy into the works they present to you here. Good research takes a lot of work to conduct and present. Each and every one of the authors should be commended for the efforts they have given to these articles. I am very proud of the authors who undertook the challenges I put forward to improve their work. They did not shrink back but accepted the challenge and even exceeded my expectations.

Going forward I hope the AJMI can become a place for nation building. Thailand is an amazing country with so much to offer the world. Looking forward I hope to help bring some of my professional experience to improve the quality of research papers that are submitted to the AJMI. To promote and build this country it is important to have proper comminications so others can understand the message. I encourage others to submit to the AJMI with a commitment to work with me to achieve excellence in our research products.

During the six-months I have lived in Thailand it is apparent that there is a thirst for knowledge and for doing things in the right way. When people from different cultures come together and work together amazing things can happen. Common understanding often leads to better understanding. Together we can capitalize on the strengths of each other to provide something that is better than the product we could create on our own—the synergy effect.

In this edition we are also introducing a Book Review section. Please contemplate the submission of a book review for consideration in future AJMI publications. We look forward to your good suggestions and recommendations.

Finally, a word of congratulations to Dr. Alexander Franco. His paper was selected as the Editor's Choice from our 2015 Natioal Conference in October. The paper provides some interesting insights into cultural differences and cause for critically thinking about how cultural difference can influence the business culture.

Thank you for your continued support of the AJMI.

Sincerely yours,

Bradley A. Corbett, Ph.D.

Editor in Chief

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Book Review

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Caudillismo as a Business Leadership Model: A Critical Assessment

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Abstract
Caudillismo has been a dominant cultural manifestation within Latin nations. It is grounded in fundamental value premises of Hispanic culture, derived from traditional Spain. Much has been written about how *caudillismo* has impacted in the political sphere, but little research has been done to assess its impact in the world of commerce and, specifically, as a model for leadership in business. This study created a literature review that highlights the fundamental value orientations and cultural dimensions of *caudillismo* in order to assess its worth as a model for leadership in the business world. Recommendations are made, based on this critical assessment, and suggestions are provided for future research.

Keywords: Caudillismo, caudillo, Latin America, business leadership, leadership, culture, cultural theory, cross-cultural management, cross-cultural communications, pyramidal management, power structure, Kluckhohn, Hofstede

1. Introduction

Article type: Literature review. Very little has been written about *caudillismo* as a business leadership model or how *caudillaje* characteristics impact on the managerial decision-making of a business. This study sought to explore the fundamental value orientation and cultural dimensions of *caudillismo* in order to assess its strengths and weaknesses and to provide recommendations as to the implementation of this leadership model.

2. Literature Review

Cultural Theory and the Definition of Culture

In the early 1960s, Clyde Kluckhohn at Harvard and Alfred Kroeber at Berkeley, considered the twin deans of American anthropology at the time, set out to create an objective science of culture that would allow for scientific cross-cultural analysis. Applying the works of prior scholars, Kluckhohn and Kroeber concluded that "culture had to be treated as an integrated and structured whole, made up of connected parts" and that it needed to be defined "as a matter of ideas, rather than of acts and institutions" (Kuper, 1999).

Kluckhohn (1951) defined culture as follows:

> Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts: the essential core of culture consists of traditional ideas and especially their attached values.

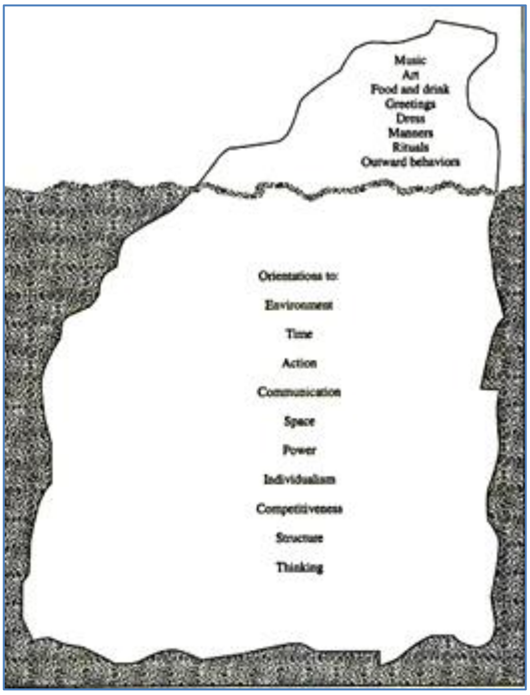

Exhibit 1: The iceberg model as a metaphor to illustrate that the most important aspects of culture are hidden and often quite difficult to measure. Source: The Training Management Corporation (1992). *Doing business internationally: The cross-cultural challenges.* Princeton, NJ: Training Management Corporation.

Thus, culture is essentially a matter of ideas and values, a "collective cast of mind" (Kuper, 1999) whose metaphysics, epistemology, morality, cosmology, and aesthetics are expressed in symbols such as language, rituals, and within common business practices.

Kroeber and Kluckhohn believed that values provided "the only basis for the fully intelligible comprehension of culture, because the actual organization of all cultures is primarily in terms of their values" (Kuper, 1999). These values are relative, variable, and subject to change by a variety of internal and external influences due to the porous nature of culture itself. Ideas and values are internally contested and, therefore, fragmentation can develop (including the creation of subcultures) as a consequence.

In order to facilitate a scientific study of cultural variation, Florence Kluckhohn and Fred Strodtbeck designed a framework of value orientations that would provide quantitative distinctions between different cultures. This concept of value orientations was based on four assumptions (Kluckhohn & Strodtbeck, 1961):

1. Because of the givens of biological human nature, "there is a limited number of common human problems for which all peoples at all times must find some solution. This is the universal aspect of value orientations because of the common human problems to be treated arise inevitably out of the human situation."

2. Though "there is variability in solutions of all the problems, it is neither limitless nor random but is definitely variable within a range of possible solutions."

3. "[A]ll alternatives of all solutions are present in all societies at all times but are differentially preferred."

4. A ranking order of preferences of the value-orientations alternative will exist amongst cultures. Thus, value orientations vary from culture to culture but the variation is only in the ranking order and not in their presence since such value orientations are considered to be cultural universals.

Value orientations are complex principles reflecting core ideas that constitute a *weltanschauung* or worldview. It is from these orientations that certain values are chosen over others and then operationalized. Kuckhohn and Strodtbeck (1961) designed a framework consisting of five orientations that addressed the most fundamental problems common to all cultures (summarized in Szapocznik, Scopetta, Aranalde, & Kurtines, 1978):

1. **Human nature orientation.** This "pertains to a society's perception of innate qualities in terms of good and evil; (a) good – the human being is perceived as being basically good but corruptible; (b) evil – the human being is perceived as being basically evil but perfectible; (c) neutral – the human being is perceived as neither good nor evil and subject to influence."

2. **Man-Nature orientation.** This "refers to the perceived relationship of people to natural and environmental phenomena: (a) subjugation to nature – the person is helpless and at the mercy of nature's forces (worldly or other worldly); (b) mastery over nature – the person is seen capable of controlling nature, mainly through technology; (c) harmony with nature – person and nature are one, working in harmony."

3. **Activity orientation.** This "refers to the nature of the behaviors through which a person is judged or judges himself or herself; (a) doing – the person is judged by what he or she achieves and emphasizes success-oriented activities usually including externally measurable activities; (b) being – this variation emphasizes activities that are in expression of existing desires (spontaneous expression), and activity is perceived existentially; (c) being in becoming – the emphasis in this variation is on mediation about one's self, which leads to understanding and self-development."

4. **Time orientation.** This "refers to the meaning or emphasis placed on a particular time period: (a) past – the traditions of the past ought to be maintained or re-captured; (b) present – emphasis is on present times and problems; (c) future – emphasis is on a consideration of the future in solving present problems.

5. **Relational orientation.** This "refers to the nature of a person's relation to other people: (a) lineal – the way people relate to each other is determined by their relative positions within a hierarchy; (b) collateral – people's relations to each other are determined by a horizontal network. In this network, all persons are at the same level and relate to each others as 'equals' having a place in the network; and (c) individualistic – people relate to other autonomously, not by hierarchical or lateral networks."

The Kluckhohn and Strodtbeck framework has been used to study differences between many value orientations including those between Americans and Latin cultures. Table 1 provides an example, showing results involving American mainstreamers, Cuban exiles, and pre-Castro Cuba.

The creation of constructs such as "value orientations" has allowed for cultural factors to be treated in different fields of social science on an empirical basis. Such empirical analyses have been applied in the field of psychology (Rokeach, 1973; Triandis, 1972, 1980), sociology (Pettigrew, 1979), work beliefs (Buchholz, 1978), and international business management (Adler, 2008; Dorfman & Howell, 1988; Hofstede 1980, 1985, 1997).

Table 1: Review of Value Orientation Studies as per the Kluckhohn-Strodtbeck Model

Orientation	Pre-Castro Cuba	(1) Cuban Exiles	American (2) Mainstreamers
Human nature	Neutral	Neutral	Neutral
Man-Nature	Subjugation	Subjugation	Mastery
Activity	Being	Being	Doing
Time	Present	Present	Future
Relational	Lineal	Lineal	Individualistic

(1) Based on research by Sandoval (1976, 1986).
(2) Based on research by Szapocznik, Scopetta, Aranalde, & Kurtines (1978).
(3) Based on research by Kluckhohn & Strodtbeck (1961) and Szapocznik et al (1978) and Szapocznik, Kurtines, & Hanna (1979).

Note: The Cuban exile community in Miami in the 1970s was very slow in acculturating since they saw themselves as waiting for political change in their homeland as opposed to being immigrants.

Inspired by the pioneering work of Kluckhohn and Strodtbeck (1961), Hofstede (1980) enhanced the role of quantification in cultural theory by providing a conceptual framework for the identification and comparison of work-related dimensions in different national cultures. Hofstede developed four primary constructs (referred to as "cultural dimensions") which he believed to be universal constructs and key to understanding how a culture resolves basic problems within the existence of organizations (Hofstede, 1993):

1. **Power Distance**: "defined as the degree of inequality among people which the population of a country considers as normal: from relatively equal (that is, small power distance) to extremely unequal (large power distance)."

2. **Uncertainty Avoidance**: "the degree to which people in a country prefer structured over unstructured situations. Structured situations are those in which there are clear rules as to how one should behave. These rules can be

written down, but they can also be unwritten and imposed by tradition. In countries which score high on uncertainty avoidance, people tend to show more nervous energy, while in countries which score low, people are more easy-going. A (national) society with strong uncertainty avoidance can be called rigid; one with weak uncertainty avoidance, flexible. In countries where uncertainty avoidance is strong, a feeling prevails of 'what is different, is dangerous.' In weak, uncertain avoidance societies, the feeling would rather be 'what is different, is curious."

3. **Individualism**: "the degree to which people in a country prefer to act as individuals rather than as members of groups. The opposite is collectivism [therefore] collectivism is low individualism."

4. **Masculinity**: "the degree to which tough values like assertiveness, performance, success and competition, which in nearly all societies are associated with the role of men, prevail over tender values like the quality of life, maintaining warm personal relationship, service, care for the weak, and solidarity, which in nearly all societies are more associated with women's roles. Women's roles differ from men's roles in all countries, but in tough societies, the differences are larger than in tender ones."

The cross-cultural comparisons in Hofstede's (1980) work between the United States and Latin America is worth examining as it will help to enhance understanding *caudillismo's* business model of leadership:

Table 2: Hofstede's Cultural Dimensions: United States v. Latin American Nations

United States	Latin American Nations (1)
small power distance	large power distance
weak uncertainty avoidance	strong uncertainty avoidance
high individualism	low individualism
high masculinity	low to high masculinity (2)

(1) The actual countries tested were Argentina, Brazil, Chile, Colombia, Mexico, Peru, Spain, and Venezuela.

(2) This construct includes the influences of *machismo*. However, it was also constructed to measure assertiveness in achievement, particularly in wealth, advancement, and recognition, and an emphasis on the centrality of work and independent decision making. These are key values of the Protestant Work Ethic, which may explain why the United States rated high while some Latin American countries rated low. Overall, Venezuela, Mexico, and Colombia rated high while the rest rated lower. Hofstede suggested that Latin American countries located around the Caribbean tend to be more *machista* and that this may account for the scoring differences. There is no empirical evidence for this observation. In fact, an argument can be made that *machismo* (which is heavily tied to social class) is less strong in Cuban culture than in Brazilian culture. A more appropriate answer may be that this construct attempts to measure two variables (*machismo* and achievement) that can be distinct from one another.

Table 3: Hofstede's Cultural Dimensions and Organization Development

(1) Small Power Distance Weak Uncertainty Avoidance Countries: Anglo, Scandinavian The Netherlands Organization type: implicitly structured - neither relationship nor work processes are rigidly prescribed Implicit model of organization: market	**(2)** Large Power Distance Strong Uncertainty Avoidance Countries: Latin, Mediterranean, Islamic, Japan, China; other Asian nations Organization type: full bureaucracy – relationships between people and work processes are rigidly prescribed Implicit model of organization: hierarchical pyramid
(3) Small Power Distance Strong Uncertainty Avoidance Countries: German-speaking, Finland, Israel Organization type: workflow bureaucracy - workflow processes are prescribed but not relationships among people Implicit model of organization – a well-oil machine	**(4)** Large Power Distance Weak Uncertainty Avoidance Countries: Southeast Asian Organization type: personnel bureaucracy relationships among people are prescribed but not the work processes Implicit model of organization: family

Hofstede argued that the high power distance organizations found in Latin cultures usually have greater centralization and tall organization pyramids. Changes in a bureaucratic organization of this sort "must come from the top down and must be universalistic, i.e., encompass the whole organization *en bloc*," thus making crisis "a distinctive and necessary element of the bureaucratic system" (Magalhaes, 1984). Regarding Latin culture, Hofstede (1980) identified certain impacts on society and business based on its dominant cultural dimensions:

1. "a world in which everyone has his rightful place; high or low are protected by this order"
2. "hierarchy means existential inequality"
3. "superiors consider subordinates as being a different kind, and vice versa"
4. "powerful people should try to look as powerful as possible"
5. "the way to change a social system is by dethroning those in power"
6. "power is a basic fact of society which antedates good or evil. Its legitimacy is irrelevant"

3. *Caudillismo* and its Characteristics as a Business Leadership Model

Caudillismo is primarily an autocratic and personalistic form of leadership based on dyadic relationships of dominance and submission, and a symbiosis of patron and client involving the distribution of power and status (Beezley, 1969; Hicks, 1971; Franco & Ventura, 1996). Profit motive is often subordinated to the personal prestige of the boss as subordinates give their loyalty and obedience to the person who rules rather than the office or position he holds. In Latin American nations, the rule of law, which was rarely legitimized with the consent of the governed, becomes superseded and, instead the prevailing impact of *caudillismo* creates a social elasticity with regard to rules and laws in general.

Under *caudillismo*, the focus is on the leader, not society or the firm. From the political and macro-economic perspective, it breeds *caudillos* (strong man leaders) and political parties that are anthropomorphized with followers identifying themselves as, for example, *Peronistas* or anti-*Peronistas*, *Fidelistas* or anti-*Fidelistas* (Maingot, 1994). Political parties suddenly appear at election time ("ad hoc parties") to back a particular *caudillo* and then disappear when the vehicle has served its purpose. Those parties that do not survive often lack an ideological base and experience frequent party switching among politicians (Blanksten, 1959; Dominguez, 1998). As with political parties, the rule of law is seen in personalistic terms. Since the rule of law is a personal instrument of the *caudillo*, breaking rules is seen, not as a violation of ethics or civility, but as a political act against a particular person.

Caudillismo permeates throughout Latin American culture, including the business world and the family. Within the household, highly authoritarian relationships are created with the father playing the role of the *caudillo* and the sons are raised to emulate the father (Harrison, 1992). This type of familism in Latin American culture is an expression of particularism, that is, a state of mind that believes you don't need to pay attention to those who are beyond the extended family (Ortega y Gasset, 1937) and reinforces *caudillaje* thinking by elevating "family and kinship ties above other sorts of social obligations" including profit (Fukuyama, 1999). Resources are given to those whom one has a personal obligation, especially family and friends, and "[n]epotism is its most visible expression" (Lipset & Lenz, 2000). Therefore productivity is hampered by the sabotage of meritocracy regarding issues such as competitive bidding and effective hiring practices.

"Social capital," a concept determined to be vital for commerce, is inhibited by the values underlying *caudillismo* (Fukuyama, 1999, 2000; Gregory 1999; Putnam, 2000; Seligson, 2006). Social capital consists of "a set of informal values or norms shared among members of a group that permits cooperation among them" (Fukuyama, 1999). Key to this cooperation is the range of a "radius of trust," that is, the degree of honesty and reciprocity that is practiced within a specific group. Fukuyama (1999) argues that family ties are an important source of social capital, however, such ties may also impact adversely as to a community's radius of trust and overall structure of social accountability:

> …the strength of family bonds differs from society to society, and varies relative to other types of social obligation. In some cases, there appears to be something of an inverse relationship between the bonds of trust and reciprocity inside and outside of the family; when one is very strong, the other tends to be weak. In…Latin America, families are strong and cohesive, but it is hard to trust strangers, and levels of honesty and cooperation in public life are much lower.

A consequence of this is nepotism and corruption in both government and the business world. Empirical research suggests a direct correlation between *caudillaje* cultures and corruption. Transparency International's Corruption Perception Index, which scales 175 countries and territories from 100 (very clean) to 0 (highly corrupt), found that 18 countries from Latin America rated an average score of 39 against the global average of 43 (Transparency International, 2015).

Caudillismo, though transnational, is not monolithic and, like culture itself, is subject to change. Indeed, it has experienced deterioration throughout Latin America, especially in the last thirty years. The degree of *caudillismo's* presence and practice depends on many factors including intensity of ties to the traditional culture of Spain (another nation that has undergone significant cultural changes) as well as the impact of globalization and other foreign influences. Scholars have identified four value premises from traditional Spain that are fundamental to the *caudillaje* worldview (Dealy, 1992; Harrison, 1985, 1992; Ortega y Gasset, 1937; Wells, 1969):

1. **Fatalism**. This "is the belief that life is shaped by forces beyond human control. Nature, fate, luck, the will of God are the determining influences of human existence" (Wells, 1969). Within the framework established by Kluckhohn and Strodtbeck (1961), this reflects a man-nature orientation of subjugation to nature.

2. **Hierarchy**. Society "is naturally hierarchical and…one's place in the social pyramid depends mainly on the stratum to which birth consigns one. Every person in the traditional culture tends to accept his station in life. Inherited or ascribed social superiority and inferiority are among the unalterable facts of human existence" (Wells, 1969). Under Kluckhohn and Strodtbeck (1961), this reflects a relational orientation of lineality; under Hofstede (1980), this is reflected in a large power distance and a strong uncertainty avoidance, leading to a pyramidal organizational structure.

3. **Personalism**. This value premise argues that each person "has intrinsic worth or integrity. In this view of man,…it is the uniqueness of each human being that counts. One's own innate individuality entitles one to the respect of others and, by the same logic, one accords respect to every other person in recognition, not of his common humanity, but of his equally worthy but inevitably different individuality" (Wells, 1969). People have an intrinsic dignity or integrity. However, this has nothing to do with rights, enterprise, initiative or equality of opportunity. "In the United States, the average individual is seen in terms of his equality with others – equality, either of right or opportunity. In Latin American culture, however, the individual is valued precisely because he is not exactly 'like' anyone else. He is special and unique" (Wells, 1969).

4. **Male Superiority.** This "is the belief that men are inherently superior to women' (Wells, 1969). From this stems *machismo*, paternalism, and authoritarianism.

The organization of the *caudillaje* structure is characterized by a tall pyramid that is highly centralized (but not well-organized authority), by fear of responsibility, and by constant referrals to higher officials. "One should not question the superior's wishes, for promotion and job security largely hang on loyalty and the communication of deference within the pecking order" (Duncan, 1976). In studying the managerial style in Mexican companies, Stephens and Greer (1995) found that it was primarily autocratic and paternalistic. Mexican subordinates were more deferential than American workers and far less likely to challenge or oppose the directives or ideas of supervisors:

> …the authoritarian style of many Mexican managers does not encourage upward communication of subordinates' misgivings about a course of action… [Mexican managers, in turn] try to keep others from learning of mistakes. All of these factors can heighten the commitment to a poor course of action, with devastating effects. Managers may view long-term projects as temporary setbacks or continue to pour resources into a project long after it has become irrational to do so, in the hopes that the additional resources will bring about success.

4. Conclusion and Recommendations

The primary characteristics of the *caudillaje* model of business leadership provide disadvantages that may have strongly contributed to slow economic growth and overall development within Latin America (Harrison, 1985, 1992; Sachs, 2000). It is a strong-man power structure that is hierarchical and pyramidal over being democratic and pluralistic in decision-making. The leadership is autocratic and personalistic, forming dyadic relations based on personal ties of dominance and submission. Communications consists of orders from the power apex of the pyramid flowing downward. What flows upward is usually sycophantic and lacking in crucial information if that information can be interpreted as critical of or challenging to the *caudillo*. This lack of honest feedback and freedom of expression leads to inefficiency and ineffectiveness.

The *caudillo* operates a business as a kind of spoils of war. Meritocracy is replaced with favoritism and pervasive nepotism. Clientelism, based on symbiotic relationships between the *caudillo* and different parties, replaces the professionalism and objectivity required for dealing with competitive bidding controls and credit policies that limit risk. The *caudillo* rules in an arbitrary fashion that creates an elastic code of ethics, destroys structural accountability (both horizontal and vertical) and breeds systemic corruption. Finally, *caudillismo's* present time orientation discourages vitally needed long-term strategic thinking and planning.

Much has been written about the impact of culture on management and, specifically, how to deal with cross-cultural managerial considerations (Adler, 2008; Avruch 1998; Browaeys & Price, 2015; Chaney & Martin, 2011; Earley, 2006; Elashmawi, 2001; Hofstede & Hofstede, 2005; Kawar, 2012; Parhizgar, 2002; Peterson, 2004; Reynolds & Valentine, 2011; Trompenaars & Hampden-Turner, 1998; Weaver, 1998). Not much, however, has been written about *caudillismo* as a management model in the private sector. This is unfortunate since Latin America consists of twenty-one nations with a combined population of close to six hundred million (Central Intelligence Agency, 2014). More research is needed in this area, including within a comparative context between Latin nations and non-Latin nations which Hofstede identified as having characteristics of large power distance and strong uncertainty avoidance with an organizational model preference of a tall, hierarchical pyramid (see Table 3). Such comparative and dialectical analyses can be useful in determining trends and developments from economies and business environments based on *caudillaje* values.

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Impact of Debt Leverage on Thai Property Funds' Performances

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Abstract

Thai property fund is limited to a maximum debt usage at 10% of net asset value, which differ from many international REITs with more flexible regulation. The two largest REIT market also exhibit different relationships of positive and negative coefficients between debt use, and returns of Australia and US REITs respectively. Regarding debt use and the property fund's returns, the research conducts not only a quantitative research to find a statistical relationship, but also a qualitative research to understand rationales. Similar to Australia REIT, return of Thai fund exhibits statistically positive relationships to debt in both full and sub–period analysis. The only supporting reason is that the large fund can access to debt funding to secure commercial loan, which is consistent to other studies with findings of positive relationships between size and liquidity, and degree of debt leverage. Under regulatory constraints of debt payback after 90% dividend payment and no collateral, Thai property fund is not usually discussed in terms of yield spread and level of debt leverage like other international REITs. Unlike other REITs, the results of the interviews conducted did not corollate with the pecking order theory owing to low debt allowance. Thai property funds show dissimilar rationales of debt use compared to other international REITs; therefore they might benefit from converting to be REIT because of positive leverage from higher degree of debt use.

Keywords: Debt Use, Property Fund Return, Leverage, Fund Regulation Constrain, REIT Conversion

1. Introduction

In the 1960s, a new form of real estate investment named Real Estate Investment Trust (REIT) was initiated in the United States. In 2014, such an investment vehicle has been globally recognized in 37 countries which includes similar asset type of Property Fund for Public Offering (PFPO) in Thailand. Exhibiting a potential growth, Thai property funds' market capitalization grew to approximately 2.3% of the Thai stock exchange market's capitalization, and 5.1% and 0.7% of Asian and global REIT markets, respectively (APREA, 2015; Stock Exchange of Thailand, 2015a).

Interestingly, the indirect real estate asset represents significant value and ratio of REIT market capitalization to economic value in some developed countries, such as USD 929.3 Billion in the US (worth approximately 5.3% of GDP), USD 91.8 Billion in Australia (approximately 6.4% of GDP), USD 28.8 Billion in Hong Kong (approximately 10.0% of GDP) and USD 51.3 Billion in Singapore (approximately 16.6% of GDP) in 2014. In

Thailand, it represents approximately 2.6% of GDP at USD 9.7 billion, which might potentially grow (National Economic and Social Development Board, 2015).

Regarding its benefits, development of the investment asset and capital market is found to have a positive relationship regarding growth of national economies (Barna & Mura, 2010). Since Thai economy has heavily and increasingly relied on an exporting sector from 40% of GDP in early 90s' to 71% in the next decade (SCB EIC, 2009), growth in other businesses (e.g. a private investment and real estate sectors) might mitigate risk to the country's economy (Marc, 2004; Villanueva, 1993). Almost one million jobs have been supported through operations and facilities using real estate held by REITs in the US (NAREIT, 2015).

The international REITs are found to help developers not only raise capital for their business expansions, but also scale down their balance sheets from diverting the capital locked in the investment assets into high service content businesses and to gain a trust management income (Ooi, Newell & Sing, 2006). Since Thai society will become an "aged society" with over 20% over 60 years old in the 2020s (World Health Organization, 2013), the property fund might also be used as a saving and investment alternative for both retail and institutional investors (Newell, Yue, Wing, & Kei, 2010).

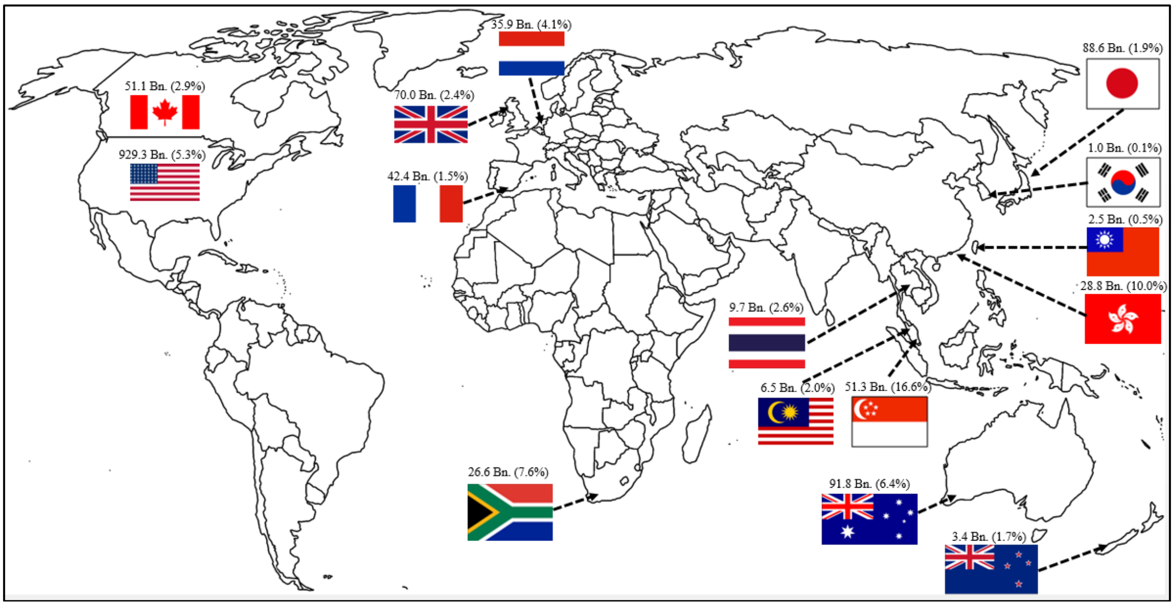


Figure 1 Global REIT Market Capitalization by Country in 2014
Monetary Unit: USD (% to GDP value of each country)
Source: APREA (2015)

Regardless of investor types, relevant information is *sine qua non* in terms of providing market insights for investment decisions so that such market understandings create sustainable growth within the financial sector and industry in general (Buranasiri, 2012; Cheong, Wilson & Zurbruegg, 2009; Yong, Allen & Lim, 2009). By comparison, some attributes of such indirect real estate differ from those of the traditional indirect real estate, for instance, liquidity from trading in the stock market (Ciochetti, Craft, & Shilling, 2002; Jiamchoatpatanakul & Tangchitnob, 2014), having professional property management and co-ownership with the property sponsor (Stevenson & Lee, 2007; Jiamchoatpatanakul & Tangchitnob, 2015a), and obtaining the stock market impact (Clayton & MacKinnon, 2001; Hoesli & Serrano, 2007; Jiamchoatpatanakul & Tangchitnob, 2015b).

One of the interesting aspects to understanding Thai property fund is debt usage since regulations allow a 10% maximum debt level of the fund's Net Asset Value (NAV) which does not align with those of other international REITs with have much more flexible permission for their debt leverage. In 2012, the Thai Securities and Exchange Commission (SEC) employed a regulation of new indirect real estate vehicles called REIT to substitute the property fund, and allowed a conversion of the existing funds. The SEC provided the reasons for employing new REIT regulation: to develop Thai real estate investment vehicles to be in line with international practices, to offer alternatives of real estate investment to the public and to provide more flexibility in establishment and management of real estate investment (SEC, 2007). These funds, however, are not enforced to convert to become REITs with different attributes, includes 35% maximum debt level of NAV (capped at 60% of NAV with disclosed credit rating). Therefore, the finding about how debt usage affects the existing fund might help support a decision for the REIT conversion.

Table 1: Key Differences in Attributes between Thai PFPO and REIT

Issue	Property Fund for Public Offering (PFPO)	Real Estate Investment Trust (REIT)
Legal Structure	Mutual Fund	Trust
Fund Management	A licensed mutual fund management company	A licensed REIT management company, includes potential sponsor company
Holding Restrictions	Persons in the same group shall not hold more than 1/3 of NAV	Persons in the same group shall not hold more than 50% of the total trusts
Investable Asset	Not allow to invest in oversea property	Allow to invest in oversea property
Borrowing Restrictions	Not more than 10% of NAV	Not more than 35% of NAV (capped at 60% of NAV with disclosed credit rating)

Source: Stock Exchange of Thailand (2015b)

2. Literature Review

Debt usage relates to a credit risk which implies a financial liability for the borrower to pay back a loan principal and an interest to the lender. Use of debt funding at higher debt cost than the asset performance leads to a negative leverage and vice versa (Allen, Madura & Springer, 2000; Poorvu, 2003). In this regard, there are two theories which relate with a debt capital structure: trade–off theory and pecking order theory. The former theory considers a tax benefit of debt expense deductibility from debt funding (Anderson & Betker, 1995). The latter explains the firm with a status of financial deficit resort to debt choice, which suggests high growth firm with high business sensitivity towards a lower leverage ratio (Shyam–Sunder & Myers, 1999).

In terms of debt use, there is some research regarding debt usage by the international REITs. However, since regulation about debt use has been employed in a dissimilar approach in each country, debt leverage by REITs are affected differently by their respective national restrictions.

Table 2: Debt Use Regulation of the International REITs

Country	Debt Use Regulation
US	There are no leverage restrictions on REITs
Australia	Unlimited, subject to general thin capitalization rules

Country	Debt Use Regulation
Japan	No restriction
Singapore*	35% of total assets (capped at 60% with disclosed credit rating)
Hong Kong	Capped at 45% of gross asset value
Thailand**	Not more than 10% of NAV

Source: APREA (2015)

Note: *Monetary Authority of Singapore (MAS) employed new guidelines for Singapore REITs to have single tier leverage at 45% of NAV.
** Thai Property Fund vehicle is allowed to change to be REIT with debt use not over 35% of net asset value or 60% in case of being investment grade.

The international REITs have generally applied debt as a source of the investment capital, such as relatively high debt at 49.1% of NAV of US REIT and 45.0% of NAV of Japanese REIT (J–REIT). The average leverage of overall US REITs is approximately 46.0% between 1990 and 2012 (Giacomini, Ling & Naranjo, 2015). However, Thai Property Fund applied low debt level at approximately 0.7% of NAV.

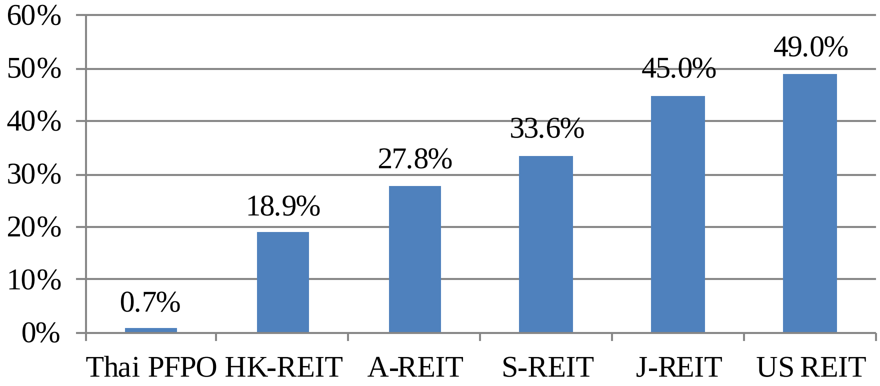


Figure 2 Debt–to–Total Asset Ratio of International REITs by Country in 2013
Source: APREA (2015)

Since Thai property funds are regulated to limit maximum debt use at 10% of NAV, there are only three funds with debt use: TLGF, CPNRF and CPNCG.

Table 3: Term Loan of Thai Property Fund, 2014

	TLGF	CPNRF	CPNCG
Loan Value (mil THB)	2,591.26	1,955.00	370.00
Loan–to–Value (%)	9.8%	7.1%	7.2%
Loan Cost (%)	BIBOR +1.25%	MLR-2.00%	MLR-2.00%

Source: Stock Exchange of Thailand (2015a)

There is a linkage between market interest rate and the real estate asset because such rate change might impact a borrowing cost and their performances (Ibbotson & Siegel, 1984; Liow, 2006). REIT performances are found to be sensitive to a financial leverage (Delcoure & Dickens, 2009). In addition, the discount rate for valuating income property can be considered from adding real estate risk premium to risk free rate (Sharpe, 1964).

Debt leverage is negatively related to profitability, growth opportunity, and operational risk of REITs (Chikolwa, 2009). In general, REIT vehicles tend to behave like income stock rather than growth stock because of a regulatory requirement of minimum 90% dividend payout and consequently low retained earnings to reinvest in the new properties without capital increases (Chan et. al., 2003). In terms of size, the larger REITs tend to use slightly more leverage than smaller REITs (Giacomini et al., 2015). There is a positive relationship between liquidity degree of real estate asset and of debt financing (Benmelch, Garmaise & Moskowitz, 2005; Giambona, Harding & Sirmans 2008).

In the US, REITs showed significantly negative relationship with debt leverage levels (Buranasiri, 2012; Harrison, Panasian & Seiler, 2011). US REITs with high leverage in comparison with the market average tend to underperform those with less debt in their capital structure (Giacomini et al., 2015). One of the supportive reasons is that share prices of US REITs with higher debt ratios and shorter debt maturities suffered larger declines during the global financial crisis, especially during 2007–2008.

In Australia, debt funding has played a significant role in the growth of Australia REITs (A–REITs), increasing from 10% in 1995 to 35% in 2007 (Newell, 2008). A low interest rate situation provides a supporting rational for debt leverage of A–REITs, especially those investing in the underlying commercial properties with 50–55% leverage (Allen et al., 2000). A–REITs exhibit a significantly positive relationship with debt level between 2004 and 2007 (Yong et al., 2009).

3. Research Methods

In this research, both quantitative and qualitative approaches were conducted to understand effects from debt usage on Thai property funds.

3.1 Quantitative Approach

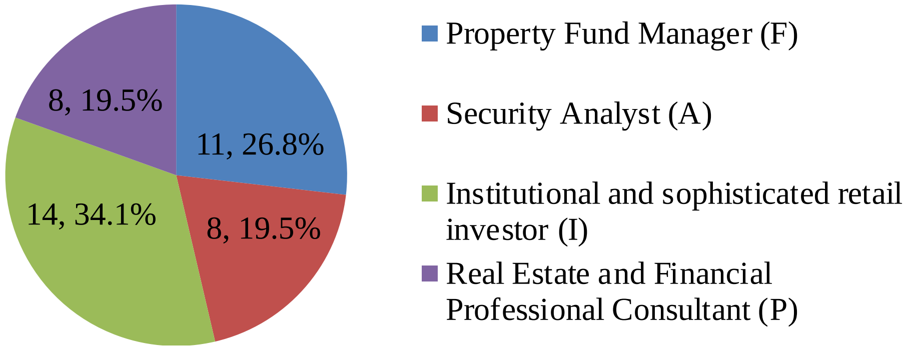
The quantitative research applied the ordinary least square (OLS) regression to find an existence of the relationship between the debt–to–total asset and return of the property fund. Source of the research data were derived from a Bloomberg database. It should be noted that the first Thai REIT was listed in October 2014; the analysed data would not include the later period to avoid effect from REIT existence in this study. Since this research concentrates on understanding the debt use effects, the data of monthly return of the Thai Property Fund index (SETPFund index) and debt–to–total asset ratio from November 2003 to September 2014 were analysed via a generalized linear regression model. Because the first debt use of Thai property fund started in November 2009, the sub period between November 2009 and September 2014 was also analysed in this study.

Thai Property Fund Monthly Return = B0 + B1 Total Debt to asset ratio

3.2 Qualitative Approach

The qualitative approach was conducted by interviewing 41 experts in the property fund business in order to comprehend their views whether the debt use or implied credit risk is a major risk of concern for the fund and how it affects the property fund performance. Selecting interviewee samples required a predetermined set of criteria to obtain experience–based opinions from them who have had active roles in the property fund business and possessed three years, minimum, of practical experience. The samples include 11 property fund managers, 8 security analysts, 14 institutional and sophisticated retail investors, and 8 real estate and financial professional consultants (average age: 41 years old with 9 years of working experience in the field). Applying the data triangulation technique, different sources of information from various groups of the interviewees would enhance the credibility of scientific knowledge and validity of a study (Hussein, 2009).

For this study, an approach of the semi–structured interview was applied. Afterwards, a method of summative content analysis was used for analysing data. This approach helped increase understanding about the rationale of the debt use effects from experience–based opinions. The interview method helped clarify the answer of the complex issues based on opinions of the interviewees (Ebrahim, 1995). To understand about effects on the performance of the property fund, the interview results were rated as "agree" or "disagree" opinions in each subcategory of short and long term market effects. Both short and long term factors concluded "accept," "fail" and "partially accept" when the subcategories are all agreed, all disagreed and partly agreed respectively.



4. Results and Analysis

Results of both quantitative and qualitative researches were analysed in this section.

4.1 Quantitative Approach

This research analysed effect of debt use to the fund's performance over two time laps of full period (Nov 2003 – Sep 2014) and sub period (Nov 2009 – Sep 2014) as follows:

Table 4: Descriptive variables of the monthly total returns of Thai Property Fund index and debt–to–total asset ratio

Dependent Variable (Y)	TOT_RETURN_INDEX_NET_DVDS Monthly total return of Thai Property Fund (Bloomberg)	
Independent Variable (X)	TOT_DEBT_TO_TOT_ASSET Monthly debt level to total asset of Thai Property Fund (Bloomberg)	
Period	Nov 2003 – Sep 2014	Nov 2009 – Sep 2014
Sample	N = 130	N = 58
Average	0.49%	1.09%
Std. Dev.	0.59%	0.34%
Minimum	0.00%	0.59%
Maximum	2.21%	2.21%

Table 5: Regression result of the monthly total returns of Thai Property Fund index and total debt to asset ratio

Variable	**Nov 2003 – Sep 2014**	**Nov 2009 – Sep 2014**
Constant	0.00	-0.00
	(0.51)	(-0.36)
Total debt to asset ratio	0.99	1.42
	(2.42)*	(1.71)
R Square	0.04	0.05
Adjusted R Square	0.04	0.03
F	5.89	2.94

Correlation	0.20	0.22

The t-statistics are reported in parentheses
*denotes significance at $p<0.05$ level

As shown in Table 5, statistic results exhibited the impact of the debt use on the property fund's performance. The results found 0.04 and 0.03 adjusted R–square for models of full and sub–period analysis; both time laps did not exhibit high explanatory power of single factor model of debt use variable. The full and sub–period models, however, showed relatively similar results of being positively correlated between these variables with statistically significance levels of $p<0.05$ and $p<0.10$ respectively. For the formal model, the regression result implies that every 1% change in debt level leads to a 0.99% increase in the monthly returns of the Property Funds.

4.2 Qualitative Approach

From the interview research, there were 41 experts' comments about debt use. Most of them provided disagreeing opinions to support significance of such factor to performance of the property fund (agreed freq. = 4, 5.6%; disagreed freq. = 67, 94.6%).

- **Significant Loan Amount from Leverage at 10% of NAV**

Almost all interviewees commented about insignificant debt use from maximum debt use at 10% of NAV. They discussed that a concept of debt use at lower cost than yield of the property fund is reasonable, but mostly commented about too low amount to enhance return on equity (ROE) from 10% debt leverage. Only do 10% loans make property funds raise enough capital for new property acquisition, especially those with small sizes or implied low NAV. One interviewee suggested that debt use at 10% level might insignificantly enhance return on equity. Similar to a comment of another interviewee, 10% maximum debt use for the property fund is deemed too low when compared to traditional loans to commercial property.

Result: The majority disagreed

- **Easiness to pay back the loan principal under regulatory constraint**

Some interviewees disagreed on the easiness of paying back the loan principal under regulatory constraint. One interviewee pointed out that structural requirements to provide a dividend at 90% minimum of taxable income to the unit holder caused difficulty for the fund to pay back the loan principal since the commercial bank typically granted 10-year loan terms to the debtor. Although the fund may be able to afford paying interest of the loan, the remaining amount of net profit, after paying dividend to the unit holder, might not be enough to serve debt payback within the loan term period.

Result: Disagreed

- **Low regulatory burden to request loan approval**

Some interviewees disagreed that there is a low regulatory burden to request loan approval. One interviewee suggested that loan applicants be required to request an approval from the SEC, including supporting reasons, source(s) of debt, loan terms and other information. The implication here was that the more processes and regulations required, the more disincentives for the fund manager and investment banker to avoid using a debt option.

Result: Disagreed

- **Low risk for leasehold property to utilize debt**

Some interviewees discussed about high risk for leasehold property to utilize loan. One commented that a limited ownership period of leasehold interest may expose more risk in failing to meet the loan principal and interest payback because the shorter ownership makes it difficult for such a property to refinance or exit. Another interviewee suggested that a leasehold property should fundamentally provide a higher return from higher risk exposure than the freehold property.

Result: Disagreed

- **Low risk for some property types with relatively short lease term to utilize debt**

Some interviewees commented on high risk for some property types with relatively short–term agreement to use leverage. One interviewee pointed out that some properties with more volatile revenue from relatively short lease term on a daily, weekly or monthly basis, (such as hotel and service apartments) might be perceived to be high risk in terms of failure to pay back the loan principal and its interest when compared with office and retail properties with, generally, three-year lease agreement.

Result: Disagreed

- **Significant spread between debt cost and property yield**

Some interviewees discussed that a significant spread between debt cost and property yield is required to make a debt funding attractive. Interviewee no. 15 mentioned that the property fund generally provide yield at approximately 6–7%; therefore debt cost should be at 4.5% or less (or implied MLR-1.5% or less) to have enough spread to generate leverage benefit. In practices, it may not be easy for some small funds to gain low debt cost due to high risk exposure. Interviewee no. 26 suggested that spread between debt cost and the property fund yields is expected at approximately 2–3%, otherwise it might impact market price of the fund.

Result: Disagreed

- **Lower WACC and discount rate to cause higher property value**

Some interviewees suggested that an income property valuation might use a discount rate developed by WACC with composition of debt cost. This issue was mainly discussed by the property consultancy experts. Interviewee no. 37 commented that value for the investment properties can be summarized into two cases of market value and market value subject to specific terms and conditions of the fund. Assuming the fund gain lower debt cost than equity return, discount rate or WACC for the income valuation may decrease and the property value may increase. Interviewee no. 38 informed that an appraiser would typically conduct an asset valuation without considering debt cost for a discount valuation. In addition, some suggested that the 10% maximum debt leverage tends not to affect discount rate much.

Result: Major disagreement

- **Fitting for the large fund to secure commercial loan**

Few discussed that 10% debt use is relatively low amount for funding. Interviewee no. 12 suggested that large fund might raise enough loan to acquire new asset at 10% debt gearing. For instance, fund size below THB 5 billion would request for debt below THB 500 million, which is less than minimum fund size for the property fund. Interviewee no. 15 also commented that the lender would perceive a lower risk from multiple assets in large fund, since the underlying property of the fund is not permitted to be used as the collateral.

Table 6: Findings and conclusions of the qualitative research

Major concerned risks to the stakeholders	Agreed Result	Result
- Significant loan allowance of 10% NAV maximum debt use	(1/36) 2.8%	Disagree
- Easiness to pay back the loan principal and interest under regulatory constraint	(0/9) 0.0%	Disagree
- Low regulatory burden to request loan approval	(0/6) 0.0%	Disagree
- Low risk for leasehold property to utilize debt	(0/5) 0.0%	Disagree
- Low risk for some property types with relatively short lease term to utilize debt	(0/5) 0.0%	Disagree
- Significant spread between debt cost and property yield	(0/4) 0.0%	Disagree
- Lower WACC and discount rate to cause higher property value	(1/4) 25.0%	Disagree
- Fitting for the large fund to secure commercial loan	(2/2) 100.0%	Agree
Debt Use	**(4/71) 5.6%**	**Partially accept**

4.3 Discussion

Debt use exhibits a statistically significant, positive relationship to performance of the property fund in a quantitative research, and shows a partially–accepted result to be one of the major risks in a qualitative research. Since findings of the qualitative approach include a reason to support the debt leverage from fitting for the large fund to secure commercial loan, the outcome is consistent to that of the quantitative approach from positive coefficient but low explanatory power of a regression model.

5. Conclusion

The research results show partial supports for Thai property fund to the debt leverage. Similar to other studies, the larger REITs tend to use slightly more leverage than smaller REITs (Giacomini et al., 2015). There is a positive relationship between liquidity degree of real estate asset and of debt financing (Benmelch, Garmaise & Moskowitz, 2005; Giambona, Harding & Sirmans 2008).These findings relate to a positive relationship of A-REIT returns (Yong et al., 2009), but contradicts to US REIT returns with a negative relationship (Buranasiri, 2012; Harrison et al., 2011). Different result of relationship between REITs and debt use was discussed in terms of debt level, and spread between yield and debt cost (Atchison & Yueng, 2014). In addition, US REIT with short debt maturity suffered during the global financial crisis (Giacomini et al., 2015).

For Thai property fund, low debt level at 10% of NAV might diminish an opportunity of positive leverage. Only can large property fund access to the debt funding because the commercial bank may not easily provide a commercial loan under regulatory constraints of debt payback after 90% dividend payment and no collateral. Unlike other REITs, the result does not relate with the pecking order theory owing to low debt allowance. Thai property fund show dissimilar rationales of debt use compared to other international REITs, therefore it might benefit from converting to be REIT because of positive leverage from higher degree of debt use.

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Motivation and Decision Making in Choosing Medical Tourism Service in Thailand

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Abstract

The objectives of this research were to discover the motivations and factors that influence customers in making decisions for medical tourism service in Thailand. This research also aimed to study the nature of medical tourism service in different areas of Thailand. Under this study, samples were collected from tourists who traveled and used health service in Thailand. Three main theories applied in this study included (1) the competitive advantage of the nation theory (2) the hierarchy of need theory and (3) push-pull factors of tourism theory. Both qualitative and quantitative methods were adopted in this study via in-depth interviews and survey questionnaires. The results showed that medical tourist can be classified into two groups, which are medical-focused tourists and tourism-focused tourists. Medical-focused tourists are those who come to the country with the major purpose of having medical treatment to cure their illness, undergo cosmetic surgery, or to learn prevention from illness. They focused mainly on factors associated with medical treatment and service such as cost, quality and reputation of hospital and physician. Tourism-focused tourists are those who come for tourism but also took the opportunity to undergo a health check, dental care or wellness treatments. This group of tourists mainly emphasized factors such as the attractiveness of the location and the convenience of hotel and transportation as well as entertainment and leisure opportunities.

Keywords: Thailand, Medical tourism, Health tourism, Diamond model, Influencing factors, Tourist motivation

1. Introduction

The phenomenally fast growing market of the medical tourism business is respectively gaining more attention from both academics and business field. Medical tourism consists of new types of services that integrate tourism business and medical services together, which is known as a multi-disciplinary service. The scope of services is very broad because this is desirable from an international perspective. The main point of medical tourism business is that people travel outside of their home country to another country for medical or health care services and travel within that country (Weaver D. and M. Oppermann, 2000). The global medical tourism market in 2006 was estimated at 20,000 million dollars (USD) and increased to 35,000 million dollars in 2009 (Keckley, 2009). The global medical tourism market is estimated to be 32.5 billion dollars by the end of 2019 (IBM, 2006; TMR, 2015). Thailand is within the top ranking of countries that have been popular over the world regarding medical tourism, making it a national, major industry, that generates increasing revenue for the country each year. More than 3 million foreigners come to Thailand for medical service in Thai hospitals and other healthcare facilities in 2012 while generated approximately 70,000 million baht to the nation (National Statistical Office, 2013). Thailand medical tourism market is estimated to exceed 100 billion baht in 2015 (KResearch, 2015). It is not only Thailand, however, that focuses on the medical business. India, Singapore, Malaysia and many countries around the world have also announced a clear policy to be centers of medical tourism in this global industry (Gan & Frederick, 2013). Therefore, in order to maintain its strong position and increase competitive advantage in the global arena, Thailand must be aware of this intense competitive situation by retaining existing strengths and creating competitive advantages over rivals.

In addition, Thailand must prepare for the Asian Economic Community in 2015 as the integration is very beneficial to the medical tourism industry of Thailand. The population of the AEC is larger than 600 million people with more than 1.5 trillion dollars of international trade value. Besides, this market will play a greater role and gain more bargaining power in the world economy as such as the European Union (Department of Asean Affairs, 2015). Moreover, the medical tourism is also expected to be a primary source of income for the country. The government aims to draw more than 2 million medical tourists into the nation each year, the result of which will flow money into the country in the amount of over 4 hundred billion baht in 5 years. Such income can be divided into medical care services over 2.8 hundred billion baht, Wellness service 7.8 hundred billion baht, traditional medicine and alternative medicine 2.8 hundred billion baht, and herbal products over 4 hundred billion Baht. Therefore, it is necessary to know the motivations and factors that influence customers in making decisions regarding medical tourism service in Thailand in order to gain greater competitive advantage and also maintain a leadership position in the global medical tourism industry (Tourism Authority of Thailand, 2012).

2. Conceptual Frameworkand Literature Review

Medical tourism means patients traveling abroad to receive medical treatment or people who take the opportunity to get medical treatment and take the vacation abroad at the same time (Cohen, 2008). The concept of medical tourism is formed by two main theories, including theories of tourism and medical services. This research aims to determine the motivations and factors that can affect the decisions to undertake medical service by tourists in Thailand. This would create competitive advantages and help Thailand to compete in the global market. Research applied to the Diamond Model (Porter, 1990) describes the main theory of how to study the competitive advantages of a nation in the following fashion:

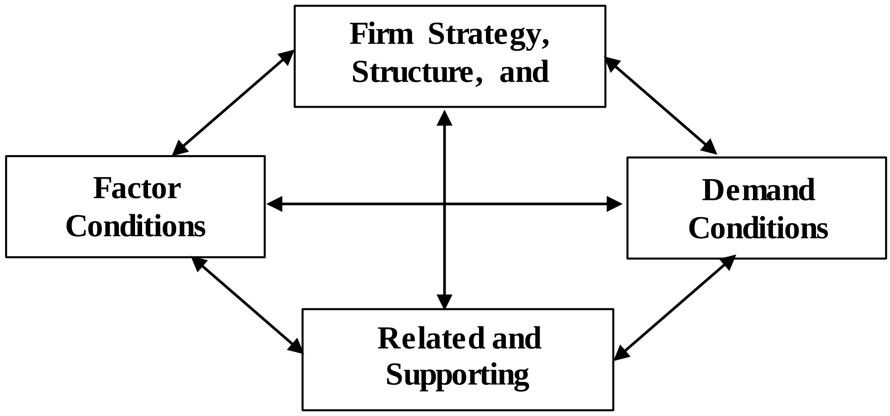

Figure 1 Determinants of National Competitive Advantage

1) National Competitive Advantage

The theory argues that the competitiveness and success of companies in the industry of a given nation depend on the efficient use of production factors such as labor, capital, and natural resource. Therefore, each country must compete by creating a business environment to gain the highest possible level competitiveness. Even though government agencies have different roles from private organizations, they can also work together with the private sector to strengthen national competitiveness. The synthesis of a national competitive advantage theory can be applied to the medical tourism business in Thailand as follows:

(1) Factor conditions can be considered as pulling factors. This consists of beautiful landscapes, warm climate suitable for physical rehabilitation, economic development with a low cost of living, political tranquility, health laws that are less restrictive than many countries, and general friendliness to foreigners.

(2) Demand Conditions are a push factors that cause people travel to get medical services outside their home country along with tourism. It can be divided into two major parts: medical need and tourism need. Medical need involves the reputation of the hospital, the expertise of doctors and therapists, quality and medical standards, the speed of service, modern medical technology, a wide range medical services, affordable/cost-effective price, privacy, and excellence of care (Enderwick & Nagar, 2011). Tourism needs consists of interesting destinations, comfortable hotels, the availability of quality food, recreational facilities and entertainment.

(3) Related and supporting industries consist of tour agencies, hotels, airlines, transportation, entertainment businesses, restaurants leisure businesses, embassies, and other related businesses.

(4) Firm strategy, structure and rivalry consist of quality and medical standards, hiring medical professionals, providing fast service, focus on service excellence, providing value added services such as interpreters, visa extension, money exchange, offering special promotion, publicity through various media, opening overseas branches, contracting business partnerships with international hospitals, insurance companies, foreign governments agencies, and co-marketing with partners such as airlines and tourism agencies.

2) Hierarchy of Health Care Needs

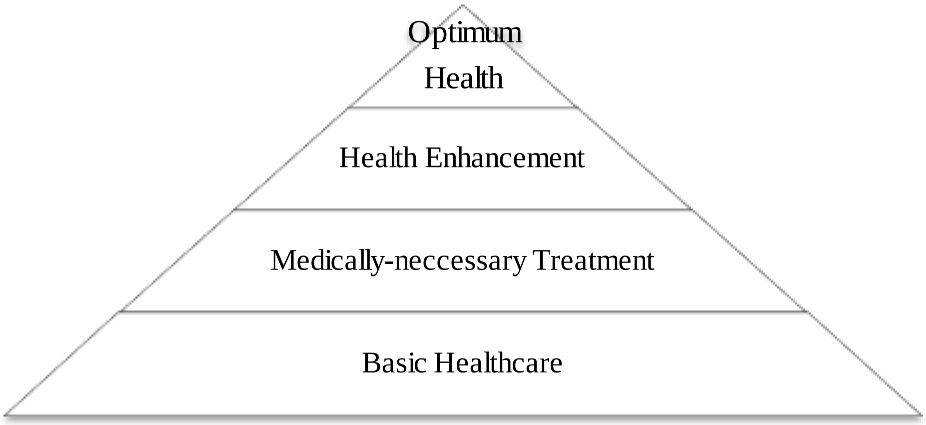

Figure 2 Hierarchy of Health Care Needs (Runnels & Carrera, 2012)

A review of the scholarly literature on medical tourism (Runnels & Carrera, 2012) revealed a hierarchy of health care needs based on Maslow's hierarchy of needs theory. People with different levels of health care need will seek different forms and characteristics of healthcare providers. Analysis of the hierarchy of healthcare need in conjunction with the medical tourism comprises four levels (a to d) as follow:

(A) Basic Healthcare for medical tourists who want basic medical care such as health checkups, dental care, immunization and preventive screening. Medical tourists who have the health needs at this level will focus primarily on tourism. For medical services, they seek standard medical service, affordable price, specifically a promotion or special packages and they often choose those health providers that are located in the tourist area. (B) Medically-Necessary Treatment is for medical tourists who are required to obtain medical treatment, such as treatment, surgery, and treatment of various diseases. Medical tourists with health care needs at this level will mainly focus on medical treatment and other relating services. For the issue of tourism, they most likely take a short trip to a nearby hospital or choose travel destinations that are suitable for their recuperation. (C) Health enhancement is for medical tourists who need additional medical service. Whether to remove, to fill, to modify or to receive minor surgery, lose weight, or sex reassignment surgery. A medical tourist who has healthcare needs at this level will primarily consider the conditions of medical services while they will arrange the tourism portion of their trip to be during or after receiving medical treatment. (D) Optimum Health is for medical tourists who have good health conditions but may wish to manitain or improve their current condition. This group of tourists would be more likely to take an extra service, for instance, spa, massage, acupuncture, traditional medicine, detoxification, and holistic healthcare treatment. The primary focus of these particular medical tours is to enjoy the tourism aspects of their trips while also taking advantage of health care services located in tourist areas.

3) Push-Pull factors in Tourism

This theory states that the factors that affect the rise of tourism consists of two main factors (Weaver D. and M. Oppermann, 2000). First are the push factors that make people travel out of their home country, They consist of: a good economy of the home country that makes their purchasing power high in a foreign market, a society that values or is infatuated with tourism, demographic changes such as smaller family size, thus making it easier to travel together, the advancement of technology especially communication technology like the internet, and the home country allowing its citizens to travel aboard.

Second are pull factors that attract tourists to come to the destination country. This includes a good image of the destination country, beautiful landscapes, good transportation, few legal limitations, the variety of services, low or affordable costs, and political stability. When applying this theory to medical tourism, the following can be stated: (1) Push factors consist of the long waiting time, high cost, unavailable or forbidden treatment such sex reassignment surgery, and lack of confidence, and (2) Pull factors consist of a country's reputation in both tourism and medical service, a variety of medical and tourism services, affordable/valuable costs.

3. Research Methodology

This research is conducted by using both qualitative and quantitative methodologies. In-depth interviews and questionnaires were used as qualitative and quantitative tools, respectively. The research framework is presented in Figure 3. Researchers have synthesized and integrated a theory of the competitive advantage of the nation with a hierarchy of healthcare need theory and tourism push-pull factors theories. A conceptual framework for this research consists of independent variables which include factos of the competitive advantage of a nation: factors condition, demand condition, related and supporting industry and firm strategy, structure and rivalry.

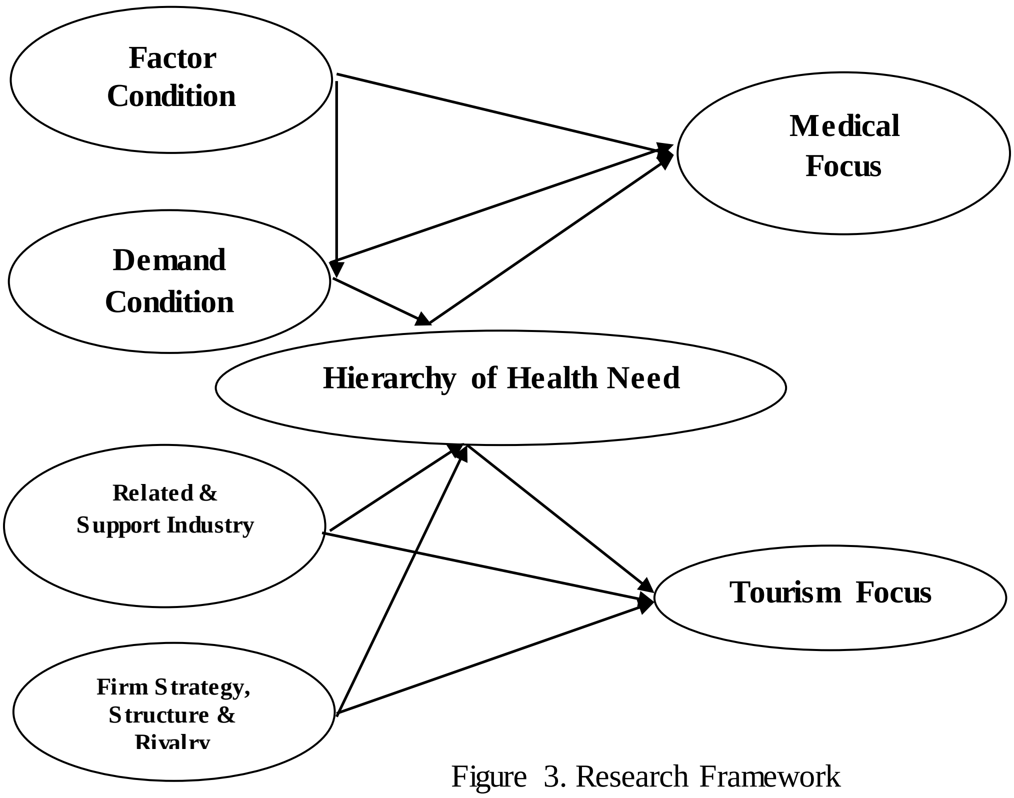

Figure 3. Research Framework

The findings indicate that medical tourists who have different levels of health care needs decide to choose differing medical tourism services. Therefore, the researcher took the hierarchy of health care needs as a mediating variable in the framework of this research.

Research has integrated push-pull factors in tourism theory with factor condition and demand condition of a diamond as the independent variable. Dependent variables in this research framework are groups of medical tourists who are motivated and decided to use a different medical tourism. This study found that it can be divided into two groups (1) Medical-focused tourists who come to Thailand to receive medical treatment as the main purpose. (2) Tourism-focused tourist who comes into Thailand to travel as the main purpose.

1) Population, sample and data collection

The population of the qualitative research consisted of executives, owners, markets, managers and administrators of healthcare service providers in Thailand. The researcher collected a total 60 samples by using the snowball sampling technique. The population of quantitative research are foreigners who travel and use healthcare services in Thailand. The researcher collected total 400 samples by the using selective sampling method. Both qualitative and quantitative data was collected from the five main cities in Thailand that are the major tourist attraction areas: Bangkok, Chiang Mai, Pattaya, Koi Samui, and Phuket.

2) Research limitation

The conceptual limitation of this research focused only on medical tourists who came to Thailand for both healthcare service and tourism. This excluded foreigners who are expatriates, retirements, students, and teachers. The scope limitation of this research aimed to study the motivation of and decision-making regarding medical tourism service choices made while in Thailand.

3) Research tools

This research used in-depth interviews as a research tool for qualitative research. The content of the interview was divided into two major components. First, questions were asked for his/her opinions toward factors and motivations that caused the medical tourist to come for medical treatment in Thailand. Second, questions were asked about organizational strategy, structure, and marketing direction. On the other hand, questionnaires were used as a research tool for quantitative research to gather primary data.

Qualitative data analysis consisted of identifying, coding, and categorizing patterns or themes found in the data. The quantitative data analysis consists of factor analysis, linear regression, and ordered-probit regression.

4. Results

Qualitative Results

The synthesis and integration of three theories (1) The competitive advantage of the nation theory (Diamond Model), (2) Hierarchy of healthcare needs which is adapted from Maslow's hierarchy of need theory, and (3) Push-pull factors in tourism theory can be applied to medical tourism business. Thus, the result shows that motivation and decision of medical tourism depend on the major purpose of the journey, which can be divided into two groups. The first group consists of tourists who come for medical treatment as their main purpose. The second group consists of tourists who come for travelling as their primary purpose. These results of this study are consistent with these three theories. Push factors in tourism theory and Maslow's hierarchy of need theory are the driving factors that make foreigners leave their country. Pull factors in tourism theory and in the Diamond Model are the factors that attract foreigners in Thailand.

(1) Medical-focused tourists come for health solution as the main purpose. In reference to the hierarchy of healthcare needs in Figure 2, this group includes those who are at the level of medically-necessary treatment and health enhancement. They focus primarily on medical

factors, including the speed of the service, the reputation of the hospital, expertise of physicians and therapists, medical standards at an international level, modern medical technology, a wide range of medical services, the privacy of the service, excellence of recuperation treatment, and affordable/valuable costs. They also consider transportable distance, affordable travel price, and climate that is suitability for rehabilitation. Many healthcare service providers coordinate with overseas insurance companies and hospitals. Furthermore, having additional services such as interpreters, visa extension, and money exchange help facilitate and create a quicker procedure for medical treatment.

These findings indicated that foreigners with a need for health treatment and beauty surgery leave their country due to push factors such as costly medical services and long waiting periods. This information allows Thai health service providers to determine the precise target and marketing easier. The result also shown that medical-focused tourists mainly consider medical treatment factors. Therefore, all relevant parties should focus on developing the potential of medical treatment factors.

(2) Tourism focused tourist comes from tourism as the main purpose. Refer to hierarchy of healthcare needs in Figure 2, this group needs a basic healthcare and optimum health. They focus primarily on tourism factors, including good country image, famous and beautiful landscape, suitable weather, the convenience of a hotel, the availability foodservice, a place of recreation, entertainment service, affordable cost of travel and living, no political situation, and the society and culture of quality service and hospitality.

These findings indicated that the foreigners leave their country due to push factors such as stress from work, social trend, and world exploring. This information also allows health service providers to determine the precise target and marketing easier. The result also shown that tourism focuses tourist mainly consider tourism factors. Therefore, all relevant parties should focus on providing suitable health service at nearby tourist attractions.

This study found needs for lifestyle transformation that expand from toptimum level treatment (See Figure 4). Medical tourists wanted to change their lifestyle in order to be in physical and mental harmony with nature. Services included weight loss by changing lifestyle eating habits, the synchronization between the body, mind, and nature, body detoxification and emotional detoxification. This range of treatments takes approximately 5-7 days. These treatments were often combined with usually sightseeing near the healthcare service location. The significant factors for this group were the variety of services, the reputation of the center, and positive references from reputable sources.

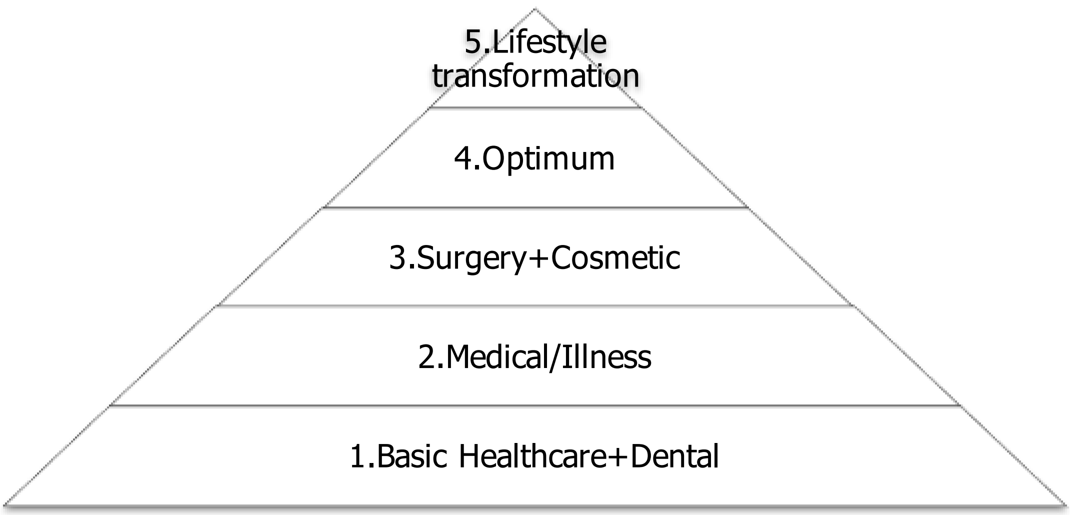

Figure 4 Hierarchy of Medical Tourism Health Care Needs

Quantitative Results

(1) Factor Loading and reliability

STATA was carried out to test the construct validity of the instrument in order to conceptualize the latent variables. Factor analysis was performed to describe variability among observed, correlated variables in terms of a potentially lower number of unobserved variables called factors. The results of principal component factors in Table 1 indicated that the scales were not only reliable but also valid for the factors under study such as the attractiveness of the country, the convenience during travel, the limitation of healthcare in their country, standard and quality of healthcare provider, service of healthcare provider, related business, and marketing activity (see Table 1).

Factors	Items/Statements	Factor Loadings	Common -ality	Variance	Cronbach's alpha
The attractiveness of the country	C1: The beauty of the landscape and attractions.	0.8018	0.6429	0.5584	0.8568
	C2: The warmth of the climate for relaxing.	0.7792	0.6072		
	C3: Appropriateness of the living costs.	0.6436	0.4142		
	C4: The stability and security in the country.	0.7914	0.6263		
	C5: The austerity of the law in the country.	0.7184	0.5161		
	C6: Thailand culture regarding services mindset.	0.7384	0.5452		
	C7: Reputation of Thai food.	0.7465	0.5573		
The convenience during travel	C8: Distance of travel to Thailand.	0.8230	0.6773	0.6902	0.7708
	C9: The affordablity of traveling to Thailand.	0.8033	0.6453		
	C10: The ease of travel to Thailand.	0.8648	0.7479		
The limitation of healthcare in their country	H1: The period of waiting for treatment relative to the home country.	0.7206	0.5193	0.4636	0.7043
	H2: Cost of medical service cheaper than home country.	0.6322	0.3997		
	H3: Variety of health services, some of which are not available in the home country.	0.6508	0.4235		
	H4: Treatment is legal.	0.6743	0.4547		
Standard and quality of healthcare provider	H5 The confidentiality of the treatment.	0.7216	0.5207	0.5876	0.7736
	H6: The quality and standards of the service provider.	0.7717	0.5955		
	H7: Reputation and expertise of the service provider.	0.8742	0.7642		
	H8: Technology and medical equipment is modern.	0.7629	0.5820		
	H9: The quality of service is good and friendly.	0.6820	0.4651		
	H10: The hospital/clinic offers accommodations during their treatment.	0.6972	0.4861		

Factors	Items/Statements	Factor Loadings	Common -ality	Variance	Cronbach's Alpha
Service of healthcare provider	H11: The available of healthy food /Halal food.	0.7483	0.5600	0.6771	0.8769
	H12: Reference from world class or well-known person.	0.8417	0.7085		
	H13: Results of treatment (Testimonial)	0.8717	0.7599		
	H14: Advice from a doctor / Agency / acquaintances	0.8325	0.6931		
	H15: After treatment service(s)	0.8151	0.6644		
Related Business	R1: The availablility of public transportation	0.6496	0.4220	0.5705	0.7476
	R2: The hospital/clinic has pick-up service	0.8371	0.7007		
	R3: There is entertainment and recreation near the hotel / hospital.	0.7320	0.5358		
	R4: Hospital/clinic is located near the tourist attraction	0.7896	0.6235		
Marketing Activities	MKT1: International branches.	0.8451	0.7142	0.7392	0.8824
	MKT2: There is contact with the hospital /doctor in the home country.	0.8779	0.7707		
	MKT3: There is cooperation between the government and the health service	0.8863	0.7855		
	MKT4: International exhibition or trade fair	0.8285	0.6864		

Table 1 Factor Loading and Reliability

The communalities of the 33 variables ranged from 0.3997 to 0.7855 suggesting that the variances of each original variable (from 39.97% to 78.55%) were reasonably explained by the seven-factor solution. Factor loadings of the variables ranged from 0.6322 to 0.8863, above the suggested threshold value of 0.30 for practical and statistical significance (Hair et al., 1998). The Cronbach's alpha for the nine factors varied from 0.7043 to 0.8824, suggesting high internal consistency. The seven factors were labeled based on the core variables that constituted them: the attractiveness of the country, the convenience during travel, the limitation of healthcare in their country, standard and quality of healthcare provider, service of healthcare provider, related business, and marketing activity.

(2) Model testing: Linear and ordered probit regression

Table 2 indicates a summary of the linear testing. Results of the study found that the attractiveness of the country, the convenience during travel, the limitation of healthcare in their country, standard and quality of healthcare provider, service of healthcare provider, related business, and marketing activity variables were significant. Correspondingly, the robustness testing confirms that each variable was significant by using order probit regression.

Factors	Linear	OProbit
The attractiveness of the country	0.9022 ***	1.6907 ***
The convenience during travel	0.4048 *	0.8169 **
The limitation of healthcare in their country	-1.0796 ***	-2.0395 ***
Standard and quality of healthcare provider	0.9138 ***	1.8399 ***
Service of healthcare provider	-0.4517 **	-0.7421 *
Related business(es)	0.9672 ***	1.7304 ***
Marketing activities	0.7756 ***	1.4498 ***
Constant	1.6308 ***	
cut1		0.1871
cut2		1.8667 ***
cut3		3.4263 ***
N	220	220
RSS	84.4980	
log likelihood	-206.9075	-196.3277
F-test	15.6099 ***	
Chi-square		91.9570 ***
R^2	0.3401	
Psuedo-R^2		0.1898
log likelihood	-206.9075	-196.3277
F-test	15.6099 ***	
Chi-square		91.9570 ***
R^2	0.3401	
Psuedo-R^2		0.1898

Table 2 Linear and ordered probit regression

5. Discussion And Conclusion

The study found that medical tourists who came to Thailand can be divided into two major groups: medical-focused tourists and tourism-focus tourists. The first group mainly focuses on medical treatment and other factors related to medical services while only focusing secondary, sometimes not at all, on tourism factors. In contrast, tourism-focused tourists mainly pay attention to tourism factors and focus far less on medical or healthcare factors. The study's findings will enable healthcare providers, travel service providers, and other related businesses as well as government agencies to formulate policies, create marketing strategies, and establish operational plans to effectively satisfy the needs of each these two tourist groups.

The limitations of healthcare in a foreigner's home country that influence customers in making decisions to obtain medical services in Thailand are: period of waiting for treatment, costs of medical service, the variety of health services, legality of treatment, and the confidentiality of the treatment. Medical treatment factors were the main factors that influenced medical-focused tourists for using medical tourism in Thailand. Medical treatment factors can divide into two factors. The first factor is standard and quality of the healthcare provider. This consists of quality and standards of the service provider, reputation and expertise of the service provider, modern of technology and medical equipment, friendliness of service provider, and acceptable accommodations. The second factor is service of healthcare provider. This consists of the available of healthy food or Halal food, references from reputable sources, result of treatment, advice from others, and after treatment service.

Tourism factors are the main factors that influence tourism-focused tourists for using medical tourism in Thailand. Tourism factors can divide into two factors. A important factor is the attractiveness of the country. This consists of the beauty of the landscape and attractions, the warmth of the climate for relaxing, the appropriateness of the living cost, the stability and security in the country, Thai culture, and the reputation of Thai food. A secondary factor is convenience during travel. This consisted of distance of travel to Thailand, the affordability of the trip, and the ease of travel to Thailand.

Other businesses that relate to medical tourism also influence customers in decision making for medical tourism services in Thailand. This consists of the availablility of public transportation, pick up services, and the hospital/clinic being located near tourist entertainment and recreation.

Marketing activities of service providers also influence customers in making decisions for medical tourism services in Thailand. This consists of the existence of international branches, contact with the hospital in the home country, cooperation between the government and the health service providers, and international exhibitions or trade fairs.

Moreover, there are several issues of concern: (1) Although Thailand is the leader of medical tourism in the world, there are only a few medical tourism agencies in the nation; (2) There are still gaps in the medical tourism cluster that need to be a filled in such as transportation, interpreters, and quality food service providers, and; (3) The connection between medical providers and tourism providers is not as good as it should be. Therefore, opportunities are being lost in many cases.

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Post Operating Performance and IPO Issuance Timing: The Developing Country Experience

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Abstract

This research aims to examine the post-issuaunce operating performance of newly issued stocks of small and medium companies. The research found a significant decline in operating performance after listing. It is evident that issue timing affects risks and volatility of operating performance. Issuing initial public offering (IPO) stocks prior to the 2008 financial crisis demonstrated the lowest performance compared to other scenarios, whereas issuing IPOs during the crisis illustrated a high volatility of operating performance.

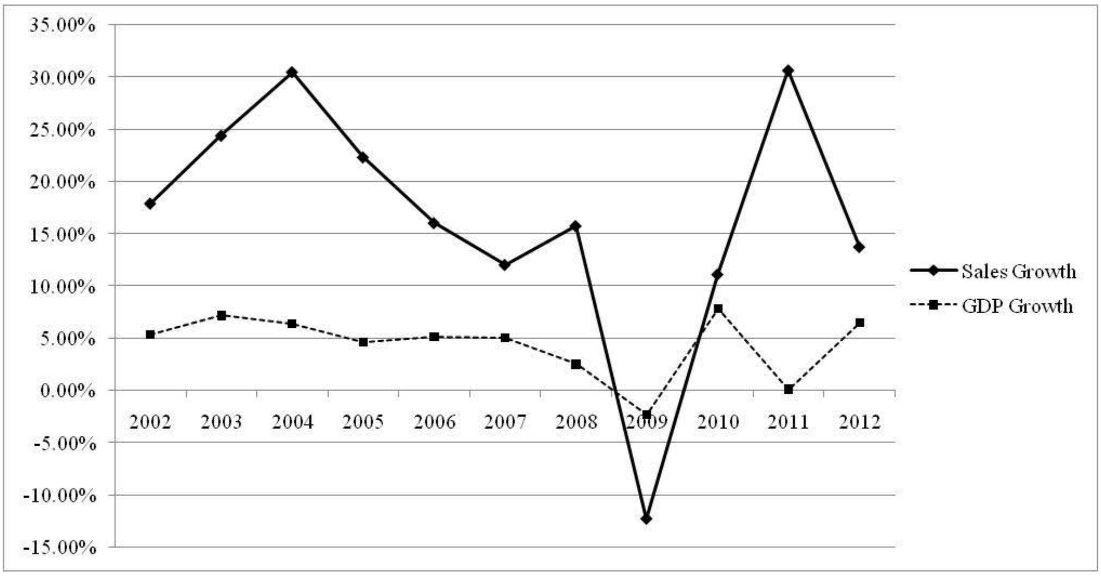
Keywords: post operating performance, initial public offerings, small and medium enterprises, issuance timing, financial crisis, developing country

1. Introduction

Several past studies documented operating performances of IPO companies, both before and after a new listing, and the relationship with market return. This research investigates the operating performance changes of 42 companies before and after IPOs during 2000 to 2012. The analysis of operating performances are based upon three areas: profitability, efficiency and leverage (Aussenegg and Ranko, 2007). Additionally, this study also identifies differences between post operating performances of IPOs issued at different timings including the normal period before the 2008 financial crisis and then during the crisis itself. According to Mishkin (1992), a financial crisis is defined as a "disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities." It was postulated that the volatility of operating performance in each period would be different.

The most recent economic crisis started in July 2008, resulting from the credit crunch of the US banking system. The crisis spread rapidly throughout the US economy and the effects were continued across the globe (Earle, 2009); Thailand was one of many countries that felt the effects (Green, 2010). The graphs in Figure 1 represent Thailand's GDP and the sales growth of the Market for Alternative Investments (MAI) from 2002 to 2012. The peak of the US crisis was evident in periods during 2008 and 2009 (Rapoport and Gerts, 2010). During this time, Thailand's GDP growth dropped to negative values (Figure 1). Operating performances of private and public companies dropped accordingly, with some companies resulting in the complete shut down of some businesses. The stock market also felt the impacts from the economic recession. Sales growth of listed companies in the MAI showed the lowest point in year 2009 at -12 percent, which was the first negative rate of sales growth since the establishment of the MAI. Although the market conditions in Thailand were not strong at the time, there were 14 new IPO companies during 2008 to 2009. This reflects the high level of confidence to go public amongst SME entrepreneurs, in order to benefit from future growth opportunities.

Figure 1.Thailand's GDP growth and MAI listed companies' sales growth in year 2002-2012.



Sources: World Bank and SET databases

In the Thai capital market, the MAI is one channel for SMEs to raise capital. The MAI was established under the Stock Exchange of Thailand (SET) in the year 1998 and plays a significant role in supporting and providing access to SMEs within the Thai capital market. The MAI also provides long-term capital for SME business expansions and development, facilitating the opportunity to strive for global competitiveness.

The number of companies listed in the MAI, which transitioned from being a small firm to becoming a larger organization and moving on to the SET market, increased from only 3 listed companies in 2001 with an IPO issued size of 131 million Thai Baht to a total of 92 listed companies in 2013 accounting for 19,826 million Thai Baht (SET database). This information illustrates that the MAI presents high growth opportunities for investors.

As a result of the transition from private to public ownership through the initial public offering (IPOs), the changes of operating performance should be examined. Most IPO companies have incentives to report the best operating performance prior to the IPO offering, in order to increase the expectations of investors and to increase the offering price of the firm.

Although several researchers investigated the performance of IPO firms, they typically focused on the firms' post issue price performances. The motivation for this study stems from the lack of evidence on operating performance of small and medium enterprises that are listed on the MAI. Most Thai studies on stock performance have typically focused on the SET and pricing performance rather than operating performance.

2. Literature Review

As companies seek multiple benefits to go public, it becomes difficult to pinpoint a single reason. Hansen and Jorgensen (2010) explained the reasons to go public as the pecking order theory. They said that companies usually prefer internal equity and debt financing as sources of financing, with the last option being external capital. Lower cost of capital is an advantage of external financing. The value of the firm also increases as a result of lower costs of capital. Pagano, Panetta and Zingales (1998) analysed the decision to go public of Italian private companies. Their study found that larger sized firms with higher firm values within the industry were likely to go public in order to rebalance their account due to high investment projects. Latham and Braun (2010) found that CEO ownership, companies' debt levels and leverage are key factors influencing IPO decisions. Some investigations mentioned non-financial reasons in the decision to go public. According to Ritter and Welch (2002), market conditions are included in the initial factors, whereas the stage of the business cycle proved to be a minor factor for stock market listing.

Another important factor is higher bargaining power on bank credit after IPO, whereby newly listed companies can access added sources of funds. Mikkelson, Partch and Shah (1997) found the reasons for private companies to list in the stock market from the prospectus of their IPO sample. The information showed that 85 percent intended to raise working capital, 64 percent to invest on capital expenditure and, lastly, 58 percent to payout liabilities. The stock issues of newly established companies have major reasoning for raising capital. However, some companies may not want to go public as examined by Brau and Fawcett (2006) due to the dilution of ownership, uncertainty in the market and industry condition. High personal risk burden of decision makers and firms' debt levels contribute to IPO withdrawals (Latham and Braun, 2010).

Several papers that studied new IPOs after the listing year reported a decline in the IPO firm's operating performance. As stated in Jain and Kini (1994), the decline of operating performance cannot be claimed by the increase of assets and equity after listing. They investigated that the first day of trading for IPO companies would have a high initial public offering price per earnings ratio due to the investor's high expectations that companies will have future growth opportunities. They recommended that the cause of under-performance after listing is consistent with agency costs as a result of ownership structure, window-dressing on pre-IPO performance and timing their issuances on periods of unusual over performance.

Agency costs are the most common obstacle for companies that transition to a public company in the stock market. Wong (2012) studied the post-operating performance of Hong Kong's listed companies. He found that IPO companies peak on earning performance in the IPO year and then decline continuously thereafter. The root of inferior performance issues results from changes in the ownership structure after the firm's IPO. The agency cost problem is a main factor that impacts the operating performance after private companies become public. Agency costs arise due to self-interested CEO behavior and conflicts of interest between executives and shareholders leading to misallocation of resources (Jensen and Meckling, 1976). During the period of first offering, managers usually show the best performance, but are then are unable to maintain original performance levels after listing. Some companies attempt to "window-dress" their financial performance before listing, in order to maximise investor attraction and IPO prices. Limpaphayom and Ngamwoutikul (2004) also supported the issue of post operating performance decline after listing by agency cost in the Thai stock market.

Ritter (1991) indicated three psychological factors of IPOs' under-performance in operation: the error of risk measurement, wrong timing and over-optimism. Furthermore, Jain and Kini (1999) stated that companies going public prematurely in the business cycle are at more risk of becoming an unsuccessful public company. IPO companies in the early stages of the business growth cycle are generally not profitable. IPO companies that have higher pre-operating performance can usually survive in the long term due to the ability to maintain original levels of operating performance.

Mikkelson, Partch and Shah (1997) supported another reason for the decline in operating performance after IPO, which can be explained by the age and size of the firms. Smaller and newly established companies present the result of decline in operating performance below the industry average. On the other hand, larger and longer established companies can generate better operating performance compared to the industry average.

The questions that are addressed in this research are as follows;

(1) Does the transition of Thai small and medium enterprises (SMEs) to a public company affect the operating performance?

(2) Are there any differences or changes in post operating performance based on the three scenarios of IPO issue timing?

The result of this research will lead to a better understanding in pre and post issue operating performances of companies in the Market for Alternative Investment (MAI). Improvement in operating performance of listed companies are essential, as when investment decisions are made, most investors study operating measures to value stocks. Understanding the key method to improve financial performances of listed companies after listing them, will help develop the potential of stock markets and boost the company's business performance in the long run.

3. Methodology

This study consists of a sample size of 42 companies out of 60 companies that are listed on MAI. The primary criteria for choosing sample data was that the company needed to be listed on MAI market since initial public offering. Additional criteria included the necessity for companies to have pre and post operating performance data for at least a period of 3 years between 2000 and 2012. For the industry data to calculate industry-adjusted changes on operating performance, the operating performance of all companies (SET and MAI companies) for each industry by SET standards were calculated.

Data was divided into three sub-groups based on three scenarios. The first scenario included subsamples of small and medium companies that issued IPOs within the normal period, which did not relate to the financial crisis years throughout 7 years, both before and after listing. The period used in this scenario was in year 2003 and 2004. IPO companies in year 2005 to 2007 were the subsample for the second scenario which included companies issuing IPOs before the economic crisis. The last scenario was IPOs that were issued in year 2008 and 2009. This period represented the peak of the US economic crisis which sent domino effects around the world.

In this study, the Wilcoxon Signed-Rank Test was used as the statistical tool, because this distribution free approach was suitable for the small sample size. Hansen and Jorgensen (1996) stated that the Wilcoxon Signed-Rank Test was better than the parametric test because it was distribution free and did not assume normality in the data. The test is able to identify the significance of changes for this non-parametric statistical test (Shieh, Jan and Randles, 2007).

The variations in performance from year to year were examined and the medians of each proxy were tested by the Wilcoxon Signed-Rank Test that the null hypothesis of median changes equals zero.

Factors explaining operating performance

This research chose four measures to explain operating performance of initial public offering companies. Definitions of terms are as follows:

Sales-growth rate (SG) (percentage): total sales in the current year minus total sales in the previous year, divided by total sales in the previous year.

Return on assets (ROA) (percentage): an indicator of how efficient management is at using its assets to generate earnings.

Return on equity (ROE) (percentage): measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Asset turnover (AST) (times): A measure of a company's ability to generate revenue from its total assets invested.

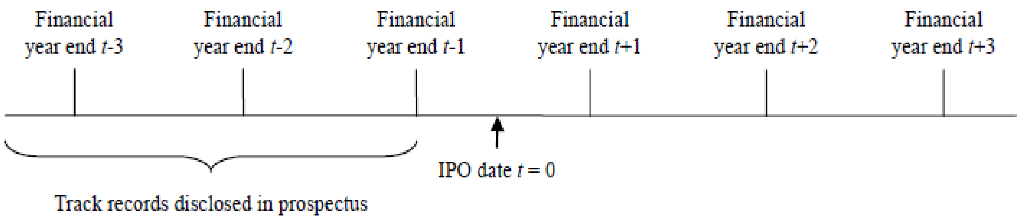
Debt-to-Equity ratio (DE) (times): A measure of a company's financial leverage calculated by dividing its total liabilities by stockholders' equity. It indicates what proportion of equity and debt the company is using to finance its assets.

The first was the output measurement where the output performance from sales and the sales growth rate was measured. The profitability measurement included the return on asset (ROA) and return on equity (ROE), both of which are important proxies in measuring the profitability of newly listed company. Return on asset (ROA) is the measurement of the ability to generate sales from the company's assets. When private companies make the transition to become listed in the stock market, newly listed companies gain more from shareholder's equity which enables them to raise funds and invest in new projects; therefore their assets increase from the new projects. If newly listed companies cannot generate more earnings to maintain the original ROA and ROE, they will fail to survive in the capital market which will affect the company's stock price.

Asset Turnover (AST) was used as a measurement for efficiency. AST is the most important component of the asset management ratio, as it analyses how effectively and efficiently a newly listed company manages their assets. It incorporates the same concept with ROA and ROE for newly listed companies, that they will have higher assets after listing and how they manage their assets to generate more sales. The last measurement for operating performance is leverage changes, to which we used the debt to equity ratio as a measure. Debt ratio is one of the proxies that shows the capital structure of the company and illustrates how companies finance their capital. In normal practice, newly listed companies should have a low debt to equity ratio as a result of more fund raising from equity. If the debt ratio of newly listed companies continues to grow, it signals to investors that the company holds high leverage.

After the data was retrieved from each measure as detailed above, the median from the companies in each type of empirical proxies over a seven-year period were computed first; this included three years before through three years after listing (from year –3 to year 3) to investigate the median changes (See Figure 2). We then used the Wilcoxon Signed-Rank Test to report the significance of the difference between medians of operating performance changes before and after listing.

Figure 2. The study time conversion



Source: Wong (2012)

We chose one year before listing (year –1) as the benchmark, and used the Wilcoxon Signed-Rank Test to compare the difference between the median of the benchmark year and that of each year after listing, in order to study changes in the operating performance before and after listing. Additionally, the test helped the examination of continuing trends of change after listing. The study conducted by Jain and Kini (1994), adjusted industry effects from operating performances by measuring the industry-adjusted change. The industry-adjusted change in operating performance can be calculated by the difference between newly listed companies' changes in performance and median change in industry performance of newly listed companies.

4. Results and Discussion

Analysis on IPO companies' operating performance changes: pre and post operating performance.

Table 1 presents the development in the operating performance both before and after listing. The significant estimation shows that the change of the median in sales in year 0, +1, +2, +3 relative to year -1 are all positively significant at a level of 1 percent. After companies became public, there was an expectation that listed companies would generate more sales and grow at a faster rate because of more capital being raised from the stock market and the increased company's capacity. Sales increased continuously from year -1 to year +3. The median changes of sales growth after IPO year were all negatively significant (at 1 percent, except in the second year which was at the 5 percent level). There was a similar trend of declining sales growth rate after adjustments were made to the industry effect as shown in the median industry-adjusted change figures.

Table 1. Z-statistic testing the significance of the operating performance median change after companies listed in MAI market.

Measure of Operating Performance	Year Relative to Completion of IPO			
	From -1 to 0	From -1 to +1	From -1 to +2	From -1 to +3
Number of observations 42 IPOs				
Sales				
Median Changes (%)	4.7889***	5.4266***	5.4776***	5.3891***
Sales Growth				
Median Changes (%)	0.1375	-3.0634***	-2.1756**	-3.1259***
Median Industry-adjusted change (%)	0.9003	-3.2009***	-1.7755**	-2.6883***
ROA				
Median Changes (%)	-0.2626	-0.9628	-0.6377	-1.9007*
Median Industry-adjusted change (%)	-0.15	-0.7127	-0.3251	-1.0378
ROE				
Median Changes (%)	-4.1012***	-3.7761***	-2.9759***	-4.0137***
Median Industry-adjusted change (%)	-3.9512***	-3.3385***	-2.3507**	-2.9634***
Asset Turnover				
Median Changes (%)	-4.9515***	-4.4763***	-4.2262***	-4.4013***
Median Industry-adjusted change (%)	-4.3763***	-4.4388***	-3.9011***	-4.2262***
D/E				
Median Changes (%)	-5.0890***	-4.2637***	-2.7758***	-2.9884***
Median Industry-adjusted change (%)	-5.4891***	-4.9389***	-3.7636***	-4.3513**

After listing, companies are expected to gain more asset and shareholder equity; thus ROA and ROE are also expected to reduce in a listing year (year 0). The median change in ROA shows a decline from year -1 to year 0, 1, 2, 3. Table 1 shows clear evidence of reduction in ROE, whereby the median changes of ROE from year -1 to year 0, +1, +2 and +3 were all negatively significant (at a 1 percent level).The industry-adjusted figures show same results that ROE declines after IPO.

The Wilcoxon Signed-Rank Test shows the results of asset turnover which are all negatively significant (at 1 percent level). This evidence supports the fact that companies increase their assets but are not able to boost their sales in order to maintain original levels of efficiency. For leverage changes, a leverage proxy that we used to examine the change in operating performance was the debt to equity ratio. The Z-score also supported the declining result of debt ratio from year -1 to year 0, +1, +2, +3 (significant at 1 percent level).

In summary, IPO firms showed inferior post-IPO operating performances relative to the year prior to going public (year -1). Sales gradually increased but all profitability proxies (sales growth, ROE and ROA) showed declining trends. Even after adjustment for industry effects, IPO firms showed similar trends of significant under performance. The results were similar to previous studies about the post operating performance after listing in other countries. Jain and Kini (1994) studied the decline of operating performance after companies' listing of US IPOs from 1976 to 1998. They also found reasons to support the inferior post IPO operating performance. Firstly, they found that the conflict of interest between management and shareholders increased agency costs to IPO companies as a result of ownership structure adjustments. The second reason was the window dressing of financial statements on pre IPO operating performance. Finally, it was found that the timing of issuing could also lead to substandard performance.

Analysis on IPO companies' operating performance changes: economic crisis in year 2008-2009

Table 2. Z-statistic testing the significance of the sales median changes after companies listed in MAI market between three scenarios of IPO issue timing.

Measurement of Sales	Year Relative to Completion of IPO			
	From	From	From	From
	-1 to 0	-1 to +1	-1 to +2	-1 to +3
Normal Period	2.9810***	3.0594***	3.05941***	3.0594***
Before Crisis	3.3316***	3.3316***	3.2881***	3.2245***
During Crisis	2.7456**	2.1181	1.2551	0.7060

The Z-statistical test presents the significantly positive trend of sales during the normal period of IPO issue timing scenario. Z-values of scenarios before and during the crisis slowly decreased during IPO years, resulting from the impact from the crisis on companies' earnings. The crisis scenario presented the lowest Z-value at year +3, with a value of 0.706. Although sales in the normal period showed the best performance after listing by the continued increase of sales, the impact of the economic crisis reduced the output of companies during the same period. Sales of MAI IPOs during the crisis were at a very abnormal value due to the impact from Thailand's economic recession, as a result of the global crisis.

Table 3. Z-statistic testing the significance of the sales growth median changes after companies listed in MAI market between three scenarios of IPO issue timing.

Measurement of Sales Growth	Year Relative to Completion of IPO			
	From	From	From	From
	-1 to 0	-1 to +1	-1 to +2	-1 to +3
Normal Period	-3.059**	-2.629**	-1.726	-2.237
Before Crisis	-0.850	-1.024	-2.505*	-2.113
During Crisis	-2.197	-1.726	-1.961	-2.589**

The Z-test statistic values showed negative values for all scenarios (Table 3), where the rate of sales growth decreased after listing. Companies that issued IPO before the economic crisis faced the problem of a rapidly decreasing sales growth rates on post issue year, as the Z-statistic test results presented a higher negative value from year 0 until year +2. Overall, the data presented the effect of the global crisis on the operating performances of the sample companies.

Table 4. Z-statistic testing the significance of the ROA changes after companies listed in MAI market between three scenarios of IPO issue timing.

Measurement of ROA	Year Relative to Completion of IPO			
	From -1 to 0	From -1 to +1	From -1 to +2	From -1 to +3
Normal Period	-0.235	-0.941	-0.471	-0.863
Before Crisis	-2.309	-2.396*	-2.417*	-2.344*
During Crisis	-0.314	-0.157	-0.392	-1.334

As shown in Table 4, Z-test values in the pre-crisis scenarios supported the decline of ROA after listing (above -2.000). On the other hand, z-values of other scenarios were around -1.000. The trend of ROA after listing exhibits clear evidence of ROA reducing regardless of IPO issue timing. The subsample group from before crisis issuing showed the lowest median ROA after being listed among the three scenarios. After listing year, the subsample group from issuing an IPO before the crisis, reached the bottom line of operating performances due to the impact of economic recession during that time period.

Table 5. Z-statistic testing the significance of the ROE changes after companies listed in MAI market between three scenarios of IPO issue timing

Measurement of ROE	Year Relative to Completion of IPO			
	From -1 to 0	From -1 to +1	From -1 to +2	From -1 to +3
Normal Period	-2.667**	-2.432*	-1.490	-2.197
Before Crisis	-0.828	-0.071	-0.174	-0.480
During Crisis	-2.197	-1.726	-1.961	-2.589**

The Z-values of companies' ROE that went to the stock market before the economic crisis dropped less than in other scenarios (Table 5). All scenarios showed that the Z-values were negative throughout 3 years after listing as a result of equity increasing and the inability for companies to generate more earnings.

Table 6. Z-statistic testing the significance of the AST changes after companies listed in MAI market between three scenarios of IPO issue timing

Measurement of AST	Year Relative to Completion of IPO			
	From -1 to 0	From -1 to +1	From -1 to +2	From -1 to +3
Normal Period	-3.059**	-2.472*	-2.432*	-2.589**
Before Crisis	-2.940**	-2.896**	-2.679**	-2.831**
After Crisis	-2.589**	-2.353*	-2.353*	-2.197

The Z-statistic test results of asset turnover also showed a negative value which meant the reduction of asset turnover after listing. The result of the Z-statistic also showed significance levels at 5 percent and 10 percent in Table 6. The pre-crisis scenario demonstrates the highest Z-value after listing. Newly listed companies before the crisis were affected by the US crisis more than in other scenarios. Although newly listed companies tried to reduce their assets, they were still unable to generate more profit and manage operation expenses in that period. As a result, asset turnover was reduced after listing and became even lower when the crisis occurred in the post issue year.

Table 7. Z-statistic testing the significance of the DE changes after companies listed in MAI market between three scenarios of IPO issue timing.

Measurement of DE	Year Relative to Completion of IPO			
	From -1 to 0	From -1 to +1	From -1 to +2	From -1 to +3
Normal Period	-3.059**	-2.629**	-1.726**	-2.237**
Before Crisis	-3.114***	-2.700***	-1.677	-1.938
During Crisis	-2.476**	-2.118	-1.255	-0.706

The results showed a significant decrease of DE ratios after being listed during the normal period scenario. Before and during the crisis scenario, the Z-value had reduced after listing in year +1 and +2. Companies often withdraw more bank loans during economic recessions, therefore debt increases after 2 to 3 years of being listed for companies that issue IPO during the crisis period compared to companies issuing an IPO in normal conditions.

5. Conclusions

The first part of the study analyzed the change of operating performance from 1 year before listing and throughout 3 years after small and medium companies have listed. The operating performance was tested based on three measurements; output profitability, efficiency and leverage measurement. The overall result presented the decline in operating performance after listing, with the representation of sales and sales growth as output measurements. The result illustrated that sales continued to increase after listing, as expected. In contrast, sales growth was significantly lower compared to the pre-issue year. Thus, the conclusion of output estimation is that sales can increase after listing, but at a declining rate.

The forecast of profitability after listing is that there would be higher earnings after listing. However, the study shows a decreasing trend in ROA and ROE. Prior research indicated the reason for lower ROA and ROE when companies become public, which was due to higher assets as a result of capital expenditure increasing. Most companies aim to be a public company in order to find additional sources of funds to invest in new projects. Therefore, increasing ROA and ROE is a challenge for such companies. With regards to efficiency measurement, asset turnover was used as indicator in this test. The large increase in assets after listing was a problem of decreasing asset turnover. Companies are usually unable to maintain the growth of sales to remunerate the growth of assets and maintain initial levels. Most studies also mentioned the increase in leverage changes but MAI companies presented a slow declining trend after listing. It is a positive sign for newly listed companies as the proportion of equity is higher as a result of raising funds in the MAI market, which subsequently reduces debt. Companies also have a tendency to borrow less from banks after listing.

The different timing of IPO issuing between normal, before crisis, and during crisis period is tested to support the decline in operating performance. Operating performance decreased after listing but the volatility was different based on issue timing. Companies that issued IPOs before the US economic crisis in year 2008 received higher pressure on earning management after listing. The evidence of issuing IPOs before the crisis showed more inferior performance than other scenarios, whereby issuing IPOs during the crisis also presented high risks on operating performance after listing.

The limitation of this research should be considered. Firstly, the period of post-operating performance in this study is three years after listing and the result from this period may not be able to explain gains and losses of IPO companies in the long term. Secondly, MAI companies are mainly small and medium companies. These companies are more likely to change their business models. Finding matching firms or industry benchmarks to compare with them is very difficult and may lead to abnormal results.

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Commodity Investment: An Analysis on Expected Utility Theory

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Abstract

This study expanded the boundary of researches in commodity investment to the area of Expected Utility Theory. It examined the attractiveness and benefits of commodities when portfolios are estimated based on expected utility maximization. The optimal portfolios that include and do not include commodity were estimated using full scale optimization as an alternative to mean-variance approximation. The resulting portfolios were evaluated to see how an addition of commodities can improve portfolio performance. The findings indicated that futures contract on gold, physical gold investment and futures contract on light sweet crude oil were very attractive as alternative investments. An addition of these commodities to the traditional portfolio raised investors' welfare in term of expected utility. The sub-sample analysis showed that commodities were more attractive during inflationary period. Both physical gold and futures contract on gold were desirable as a hedge against inflation. They represented large proportion of the optimal portfolio and significantly raise investors' expected utility. An analysis of optimization premium suggested that portfolios with commodities were superior to portfolios of traditional assets during recession. Investors who hold portfolio of traditional assets required certain amount of optimization premium in compensation to equate their welfare to the amount achieved by investors whose portfolios include commodities.

Keywords: Alternative investment, Commodity, Expected Utility, Full scale optimization, Opportunity cost, Risk aversion

1. Introduction

Starting from the beginning of 2000s, commodities have become a popular asset class for both individual and institutional investors. Institutions as well as mutual funds have increased their position in the commodity investments. The massive capital flows to commodity market have been remarkable and several new products have been developed during the past decade to allow investors to add one or more commodity assets into their traditional portfolios. This rapid growth of commodity investment was prompted by the recognition of its potential diversification benefits. By its definition, commodity is a marketable item produced to satisfy wants and needs (Froot, 1995). The commodity returns have recently exhibited low or negative correlation with the returns of traditional asset such as stocks and bonds because most of the drives behind commodity prices are related to weather conditions as well as demand and supply of physical production which are different from the demand and supply that define the value of financial securities (Daskalaki & Skiadopoulos, 2011). An early work by Bodie and Rosansky (1980) showed that the average return on a well-diversified portfolio of commodity futures contracts was greater than the average risk free rate and commodity futures can be a very effective hedging tool against inflation. It had good performance when stocks were doing badly. Jensen, Johnson, and Mercer (2000) and Gorton and Rouwenhorst (2006) showed that diversification benefits of commodity futures contract have arisen from their low or negative correlation with equity. The low correlation was driven by unique performance of commodity futures contracts during inflationary periods. As increasing commodity prices were typically one element of heightened inflation and higher interest rates, both of which negatively affected equities, long positions in commodity futures could, then, work as inflation hedge when included in the traditional portfolio (Conover, Jensen, Johnson, & Mercer, 2010).

Most of these previous researches in the area of commodity investments explored the characteristics and benefits of commodities in terms of risk and return (Ankrim & Hensel, 1993; Erb & Harvey, 2006; Greer, 2000; Hoang, 2011; Jensen, Johnson, & Mercer, 2000, 2002; Nijman & Swinkles, 2003; Rzepczynski, Belentepe, Feng, & Lipsky, 2004; Satyanarayan & Varangis, 1994; Smimou, 2010). Their portfolio approximations considered the two moments of return distribution which were subjected to constraints of normal return distribution and quadratic utility function. These conditions are not plausible in realistic portfolio implication. Therefore, there has been a need to search for a more general portfolio approximations that allow for higher moments of distribution and various types of return distribution. The researchers in financial economics have long recommended the Theory of Expected Utility as an appropriate model to express individual behavior. It has been a major paradigm in decision making and has been used prescriptively in management science, predictively in finance and economics, and descriptively by psychologists (Schoemaker, 1982). The theory has been popular as a superior model of decision making under uncertainty with assumptions that individuals place subjective utility on monetary unit of an outcome and they will make a decision based on the axioms of rationality described by Neumann and Morgenstern (2004).

This research expanded the extant studies in the area of commodity investment to a new boundary based on Expected Utility Theory. The objective of this paper was to examine whether the benefits of commodity investment exist when portfolios are constructed with an objective to maximize expected utility. The paper also evaluated how an addition of commodity investment into portfolio of traditional assets improves portfolio performance and identified the optimization premium that the investors who hold portfolio of traditional assets would require to compensate them for not investing in commodities. Lastly, the paper reexamined the attractiveness and benefits of commodities in the sub-sample period between 2002 and 2008, the time of rising inflation and expansive commodity market. The rest of the paper is organized as follows: The next section discusses related literature and the third section explains research methodology. Results are discussed in the fourth section. The last section concludes the study and offers recommendation on future research.

2. Literature Review

Expected Utility Theory

The Theory of Expected Utility was developed byBernoulli (1954) who arrived at the idea that “The value of an item must not be based on its price, but rather on the utility it yields. The price of the item is dependent only on the thing itself and is equal to everyone. The utility, however, is dependent on the particular circumstances of the person making the estímate.” Therefore, when people are asked to decide on a gamble, they will make decisions based on the value of expected utility resulting from the outcome but not on the expected value of the outcome. The theory was revived by Neumann and Morgenstern (2004) who extended the expected utility hypothesis by introducing the axioms of rationality which describe the modest conditions when expected utility hypothesis suggested by Bernoulli (1954) holds. They proposed that an individual is rational if every preference of that individual is characterized by maximization of expected utility.

For an expected-utility-maximizing individual, let $U(W)$ be the total utility of wealth (W) and $E[U(W)]$ be the expected utility of wealth for an individual in the sense of Probability Theory. The utility of wealth is twice differentiable and the differentiations of utility function describe marginal utility of wealth and rate of change of marginal utility respectively as

$U'(W)$ = marginal utility of wealth

$U''(W)$ = rate of change of marginal utility with respect to wealth (Second derivative of total utility)

Rational individual who is confronted with a choice of lotteries will maximize his expected utility by choosing the policy that makes $E[U(W)]$ larger. The wealth (W) is always assumed desirable, making marginal utility of the wealth always positive and $U(W)$ strictly increasing (Pratt, 1964; Arrow, 1965).

$$U'(W) > 0$$

However, the marginal utility corresponding to equal changes in wealth are decreasing as the wealth increases. Utility resulting from any small increase in wealth will be inversely proportionate to the amount of wealth the individual possesses. This explains why the decision maker's utility from deriving $4 is less if he already has $2 in his pocket than if he instead has nothing. This property can be described as

$U'(W)$ is strictly decreasing as W increase

Therefore, the rate of change in marginal utility with respect to wealth is always decreasing or strictly concave

$$U''(W) < 0$$

Arrow (1965) suggested that there are two simple measures of risk aversion;

Absolute risk aversion

$$R_A(W) = -U''(W)/U'(W)$$

Relative risk aversion

$$R_R(W) = -WU''(W)/U'(W)$$

The absolute risk aversion directly measures individual persistence for more-than-fair odds. To measure bets in proportion to wealth *W*, the absolute risk aversion is replaced by relative risk aversion which is an elasticity of marginal utility. Both types of risk aversions are described in general function of wealth *W*. An individual's degree of absolute and relative risk aversion can be described as decreasing, constant, and increasing risk-averse as his/her wealth changes.

Portfolio Optimization - Expected Utility Maximization

An expected utility maximization approach for portfolio approximation has outstanding properties to consider a function of all moments of the probability distribution and ability to fit into a wide range of investor risk preference. It combines together Expected Utility Theory and Theory of Diversification by assuming that each dollar of return from the well-diversified portfolio is associated with utility, the measure of investor's happiness regarding the total return received in a certain investment horizon (Sharpe, 2007). Risk-averse rational investors were said to diversify in their portfolio selection if they have maximized the expected utility of the returns from their portfolio in each state of the world with respect to their own preferences (Pye, 1974). To consider how investor maximizes his expected utility in a simple portfolio model consists of two assets, let *a* and *b* be the two assets in the portfolio where meu_a and meu_b are marginal expected utility of assets *a* and *b* respectively. Portfolio's return is simply a weighted average of assets' return and portfolio's expected utility is a weighted average of assets' expected utility. If the marginal expected utility of additional $1 investment in *a* is greater than marginal expected utility of additional $1 investment in *b* - $meu_a > meu_b$ - and it is possible to acquire additional units of *a* and forego some units of *b*, rational investor will maximize his expected utility by buying more of asset *a* and selling off some amount of *b*.

Let there be an investor with fixed initial wealth W_t who is given *N*-asset universe that pay off at time $t+1$. His utility function is assumed to be continuous, increasing, concave and differentiable ($U'(W)>0$ and $U''(W)<0$). Let X_i stands for the proportion of wealth assigned to asset *i* over the next period. The optimal portfolio can be constructed at time *t* by maximizing the investor's expected utility of wealth at time $t+1$ with respect to the portfolio weights, i.e.

$$\max E\left[U(W_{t+1})\right]$$

Let $r_{i,t+1}$ be the rate of return on individual asset i and $r_{p,t+1}$ be the rate of return on portfolio. The end-of-period wealth is given by:

$$W_{t+1} = W_t(1+\sum_{i=1}^{N} X_i r_{i,t+1}) = 1+\sum_{i=1}^{N} X_i r_{i,t+1} = 1 + r_{p,t+1}$$

$$\text{Subject to } \sum_{i=1}^{N} X_i = 1$$

Since the utility maximization problem requires the utility functions of wealth, it has allowed researchers to take into account individual behavior toward risk and the degree of risk aversion by quantifying an individual's risk preferences into mathematical forms. McEntire (1984) was among the early works to present portfolio problems where investor maximizes the expected value of Neumann and Morgenstern's (2004) utility function. Aizenman (1999) compared the diversification pattern of investors who maximize a generalized expected utility with the diversification patterns of investors who follow the

CAPM and found that the superiority of generalized expected utility preference arise from the inclusion of degree of risk aversion to portfolio decision because risk aversion accounts for the observed diversification patterns. Jondeau and Rockinger (2006) computed the optimal portfolio allocation that maximizes investor's expected utility numerically. The three-moment and four-moment optimal portfolios overcome inability of mean-variance portfolio to approximate expected utility under large departure from normality. In other studies the expected utility maximization was extended to included additional factors related to portfolio allocations. Best and Hlouskova (2005) included transaction cost into the expected utility optimization problem while Pang (2006) considered an infinite time horizon approximation. Jones and Stine (2010) applied general expected utility into portfolio rebalancing strategies to demonstrate that portfolio strategies considering all moments of the distribution of terminal wealth according to the general expected utility functions usually have contradiction to the mean-variance ranking strategies and the agents can be misleading in their portfolio strategies if they depend completely on traditional mean-variance statistics.

3. Research Methodology

Data

The sample data consisted of 263 monthly returns on traditional assets and commodity investments. The proxies for stock, bond, and risk-free investment were S&P 500 Total Return Index, Barclay U.S. Aggregate Bond Index, and three-month U.S. Treasury bill respectively. The return sample for commodity investments included two future indices, DJ-UBSCI and S&P-GSCI, because they have been easy and most widely used way investors can get exposed to commodity price movement. The papers included individual commodity futures contracts on light sweet crude oil, gold, copper, corn, and live cattle. Each individual contract is the one with largest open interest from each of the five main sectors according to the U.S. Commodity Futures Trading Commission (CFTC). The return on London Gold Fixing was selected to represent physical commodity investment since gold has traditionally been used as a store of value and a medium of exchange. London Gold Fixing is a benchmark for pricing the majority of gold products and derivatives throughout the world's market. The data set covers the period from January 1991 to December 2012. It does cover the early stage of financialization of commodity market when commodity was not popular and the time it was at its peak. It also includes the time of financial crisis during 2007-2009.The time period during 2002-2008 was selected for sub-period analysis to determine the attractiveness and benefits of the commodity during the inflationary period. This was the time period when commodity market has had a dramatic rise before it reached its peak in 2008. It is the same period when U.S. economy had been in recession and the inflation was rising (Campbell, 1980; Cecchetti, 2009; James, Park, Jha, Jongwanich, Hagiwara, & Sumulong, 2008).

Full Scale Optimization

This paper introduced a full scale portfolio optimization, the more general approach of portfolio approximation proposed by Cremer, Kritzman, and Page (2005) and Adler and Kritzman (2007) as an alternative to mean-variance portfolio approximation. With computational efficiency, the full scale optimization depends on sophisticated search algorithms to allow us to calculate portfolio's utility for every period, considering as many asset mixes as necessary to identify the weight that yield the highest expected utility, given any description of utility. In this study, full scale optimization was applied in solving for optimal portfolios with and without commodity. The optimization was based on static allocation problem. From the total sample of 263 monthly returns on each asset, one computedmaximum expected utility in each period and shift the assets' weights using a numerical search procedure until one found the combination that maximizes total utility of all periods.

Let there be an investor with fixed initial wealth W_t who faces an asset universe of N assets that pay off at time $t+1$. Let X_i stand for the weight of wealth invested in the risky asset i over the next period. The optimal portfolios were constructed at time t to maximize the investor's expected utility of wealth at time $t+1$ with respect to the portfolio weights, i.e.

$$\max E\left[U(W_{t+1})\right] \tag{1}$$

where
$$W_{t+1} = 1 + \left(\sum_{i=1}^{N} X_i r_i\right)$$
$$\text{Subject to } \sum_{i=1}^{N} X_i = 1$$

In this study, investors' utility functions were described by power function, negative exponential function, and logarithmic function. Power utility function has been assumed by economists to represent the decreasing absolute risk aversion (DARA), the behavior that is believed to express the most natural behavior of investors (Arrow, 1965; Bell 1995; Campbell, 1980). Let $U(W)$ be the utility of wealth (W) . The power utility function was written as

$$U(W) = \frac{W^{1-\gamma}}{1-\gamma}, \gamma \neq 1 \tag{2}$$

where γ is the coefficient of relative risk aversion. The value were set to 2, 4, 6, 8, and 10 with 2 indicating the lowest level of relative risk aversion and 10 represented the highest. They were estimated by Markowitz, Reid, and Tew (1994) and Halek and Eisenhauer (2001) and revisited by Kostakis, Panigirtzoglou, and Skiadopoulos (2011) based on the implied probability density function (PDF). These values of relative risk aversion parameters were employed by several literatures in expected utility and were believed to cover sufficient range of behavior. Therefore, let r_i be the return on each assets and X_i be the portfolio weight assigned to each asset. The expected utility maximization problem with power utility function was written as

$$\max E\left[U\left(W_{t+1}\right)\right] = \max \sum_{t=1}^{T} \left[\left[\frac{\left(1 + \left(\sum_{i=1}^{N} X_i r_i\right)^{1-\gamma}\right)}{1-\gamma} \right] \times \frac{1}{263} \right] \tag{3}$$

where $t = 1, 2, 3, \ldots\ldots, T$ and $i = 1, 2, 3, \ldots\ldots, N$

It was also assumed by Stearns (2000) that the investors do demonstrate the behavior of constant relative risk aversion (CRRA). This risk preference is the case when coefficient of relative risk aversion γ takes the value of one. In this special case, utility is assumed to be equal to the natural logarithm of wealth and resides in a broader family of power utility functions (Arrow, 1965; Cremers et al., 2005; Meyer, 2010). The function was expressed by

$$U(W) = \ln(W) \tag{4}$$

And the utility maximization problem with log utility function was described as:

$$\max E\left[U\left(W_{t+1}\right)\right] = \max \sum_{t=1}^{T} \left[\left[\ln\left(1+\left(\sum_{i=1}^{N} X_i r_i\right)\right)\right] \times \frac{1}{263}\right] \tag{5}$$

where $t = 1, 2, 3, \ldots\ldots, T$ and $i = 1, 2, 3, \ldots\ldots, N$

The last utility function assumed in this study was negative exponential. It presents the functional form for a utility function which represents constant absolute risk aversion (CARA) (Arrow, 1965; Daskalaki & Skiadopoulos, 2011; Pratt, 1964; Meyer, 2010). The functional form was written as

$$U(W) = -e^{-\alpha W} \tag{6}$$

where α is a measure of absolute risk aversion and αW is a measure of relative risk aversion. The paper also followed Markowitz et al. (1994) and Kostakis et al. (2011) in setting the coefficient of absolute risk aversion α equal to 2, 4, 6, 8, 10 to indicate the degree of risk aversion from the lowest to the highest, respectively. Thus, the maximization problem of negative exponential utility function was expressed as

$$\max E\left[U\left(W_{t+1}\right)\right] = \max \sum_{t=1}^{T} \left[\left[-e^{-\alpha\left(1+\left(\sum_{i=1}^{N} X_i r_i\right)\right)}\right] \times \frac{1}{263}\right] \tag{7}$$

where $t = 1, 2, 3, \ldots\ldots, T$ and $i = 1, 2, 3, \ldots\ldots, N$

For each optimization problem, the study added one type of commodity investment to the portfolio at a time and switched from one type of commodity to another until it covered the entire eight commodity investments in each of the functions being analyzed.

Portfolio Performance Evaluation

After a construction of optimal portfolios that include commodity, the study estimated optimal portfolios of traditional assets which contain stock, bond, and risk free-asset. This paper avoided the classical performance measurements which based on Capital Asset Pricing Model (CAPM) since they do not take into account the higher moments of the asset returns distribution and can be misleading when returns distributions are non-normal (Bernado & Ledoit, 2000; Getmansky, Lo, & Makarov, 2004; Goetzman, Ingersoll, Spiegel, & Welch, 2005; Leland, 2002; Lo, 2002). The focus was on percentage changes in maximum expected utility when commodities were added to the optimal portfolios. It was expected that when commodities were added to the portfolio, the expected utility associated with portfolio returns should increase to represent greater happiness of investors.

This paper also examined an optimization premium required by an investor whose portfolios do not include commodities. The Theory of Opportunity Cost was developed by Simann (1993) as a tool to assess an economic significance of differences in performance of two optimal portfolios based on the concept of expected utility (Tew, Reid, Witt, 1991; Daskalaki & Spkiadopoulos, 2011). The Opportunity Cost Theory suggested that when one portfolio is superior to another in term of expected utility, the superior portfolio is referred to as optimal and another is referred to as suboptimal. Since the paper examined whether an investor is better off with portfolio that include commodity, the optimization premium here was defined as the premium required by an investor whose portfolio contains only traditional assets in order to bring his welfare to the level achieved by an investor whose portfolio includes commodities. Let R_{nc} be the return of the portfolio of traditional asset (no commodity) and R_{wc} be the return of the portfolio that includes commodity. To reach a welfare or expected utility level identical to the one achieved by portfolio that includes commodity, the investor who has no commodity in his asset universe should require an optimization premium, π, such that

$$E\left[U\left(1+R_{nc}+\pi\right)\right]=E\left[U\left(1+R_{wc}\right)\right] \qquad (8)$$

The optimization premiums was calculated for each utility functions. Positive optimization premium would imply that when investors hold portfolio of traditional assets, they are holding suboptimal portfolio offering less expected utility and they will require certain amount of premium to equate their expected utility to the level achieved by optimal portfolio that include particular commodity investment.

4. Results

This research paper applied the Theory of Expected Utility into portfolio estimation with an intuition that utility is a measure of happiness or satisfaction. Unlike the more popular method of mean-variance approximation, utility maximization problem considers individual risk preference and satisfaction as criteria in decision making. The approach allows researcher to search for the optimal portfolios that are tailored to serve individual's need of investment and offered a unique mean to consider all moments of asset return distributions.

Full Scale Optimization

The results of portfolio optimization problems are exhibited in Table 1. The table reports the proportion of optimal portfolio when each commodity investment is available. The optimal portfolios are shown for investors with different utility functions and various degrees of risk aversion. Panel A shows that, for the whole sample period of study, when the two commodity indices were available for investment, investors with power utility function who maximize their expected utility did not include them in the optimal portfolios. Futures contracts on commodities were more attractive than commodity index as there were larger proportions of optimal portfolios assigned to commodity.When investors could invest in commodity futures contracts, especially futures contract on goldlight and sweet crude oil, the futures contracts represented a certain proportion of their optimal portfolios. Physical gold represented as much as 28 percent of the portfolio when it was available for investment. The proportions of investment in the commodity decreased as the degree of relative risk aversion increased from 2 to 10.

Table 1: Optimal Portfolio Proportion

Panel A: 1991-2012

1991-2012		Optimal Portfolio Proportion										
		Power					Log	Negative Exponential				
		RRA						ARA				
		2	4	6	8	10		2	4	6	8	10
DJUBS	Stock	0.26	0.16	0.12	0.11	0.1	0.46	0.26	0.16	0.12	0.11	0.1
	Bond	0.74	0.84	0.88	0.89	0.9	0.54	0.74	0.84	0.88	0.89	0.9
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	DJUBS	0	0	0	0	0	0	0	0	0	0	0
SPGSCI	Stock	0.26	0.16	0.12	0.11	0.1	0.46	0.26	0.16	0.12	0.11	0.1
	Bond	0.74	0.84	0.88	0.89	0.9	0.54	0.74	0.84	0.88	0.89	0.9
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	SPGSCI	0	0	0	0	0	0	0	0	0	0	0
Crude oil	Stock	0.15	0.1	0.08	0.08	0.07	0.25	0.15	0.1	0.08	0.08	0.07
	Bond	0.6	0.77	0.83	0.85	0.87	0.27	0.6	0.77	0.83	0.85	0.87
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Crude oil	0.25	0.13	0.09	0.07	0.06	0.48	0.25	0.13	0.09	0.07	0.06
Gold	Stock	0.24	0.15	0.12	0.1	0.09	0.4	0.25	0.15	0.12	0.1	0.09
	Bond	0.44	0.68	0.76	0.81	0.83	0	0.43	0.68	0.76	0.81	0.83
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Gold	0.32	0.17	0.12	0.09	0.08	0.6	0.32	0.17	0.12	0.09	0.08
Copper	Stock	0.13	0.08	0.07	0.06	0.06	0.22	0.13	0.08	0.07	0.06	0.06
	Bond	0.7	0.82	0.86	0.88	0.89	0.46	0.7	0.82	0.86	0.88	0.89
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Copper	0.17	0.1	0.07	0.06	0.05	0.32	0.17	0.1	0.07	0.06	0.05
Corn	Stock	0.21	0.13	0.1	0.09	0.09	0.35	0.21	0.13	0.1	0.09	0.09
	Bond	0.68	0.81	0.86	0.88	0.89	0.42	0.68	0.81	0.86	0.88	0.89
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Corn	0.11	0.06	0.04	0.03	0.02	0.23	0.11	0.06	0.04	0.03	0.02
Live cattle	Stock	0.26	0.16	0.12	0.11	0.1	0.46	0.26	0.16	0.12	0.11	0.1
	Bond	0.74	0.84	0.88	0.89	0.9	0.54	0.74	0.84	0.88	0.89	0.9
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Live cattle	0	0	0	0	0	0	0	0	0	0	0
Gold fix	Stock	0.25	0.15	0.12	0.1	0.09	0.45	0.25	0.15	0.12	0.1	0.09
	Bond	0.47	0.7	0.77	0.81	0.83	0.01	0.47	0.7	0.77	0.81	0.83
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Gold	0.28	0.15	0.11	0.09	0.08	0.54	0.28	0.15	0.11	0.09	0.08

Investors with logarithmic utility function invested a larger proportion of their portfolio in commodities than investors with power utility function. When commodity futures were available as an alternative investment, futures contract on gold represented as much as 60 percent of the portfolio and futures contract on sweet crude oil accounted for 48 percent of the portfolio. When investors with logarithmic utility function could invest in physical gold, gold represented almost half of the optimal portfolio. For investors with negative exponential utility function, the proportions of investment in commodities were mostly similar to those of investors with power utility function. There were certain proportions of investment in futures contract on gold and light sweet crude oil, as well as physical gold investment.

Panel B: 2002-2008

2002-2008		Optimal Portfolio Proportion										
		Power					Log	Negative Exponential				
		RRA						ARA				
		2	4	6	8	10		2	4	6	8	10
DJUBS	Stock	0	0	0	0	0	0	0	0	0	0	0
	Bond	0.61	0.79	0.85	0.88	0.9	0.26	0.61	0.79	0.85	0.88	0.9
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	DJUBS	0.39	0.21	0.15	0.12	0.1	0.74	0.39	0.21	0.15	0.12	0.1
SPGSCI	Stock	0	0	0	0	0	0	0	0	0	0	0
	Bond	0.78	0.87	0.91	0.92	0.94	0.59	0.78	0.87	0.91	0.92	0.94
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	SPGSCI	0.22	0.13	0.09	0.08	0.06	0.41	0.22	0.13	0.09	0.08	0.06
Crude oil	Stock	0	0	0	0	0	0	0	0	0	0	0
	Bond	0.5	0.74	0.82	0.86	0.88	0.04	0.49	0.73	0.82	0.86	0.88
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Crude oil	0.5	0.26	0.18	0.14	0.12	0.96	0.51	0.27	0.18	0.14	0.12
Gold	Stock	0	0	0	0	0	0	0	0	0	0	0
	Bond	0.01	0.01	0.35	0.52	0.63	0.01	0.01	0.01	0.34	0.52	0.62
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Gold	0.99	0.99	0.65	0.48	0.37	0.99	0.99	0.99	0.66	0.48	0.38
Copper	Stock	0	0	0	0	0	0	0	0	0	0	0
	Bond	0.51	0.74	0.82	0.86	0.89	0.05	0.5	0.74	0.82	0.86	0.89
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Copper	0.49	0.26	0.18	0.14	0.11	0.95	0.5	0.26	0.18	0.14	0.11
Corn	Stock	0	0	0	0	0	0	0	0	0	0	0
	Bond	0.54	0.77	0.85	0.89	0.91	0.09	0.54	0.77	0.85	0.89	0.91
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Corn	0.46	0.23	0.15	0.11	0.09	0.91	0.46	0.23	0.15	0.11	0.09
Live cattle	Stock	0	0	0	0	0	0	0	0	0	0	0
	Bond	0.99	0.97	0.95	0.94	0.94	0.99	0.99	0.96	0.95	0.94	0.94
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Live Cattle	0.01	0.03	0.05	0.06	0.06	0.01	0.01	0.04	0.05	0.06	0.06
Gold fix	Stock	0	0	0	0	0	0	0	0	0	0	0
	Bond	0.01	0.02	0.35	0.52	0.62	0.01	0.01	0.01	0.35	0.52	0.62
	T-bill	0	0	0	0	0	0	0	0	0	0	0
	Gold	0.99	0.98	0.65	0.48	0.38	0.99	0.99	0.99	0.65	0.48	0.38

However, the attractiveness of commodity investment was particularly remarkable between 2002 and 2008. Table 1 Panel B shows that the optimal portfolios estimated from sub-sample data included significant proportion of commodities. The proportions were much larger when compared to optimal portfolio constructed using the whole sample period data. All types of commodities in this study are chosen as alternative investments. Equity investments decreased during 2002-2008 and the assets were diverted to the expanding index-linked commodity products as well as precious metal. Between 2002 and 2008, the two commodity indices, DJ-UBSCI and S&P-GSCI, represented 39 percent and 22 percent of the portfolio, respectively, at the lowest degree of relative risk aversion for investor with power utility function. At the highest degree of relative risk aversion, they still accounted for 6-10 percent of the optimal portfolios. DJ-UBSCI can be more attractive than S&P-GSCI to investor because it has no concentration in any commodity sector. The value of DJ-UBSCI is computed according to the economic significance and market liquidity while the value of S&P-GSCI is calculated from the weighted price of world commodity and influenced by high-priced energy sectors. The futures contracts on commodity were also very attractive. Their proportions in the optimal portfolios during 2002-2008 were substantially larger than during 1991-2012. When futures contracts on gold and physical gold were available for investment, they represented as much as 99 percent of the optimal portfolios at the lowest degree of relative risk aversion.

Investors with logarithmic utility function invested significant proportion of their portfolio in commodity in the sub-sample analysis. As with the investors whose behaviors were described by power utility function, investors with logarithmic utility function invested almost their entire portfolio in gold or gold futures when they were available. These results confirm attractiveness of physical gold and gold futures among rational investors whose goals are to maximize their expected utility. For rational investors whose preferences were represented by negative exponential utility functions, the investors with lowest degree of risk aversion had largest proportion of their portfolio invested in commodities. Largest investments were made in gold futures, physical gold, and light sweet crude oil.

The larger investment in commodities between January 2002 and December 2008 than during the time between January 1991 and 2012 can be explained by the expansion of commodity market and the rise in U.S. inflation. The period between 2002 and 2008 was the time when commodity market was rapidly expanding together with the rise in inflation. As it is well accepted that commodity prices are component of inflation, it is possible that investors who anticipate negative inflationary pressure in financial markets will switch their investment from traditional assets such as stock and bond to commodities to preserve their wealth in the meantime.

Portfolio Performance Evaluation

The performances of optimal portfolio were evaluated based on percentage change in portfolio's expected utility and the optimization premium investors would require if they cannot invest in commodities. Table 2 shows the percentage changes in maximum expected utility. At the lowest degree of risk aversion, the expected utility increased when commodity futures were selected as a portfolio component. The futures contract on light sweet crude oil offered the highest maximum expected utility when added to the optimal portfolios followed by futures contract on gold and physical gold. In panel A, an inclusion of futures contract on light sweet crude oil to the portfolio drove the expected utility up by 8.35 percent for the whole sample period of the study. Physical gold investment increased expected utility by 2.8 percent while futures contract on gold and copper raised the expected utility by approximately 2.3-2.4 percent. An investment in commodity index have not raised the expected utility of the portfolios since when they were available for investments, the rational investors did not include them in the optimal portfolios.As the degree of relative risk aversion increased, rational investors invested less in commodity and the expected utility derived from optimal portfolios that include commodities gradually returned to the expected utility derived from optimal portfolio of traditional assets.

During the sub-sample period between 2002 and 2008, the inclusion of commodities to the portfolio significantly raised expected utility. As mentioned earlier, during this period of rising inflation, investors in stock market were looking for a safe place to keep their wealth. The prosperity of commodity market at the same moment unquestionably accommodated their transfer of assets as a hedge against inflation. Therefore, expected utility rose remarkably when the commodities were added to the portfolios. An inclusion of futures contracts on gold and physical gold investment into the portfolioinduced largest changes in expected utility. The two commodity indices, DJ-UBSCI and S&P-GSCI, also raised portfolio's expected utility. Changes in expected utility were particularly large for investors whose preference were described by logarithmic utility function when commodities were added to the portfolio because the logarithmic utility function itself is the preference description of investors with power utility function when the degree of relative risk aversion equal to one. This is the preference of an investor with lowest degree of relative risk aversion.

The expected utility increased most when futures contract on gold and physical gold were added to the optimal portfolios.

When investor's preference was described by negative exponential utility function, the rise in expected utility when commodities were added to the portfolio were less than those exhibited when investor's preference was described by power and logarithmic utility functions. However, the largest increase in expected utility occurred when futures contracts on gold and physical gold were added to the portfolio. The smaller changes in expected utility exhibited for negative exponential utility function can be explained by the strong risk aversion behavior displayed by investors since the negative exponential utility function was chosen to describe constant absolute risk aversion (CARA) behavior, where the dollar amount of investment is constant as individual wealth is increasing.

Table 2: Percentage Change in Expected Utility

Panel A: 1991-2012

1991-2012		Change in Expected Utility							
		DJUBS	SPGSCI	Crude oil	Gold	Copper	Corn	Live cattle	Gold fix
Power	RRA=2	0.000000%	0.000000%	8.347662%	2.312815%	2.374096%	0.000000%	0.000000%	2.792715%
	RRA=4	0.000000%	0.000000%	0.038786%	0.016598%	0.014515%	0.006130%	0.000000%	0.013524%
	RRA=6	0.000000%	0.000000%	0.023964%	0.010046%	0.009855%	0.003426%	0.000000%	0.008701%
	RRA=8	0.000000%	0.000000%	0.018434%	0.007593%	0.008201%	0.002407%	0.000000%	0.006926%
	RRA=10	0.000000%	0.000000%	0.015565%	-0.073367%	0.007346%	0.001803%	0.000000%	0.005998%
Log		0.000000%	0.000000%	28.341329%	11.564934%	8.395927%	5.529636%	0.000000%	9.117676%
Negative exp.	ARA=2	0.000000%	0.000000%	0.014446%	0.006373%	0.004847%	0.002542%	0.000000%	0.004864%
	ARA=4	0.000000%	0.000000%	0.000288%	0.000121%	0.000119%	0.000041%	0.000000%	0.000105%
	ARA=6	0.000000%	0.000000%	0.000043%	0.000018%	0.000019%	0.000006%	0.000000%	0.000016%
	ARA=8	0.000000%	0.000000%	0.000006%	0.000003%	-0.000092%	0.000001%	0.000000%	0.000002%
	ARA=10	0.000000%	0.000000%	0.001943%	0.000834%	0.000732%	0.000307%	0.000000%	0.000681%

Panel B: 2002-2008

2002-2008		Change in Expected Utility							
		DJUBS	SPGSCI	Crude oil	Gold	Copper	Corn	Live cattle	Gold fix
Power	RRA=2	10.215642%	6.996323%	56.688488%	165.234181%	49.882419%	35.510594%	0.488740%	163.265196%
	RRA=4	0.042732%	0.031125%	0.212478%	0.741927%	0.187093%	0.122451%	0.004331%	0.735007%
	RRA=6	0.027722%	0.021106%	0.126895%	0.397980%	0.111810%	0.067626%	0.005507%	0.398195%
	RRA=8	0.021997%	0.017224%	0.094483%	0.268408%	0.083221%	0.046602%	0.007159%	0.271263%
	RRA=10	0.018801%	0.015086%	0.076836%	0.199350%	0.067654%	0.035151%	0.008954%	0.203535%
Log		17.771102%	11.656350%	105.215638%	190.334788%	92.775747%	69.384302%	0.455964%	187.747059%
Negative exp.	ARA=2	0.014870%	0.010156%	0.082461%	0.238664%	0.072578%	0.051074%	0.000706%	0.236007%
	ARA=4	0.002156%	0.001569%	0.010681%	0.037420%	0.009432%	0.006114%	0.000217%	0.037151%
	ARA=6	0.000335%	0.000255%	0.001527%	0.004795%	0.001351%	0.000810%	0.000066%	0.004806%
	ARA=8	0.000051%	0.000040%	0.000219%	0.000623%	0.000194%	0.000108%	0.000017%	0.000601%
	ARA=10	0.000008%	0.000006%	0.000031%	0.000081%	-0.000054%	0.000014%	0.000004%	0.000083%

Table 3 shows the optimization premiums required by an investor who holds portfolio of traditional assets for the whole sample period and the sub-sample analysis. For investors whose preference were described by power utility function at the lowest degree of risk aversion, if they were holding traditional portfolio, they required a premium of 0.09 percent to increase their expected utility to the level achieved by investors who were holding optimal portfolios that include futures contract on light sweet crude oil. This is because the welfare or the expected utility of the investors was higher when portfolios included futures contract on light sweet crude oil. At the same level of risk aversion, investors who hold portfolio of traditional assets required approximately 0.04 and 0.03 percent to equate their utility to the level achieved by investors who hold portfolio that include futures contract on gold and physical gold investment respectively. As the degree of risk aversion rose, changes in expected utility became smaller when commodities were added to the portfolio. Thus, the highly risk-averse investors who hold portfolio of traditional asset required less optimization premium because they did not want to invest in commodities and their expected utilities were closer to the utility achieved by those of investors who hold commodities.

The table clearly shows that for investors with logarithmic utility function, an investor was better off with investment in futures contract on light sweet crude oil because an investor who holds traditional portfolio required the large premium of 0.16 percent to increase their expected utility to the level achieved by an investor who holds portfolio that includes futures contract on light sweet crude oil. For the whole sample analysis, investors did not include commodity index in their portfolio. Therefore, investors who hold portfolio of traditional asset required nothing to compensate them for not investing in commodity indices.

Table 3: Optimization Premium

Panel A: 1991-2012

1991-2012		Optimization Premium							
		DJUBS	**SPGSCI**	**Crude oil**	**Gold**	**Copper**	**Corn**	**Live cattle**	**Gold fix**
Power	**RRA=2**	0.000000%	0.000000%	0.087514%	0.037529%	0.026263%	0.015892%	0.000000%	0.027667%
	RRA=4	0.000000%	0.000000%	0.045288%	0.019986%	0.015172%	0.008455%	0.000000%	0.014458%
	RRA=6	0.000000%	0.000000%	0.031474%	0.014662%	0.011091%	0.005636%	0.000000%	0.011177%
	RRA=8	0.000000%	0.000000%	0.024567%	0.010212%	0.008946%	0.003835%	0.000000%	0.008361%
	RRA=10	0.000000%	0.000000%	0.020721%	0.008990%	0.007586%	0.002818%	0.000000%	0.007345%
Log		0.000000%	0.000000%	0.168120%	0.068603%	0.049804%	0.032802%	0.000000%	0.054086%
Negative exp.	**ARA=2**	0.000000%	0.000000%	0.087514%	0.038313%	0.026263%	0.015892%	0.000000%	0.027667%
	ARA=4	0.000000%	0.000000%	0.045288%	0.019986%	0.015172%	0.008455%	0.000000%	0.014458%
	ARA=6	0.000000%	0.000000%	0.031474%	0.014662%	0.011091%	0.005636%	0.000000%	0.011177%
	ARA=8	0.000000%	0.000000%	0.024567%	0.010212%	0.008946%	0.003835%	0.000000%	0.008361%
	ARA=10	0.000000%	0.000000%	0.020721%	0.008990%	0.007586%	0.002818%	0.000000%	0.007345%

Panel B: 2002-2008

2002-2008		Optimization Premium							
		DJUBS	**SPGSCI**	**Crude oil**	**Gold**	**Copper**	**Corn**	**Live cattle**	**Gold fix**
Power	**RRA=2**	0.083407%	0.054139%	0.492767%	1.027401%	0.431816%	0.330281%	0.002031%	1.011535%
	RRA=4	0.046155%	0.033093%	0.257532%	1.027401%	0.230391%	0.166487%	0.000704%	1.001344%
	RRA=6	0.033738%	0.023740%	0.179120%	0.675482%	0.160331%	0.109516%	-0.000623%	0.665064%
	RRA=8	0.027529%	0.021401%	0.139914%	0.499522%	0.125300%	0.081030%	-0.001287%	0.491829%
	RRA=10	0.023390%	0.016724%	0.120312%	0.385665%	0.099028%	0.066787%	-0.001287%	0.389926%
Log		0.155843%	0.098569%	0.943634%	1.027401%	0.834665%	0.650746%	0.002031%	1.011535%
Negative exp.	**ARA=2**	0.083407%	0.054139%	0.502569%	1.027401%	0.440574%	0.330281%	0.002031%	1.011535%
	ARA=4	0.046155%	0.033093%	0.267333%	1.027401%	0.230391%	0.166487%	0.000040%	1.011535%
	ARA=6	0.033738%	0.023740%	0.179120%	0.675482%	0.160331%	0.109516%	-0.000623%	0.665064%
	ARA=8	0.027529%	0.021401%	0.139914%	0.499522%	0.125300%	0.081030%	-0.001287%	0.491829%
	ARA=10	0.023390%	0.016724%	0.120312%	0.396016%	0.099028%	0.066787%	-0.001287%	0.389926%

During 2002-2008, investors were more willing to invest in commodities during the sub-sample period. They needed to be compensated if they could not invest in commodity. They required largest optimization premium when they compared their traditional portfolios with the portfolios that include futures contract on gold and physical gold investment. Investors with low degree of risk aversion required larger premium. The positive optimization premium suggested that investors had a desire for investment in commodities. The frustration of investors with lower degree of risk aversion was higher when they could not invest in the commodity market.

5. Conclusion

Commodity investments have become one of the most popular assets among investors since 2000s because they offer reliable diversification against downturns in stock markets and exhibiting low correlation with traditional assets. This study expanded the boundary of research in commodity investment by examining the attractiveness and benefits of commodities when portfolios are estimated with an objective to maximize investors' expected utility. Optimal portfolios with and without commodities were constructed. They were compared to see how addition of commodities to the portfolio can improve portfolio performance.

It was found that an investment in futures contract on gold, physical gold investment and futures contract on light sweet crude oil are very attractive as alternative investments. These three types of commodity instruments represented largest proportion of the optimal portfolios when they were available for investment. The investment in commodity decreased as the degree of risk aversion increased. Investors with low degree of risk aversion invested a larger proportion of their portfolio in commodities and when investors added commodities into their optimal portfolios their expected utility increased. Thus, the expected utility gained from commodity investment was highest for investors with lowest degree of risk aversion. This is contrary to the findings of Anson (1999) which show larger investment in commodities as degree of risk aversion increases. The futures contracts on light sweet crude oil allowed the greatest positive changes in expected utility when being added to the optimal portfolios followed by futures contract on gold and an investment in physical gold.

The analysis for sub-sample period between 2002 and 2008 supports the prior studies where the investments in commodities are very attractive during the inflationary period (Greer, 2000; Fuertes, Miffre, & Rallis, 2010; Jensen, Johnson, & Mercer, 2002, 2003). Our results show that, during the sub-sample period, risk-averse investors included larger proportions of commodities in their optimal portfolios. During 2002-2008, all commodity investments included in this study represented significant proportion of the optimal portfolios. Futures contract on gold and physical gold investment represented as much as 99 percent of the optimal portfolio when they were available for investment and they offered greatest percentage of rise in expected utility. These results lend support to the benefits of physical gold and futures contract on gold as suggested by Jaffe (1989), Hillier, Draper, and Faff (2006), Hoang (2011), and Daskalaki and Skiadopoulos (2011).

The analysis of optimization premium supports the superiority of portfolios that include commodity during inflationary period. For the whole sample study, investors required only small amount of premium to compensate them when commodities are not part of their optimal portfolios. Investors with higher degree of risk aversion were less willing to invest in commodities. Thus, they required less optimization premium to compensate them for not investing in commodities. Larger amount of optimization premium required by investors during the sub-sample period time implies that investors were happier to invest in commodities during inflationary period. Between 2002 and 2008, investors who hold traditional portfolio required large optimization premium to bring his welfare up to the level achieved by investors who include commodities into their optimal portfolio.

This research has explored the benefits of commodity investment in a new perspective and has offered a multidisciplinary implication to both academic and financial industry.

Future research can put forward the study of commodity investment in several dimensions. The study can be extended to include the recently launched alternative commodity products or to apply new performance measurement in order support the benefits of commodities found in this study. Finally, further research can consider expected utility of commodity inclusive portfolio in dynamic or tactical asset allocation as well as other alternative portfolio setting.

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Learning Organization Factors Affecting the Quality of Learners in Schools under Chanthaburi Primary Educational Services, Area Office 1

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Abstract

The objectives of this research were to study the relationship between learning organization factors affecting the quality of learners in schools under Chanthaburi Primary Educational Services (Area Office 1) and to develop a multiple regression model to predict the quality of learners in such schools. The research instrument was the 5-scale questionnaire with its reliability of .918. The sample consisted of 452 school directors, heads of academic affairs, heads of education quality assurance, and heads of personnel affairs in schools under Chanthaburi Primary Educational Services (Area Office 1). The sample was chosen by using simple random sampling. The results of this research showed that learning organization factors were related with the quality of learners in schools under Chanthaburi Primary Educational Services (Area Office 1). Two factors that could predict learning organization factors affecting the quality of learners were Knowledge and Technology. Both factors had impact on the quality of learners at statistically significance levels of .05 and .01, respectively.

Keywords: Quality of Learner, Learning Organization, Chanthaburi Primary Educational Services (Area Office 1)

1. Introduction

The development and progress of the nation relies on talented people. Therefore, the personal development precedes the national development. This can be achieved through education. Education is the key mechanism and procedure for training and educating people to possess knowledge, capability, intelligence, good health, and readiness to efficiently stay in the rapidly dynamic world (KlinSathongnian, 2000).

The Ministry of Education has announced a policy of educational reforms with the ultimate aims of maximizing the public's self-development potential, to provide the public better quality of life, and to further develop the country. The aim of educational reform is to create learning persons, learning organizations, and a learning society and the reforms are directed at four operational approaches, including: schools and educational institutions reform, teacher and educational personnel reform, curriculum and instruction process reform, and educational administration reform.These reflect the drive and need for changes in educational management at the national level to comply with globalization and the world's knowledge society where knowledge and intelligence is used as a key tool to strengthen potential and international competitiveness (Office ofthe National Education Commission, 2001).

A learning organization is the new concept that is applied to the management of a human resource development oriented organization. Such an organization tends to provide knowledge and capability to human resources in order to cope with changes over time. Personnel within an organization need to have knowledge, ability and expertise. It is important for personnel to have self-development, to enhance their knowledge and skills through lifelong learning. Basic educational institutions need to place an emphasis on learning organization by managing institutions according to the approach of a learning organization. Wirot Sanrattan (2001) stated that among all types of organizations, an educational institution should become a learning organization because it is an organization related to instruction and learning. The most important goal of an educational institution is to provide education to students by relying on the approach of a learning organization so that educational institutions achieve quality.

Chanthaburi Primary Educational Services (Area Office 1) is an educational organization focusing on developing efficient organizational potential and learner’s physical, emotional, social, and intellectual health so that a learner can achieve good citizenship according to the National Education Act B.E. 2542 (1999) and amendments to The Second National Education Act B.E. 2545 (2002)) This study was interested in the learning organization factors affecting the quality of learners in schools under Chanthaburi Primary Educational Services (Area Office 1) and hopes that the results of this research will provide beneficial information and empirical evidence to support educational reforms in Thailand and to further develop educational organizations. Objectives for this research were to study the relationship between learning organization factors affecting the quality of learners in schools under Chanthaburi Primary Educational Services and to develop multiple regression models to predict the quality of learners in schools under Chanthaburi Primary Educational Services.

2. Hypotheses

Learning organization factors can predict the quality of learners in schools under Chanthaburi Primary Educational Services (Area Office 1)

3. Theory/ Conceptual Framework

The theory of Learning Organization (Marquardt, &Reynolds, 1994; Marquardt, 1996) states that an organization has an atmosphere that encourages learning process of individuals and group through a process of thinking, criticizing and understanding what will happen. A way of learning within an organization involves dynamics depending on learning, management, and knowledge use as a key to success, coupled with the use of modern technology. The system of learning organizations consists of five major sub systems: 1) Learning, which is characterized by Learning Dynamics, 2) Organization, which focuses on Organization Transformation, 3) People, which implies People Empowerment, 4) Knowledge, which means Knowledge Management, and 5) Technology, which is Technology Application. Information technology is applied to knowledge management and organizational learning for all levels of members and involving people.

The conceptual model of this research is shown in the diagram below.

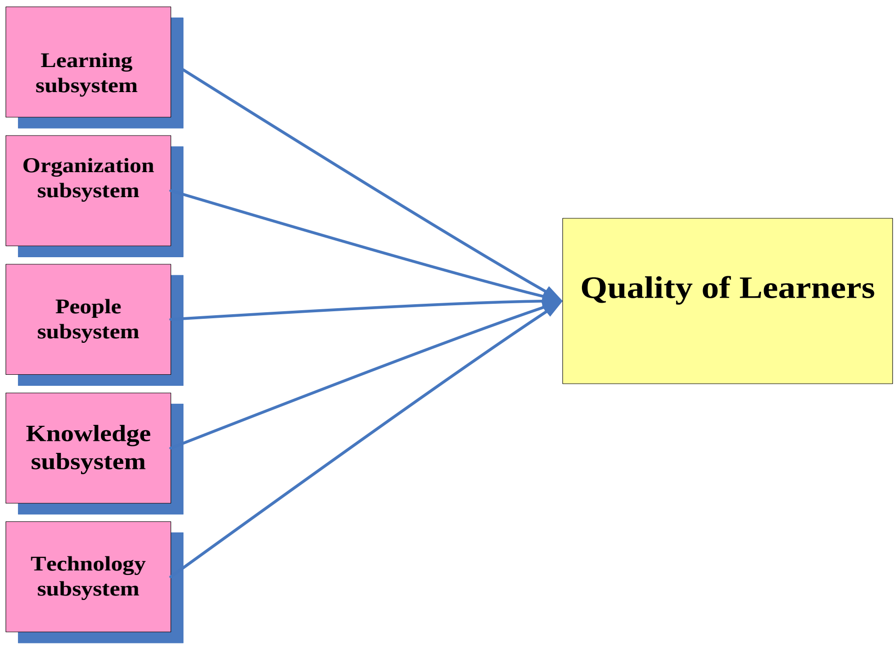

Figure 1 Conceptual framework model

4. Methodology and Sample

The population of this research consisted of 1,076 school directors and teachers in schools under Chanthaburi Primary Educational Services (Area Office 1).

The sample of this research consisted of 452 school directors, heads of academic affairs, heads of education quality assurance, and heads of personnel affairs in schools under Chanthaburi Primary Educational Services (Area Office 1). The sample was obtained by simple random sampling.

5. Instruments

This research used the questionnaire developed by the researchers as the research instrument to collect data. The self-administered questionnaire was developed based on related documents and researches and consisted of three parts as follows.

Part 1 Demographic characteristics

Part 2 Learning organization level. According to Marguardt and Reynolds (1994) and Marquardt (1996), a learning organization consists of five subsystems: 1) Learning subsystem, 2) Organization subsystem, 3) People subsystem, 4) Knowledge subsystem, and 5) Technology subsystem. The 41-item questionnaire used in this study utilized a 5 rating scale based on Likert's concept: highest (5), high (4), moderate (3), low (2), and lowest (1) levels.

Part 3 Educational institution's success on quality of learners. This part consists of six criteria: 1) Learner has well-being and aesthetics, 2) Learner has moral and desirable value, 3) learner has self-learning skills, eagerness for learning and self-development, 4) Learner has systematic, creative, rational thinking skills, 5) Learner has necessary knowledge and skills required by the curriculum, and 6) Learner has working skills, teamwork skills and good attitudes towards honest profession. The 26-item questionnaire used a 5 rating scale based on Likert's concept: highest, high, moderate, low, and lowest levels of learner quality, and had a reliability of .918.

6. Methods of Data Analysis

1. Quantitative data collected from the research questionnaire was analyzed by SPSS (Statistical Package for the Social Sciences) using percentage, means, and standard deviation.
2. The conceptual framework model of learning organization in schools under Chanthaburi Primary Educational Services Area (Office 1) developed by the researcher was discussed and commented by five specialists in terms of its appropriateness for actual practices. Descriptive statistics was used for data analysis; SPSS for relational analysis; and Mplus (Muthén, & Muthén, 2012) for validity of the model.

7. Data Collection

Data were collected from the sample schools. The researchers collected the questionnaires from the schools and then checked and eliminated incomplete questionnaires. Finally, 430 copies of completed questionnaires were obtained from a total of 452 copies, accounting for a response rate of 95%.

8. Results

1. The relationship between learning organization factors affecting the quality of learners in schools under Chanthaburi Primary Educational Services (Area Office 1) shown in Table 1as follows:

Table 1 The relationship between learning organization factors affecting the quality of learners in schools under Chanthaburi Primary Educational Services (Area Office 1)

	$Y_{QUALITY}$	$X_{1\ Leaning}$	$X_{2\ Organization}$	$X_{3\ People}$	$X_{4\ Knowledge}$	$X_{5Technology}$
$Y_{QUALITY}$	1.000					
$X_{1\ Leaning}$	.368**	1.000				
$X_{2Organization}$	.479**	.379**	1.000			
$X_{3\ People}$	.581**	.448**	.480**	1.000		
$X_{4\ Knowledge}$	.482**	.524**	.335**	.430**	1.000	
$X_{5Technology}$	.544**	.345*	.668**	.561**	.253**	1.000

Note: * represents p=<0.05; ** represents p=<0.01

According to Table 1, the results indicated that independent variables (learning organization factors) were related to quality of learners in the schools examined.

2. The results showed learning organization factors affecting quality of learners in the schools examined.

2.1 The results of learning organization factors affecting quality of learners in sample schools were shown in Table 2 as follows.

Table 2 Multiple regression analysis of learning organization factors affecting quality of learners in the schools examined.

Sources of variance	**SS**	***df***	**MS**	**F**	**Sig**
Regression	32.30	5	6.46	57.45**	.001
Residual	47.68	424	.11		
Total	79.99	429			

Note: * represents p=<0.05; ** represents p=<0.01

According to Table 2, learning organization factors affecting quality of learners in the sample schools had linear relationship with criterion variable at statistical significance level of .05. Linear prediction equation could be developed. Multiple regression analysis calculated multiple correlation coefficients

Table 3 Multiple regression analysis of learning organization factors affecting quality of learners in schools examined.

Variable	**B**	**SE**	**t**	**Sig**
Constant	1.942	.128	15.172	.000
Leaning	.064	.065	0.985	.332
Organization	.059	.073	0.808	.417
People	.097	.064	1.516	.126
Knowledge	.144	.058	2.483	.014
Technology	.162	.038	4.263	.000

$R = 0.636$ Adjusted R Square $= 0.397$

$R^2 = 0.404$ SE $= 0.335$

$\chi^2 = 0$, $df = 1$, $p = 1.000$, $\chi^2 / df = 0$, CFI = 1.000, TLI = 1.003, RMSEA =0.000, SRMR = 0.000

According to Table 3, independent variables that could predict learning organization factors affecting quality of learners were Knowledge subsystem and Technology subsystem. Both factors had an impacto on the quality of learners at statistical significance level of $p<0.05$ and $p<0.001$, respectively with the coefficient of determination (R Square) = 0.404 (total 40.40 percent).

3. Knowledge subsystem and Technology subsystem were positively related to quality of learners at statistical significance level of $p<0.05$ and $p<0.001$, respectively and could be used to develop prediction equation. Multiple correlation coefficient and weight of predictor variables were calculated in score form. The obtained multiple regression model is below.

$$\hat{Y}_{QUALITY} = 1.942 + .144^{*} X_4 + .162^{**} X_5$$

According to the multiple regression model, as X_4 increases by one unit, the value of y increases by .144 units. The raw score will be equal to 1.942. Alternatively, as Knowledge subsystem increases by one unit, the value of $\hat{Y}_{QUALITY}$ increases by 0.144 units. As Technology subsystem increases by one unit, the value of $\hat{Y}_{QUALITY}$ increases by .162 units

4. Approaches to the development of learning organization affecting quality of learners include as follows.

4.1 Building concrete learning activities to the school members thoroughly. The school administrators hold workshops to analyze operational problems. The Teachers offer a variety of choices.

4.2 Enhancing the knowledge and learning potential to members. Alternatively this is a process that teachers learn in seeking knowledge.

4.3 Building the discipline of knowledge sharing conversation exchange within an organization. This includes conversation to exchange knowledge and attitudes. Personnel naturally absorb knowledge and values of their friends.

4.4 Making development plans to develop the organizational members. The school should make a development plan as a master plan for assigning the responsibility to each teacher who plans to do self-development.

4.5 Preparing the self-development budget to member for the annual budget.
4.6 Building learning skills of the team.
4.7 Reinforcing the practice of systematic thinking to members.
4.9 Encouraging members to admit and learn the different ideas, culture and universality.
4:10 Holding meetings of future plans to create a learning vision to an organization.
4.11 Promoting the school as a learning organization and teachers' learning as top priority.
4:12 Building a cooperative atmosphere of continuous learning.
4:13 Building a team that can do self-management.
4:14 Reinforcing members to learn and create new things.
4:15 Creating a balance between the needs of learning and development of both individuals and organizations.
4.16 Promoting and providing opportunities to clients to participate in the school's learning
4:17 Creating an expectation that all members have the responsibility to collect and pass on the knowledge to the organizational members.
5.18 Building strategy, way of thinking and learning to the members.

5:19 Creating management system through knowledge, values of need for learning for the entire personnel.
5.20 Promoting knowledge gathering and storage system.
5.21 Encouraging all members to use the electronic networks.
5.22 Building learning centers by using multimedia and other advanced technologies.
5:23 Sourcing and developing learning technology to each member of the team.
5:24 Building awareness and appreciation of technology that has the potential to create a network of learning.
5.25 Promoting the use of technology in department and human resources management.

Discussions

Independent variables that could predict learning organization factors affecting the quality of learners were Knowledge subsystem and Technology subsystem. Both factors had impact on the quality of learners at statistical significance level of $p<0.05$ and $p<0.01$ respectively, with the coefficient of determination (R Square) = 0.404 (total 40.40 percent). Knowledge subsystem and Technology subsystem were positively related to quality of learners at statistical significance level of $p<0.05$ and and $p<0.01$ could be used to develop prediction equation. Multiple correlation coefficient and weight of predictor variables were calculated in score form. The obtained multiple regression model is below.

$$\hat{Y}_{QUALITY} = 1.942 + .144^{*}\, X_4 + .162^{**} X_5$$

According to the multiple regression model, as X_4 increases by one unit, the value of y increases by .144 units. The raw score will be equal to 1.942. Alternatively, as Knowledge subsystem increases by one unit, the value of $\hat{Y}_{QUALITY}$ increases by .144 units. As Technology subsystem increases by one unit, the value of $\hat{Y}_{QUALITY}$ increases by .162 units. This was consistent with Wirot Sanrattana and Anchali Sanrattana (2000) findings on management factors and learning organization in primary schools under the Office of the National Primary Education Commission, Education Region 9. The results of Wirot Sanrattana and Anchali Sanrattana (2000) study showed that 10 management factors including: 1) Development of professional organization, 2) creative motivation, 3) culture and climate of creative organization, 4) curriculum and instruction management, 5) human resources development, 6) development of self-management and communication, 7) Transformational leadership, 8) change and innovation management, 9) development of school effectiveness, and 10) shared decision and vision. Moreover, all 10 factors were highly and positively correlated. All factors together could predict 46.30% of the variation in learning organizations. Three factors affecting learning organization at statistically significance were: development of school effectiveness, curriculum and instruction management, and development of self-management and communication. Moreover, this was consistent with the work of Buntham Boranmun (2005) studying factors affecting learning organization in municipal schools under KhonKaen Municipality, KhonKaen Province. The findings showed that factors predicting learning organization included management practice, academic leadership, team and team management. The next section describes suggestions for future studies about learning organization.

Suggestions for Future Research

1 .Suggestions for future research

1.1 Future research should investigate other work factors affecting learning organization.

1.2 Causal factors influencing the change to learning organization should be studied in future research.

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Does CSR Branding Matter to Young Consumers in Thailand? The Mediation Effect of Product Brand Attitudes

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Abstract

This study investigates the relationship between CSR branding and product brand attitudes, and the mediation effect of product brand attitudes on the relationship of CSR branding and purchase intention. The research was conducted on the 220 young Thai consumers asking about a single well-known product. The statistical analysis used for hypothesis testing was multiple regression with mediation testing included. The finding suggests that only employee concern and financial fairness dimensions of CSR branding influenced both utilitarian and hedonic product brand attitudes, while there is no evidence shown for environmental awareness and community commitment dimension. In the light of product brand attitudes, the research found its role is fully mediating the relationship of CSR branding and purchase intention.

Keywords: CSR Branding, Product Brand Attitudes, Purchase Intention, Stakeholder Theory, Theory of Planned Behavior

1. Introduction

While the concept of corporate social responsibility (CSR) is continue debating among academia about its definition, different perspectives (economic vs. altruistic), similarity of terminologies (e.g., corporate social performance, corporate social responsiveness, and corporate citizenship), and its effects on various firm performances (financial performance, firm's market value, and behavior intention) (de Bakker, Groenewegen, & den Hond, 2005; Godfrey & Hatch, 2007; Lantos, 2001; Luo & Bhattacharya, 2006; Margolis & Walsh, 2003), practitioners in various disciplines continue to incorporate its concept and activities to gain competitive advantage (McCormick, 2012; O'Riordan & Fairbrass, 2014). The most common use of the CSR approach is for impression management, that is, the company attempts to incorporate CSR approach as a symbolic representation to influence the perceptions of stakeholder on the company. Thus, the information about CSR activities can be seen as a complement to the firm performance, particularly financial performance (Sandberg & Holmlund, 2015). Basu & Palazzo (2008) emphasizes that CSR should not be employed solely for impression management, but on the other hand, a company should implement authentic practice of CSR by embedding its activities in the organization's daily operations. The difference between impression management and authentic intention of CSR is the way in which an organization presents its actual identity. Hatch and Schultz (1997) explains that it is harmful for an organization to misalign its image (how others view an organization) with its actual identity (organizational culture) because eventually when any groups of stakeholder found out, the organization will lose its credential as in the classic case of Enron which involved in financial fraud (Basu

&Palazzo, 2008; Laufer, 2003). Enron was named by the Fortune as "America's Most Innovative Company" until it was exposed by the end of 2001 for hiding its financial obstacles and was filed bankrupted in the end (Laufer, 2003). A more recent case of VW, German Carmaker Company, involved in a scandal of the U.S. emission test by installing cheat devices in 11 million diesel cars by the end of 2015. This incident caused the former CEO of VW to resign in order to show his responsibility (Hotten, 2015). Enron and VW are good examples of how a company can present itself differently than what it actually is. In other words, disseminating about CSR merely to enhance stakeholder impression or image but not truly practicing or implementing throughout the company's operations may cause company to face business failure. Thus, it is important to differentiate those organizations who practice CSR in authentic manner—i.e., those that truly practice CSR as the organization's actual identity—from those that merely use CSR approach for window dressing.

Amongst marketing academia, the concept of CSR has been investigated for its effect on various marketing outcomes such as firm's market value, product evaluation, reputation, and behavior intention (Berens, van Riel, & van Bruggen, 2005; Luo & Bhattacharya, 2006; Wang, 2011). Although, the CSR studies in this manner are not new and were conducted widely, yet the studies were largely done in Western context (Alexander, 2009; Du, Bhattacharya, & Sen, 2010). Srisuphaolarn (2013) points out that CSR activities are implemented differently for each countries based on factors such as national policy, regulation, and economic development stage. As for less developing countries, it was found that the research tends to be delayed compared to the developed countries as well as less relevancy to company strategies (Jamali, 2014).

With the Western influence through an increase of FDI, entrance of MNEs, and international trade (imported brands), large corporations in Thailand has started to incorporate the CSR practice into their operations (Srisuphaolarn, 2013). Nevertheless, only specific activities of CSR are highlighted in Thailand including activities relating to community engagement (e.g., in-kind and in-cash donations, community volunteer) and environmental protection (e.g., recycling, carbon footprint reduction) (Chappel & Moon, 2005; Srisuphaolarn, 2013). The concept of CSR is not so new for Thai corporation, in fact, it has been promoted by the Stock Exchange of Thailand (SET) since 1995 issued under a Code of Conduct for corporate governance (Srisuphaolarn, 2013). By the year 2007, the concept of CSR has become well-known and commonly practiced by a number of Thai companies. In this regard, the shifting of CSR activities has moved from simply making donations to higher involvement by the companies. Total Access Communication (DTAC)—a major mobile phone service provider in Thailand—is a good example of a company who engages in CSR initiatives aiming to improve living standard and environments (Srisuphaolarn, 2013). With an extensive research on CSR practice in Thailand, its interpretation and how companies disclose CSR information are largely highlighted (Kraisornsuthasinee & Swierczek, 2006; Srisuphaolarn, 2013). However, as the practice of CSR has increasingly become important for strategic management planning and how it positively influences the company's performances in Thailand (Wattanasupachoke, 2012), the effect of CSR on the consumer response is called for investigation. Although extant studies has examined the effect of CSR on consumer responses in Western context (Sen & Bhattacharya, 2001; Wang, 2011), the particular study seems to be limited in Thailand. Thus, it is interesting to investigate Thai consumer's reaction in terms of product brand attitudes and behavior intention in order to understand how Thai consumers associate CSR information to their consumer behavior. In specific, young consumers (i.e., Generation Y, who was born between the years 1980-2000) were targeted for this research as they significantly contribute to the area of marketing and specifically their responses on social cause were found to be positive (Cui, Trent, Sullivan, & Matiru, 2003).

In sum, the aim of this research is to evaluate how strategic CSR—the embeddedness of CSR activities throughout company's daily operations, also referred to as CSR branding in this study—influences young Thai consumer attitude and behavior intention of young consumers in Thailand (Suprawan & de Bussy, 2011). Thus, this paper identifies two main research objectives including (1) to investigate the relationship between CSR branding and product brand attitudes of the young Thai consumers; and (2) to investigate the mediation effect of product brand attitudes on the relationship of CSR branding and purchase intention.

2. Literature Review

The concept of CSR has been introduced since 1950's by Howard R. Bowanwho is considered the father of CSR (Carroll, 1979). The concept of CSR has been discussed thereafter under different terminologies such as social responsibility (Frederick, 1960), public responsibility (Preston & Post, 1975), corporate social responsiveness (Frederick, 1994; Wartick & Cochran, 1985), and corporate social performance (Wood, 1991; Wood & Jones, 1995). During this time, the most prominent of CSR definition was proposed by Carroll (1979, pp., 500) as "the social responsibility of business that encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time." Besides, the different terminologies of CSR, there different perspectives that set the tone including economic, socio-political, and managerial perspectives (Suprawan & de Bussy, 2011). While the perspectives of economic (self-interest of the firm) and socio-political (altruistic activities to the society) are contradicted to one another, a strategic or managerial CSR seems to compromise between both perspectives (Lantos, 2001). The strategic CSR allows a firm to extend its activities beyond narrow self-interest by including broader stakeholder intereststogether with a strategic focus in its operations (Lantos, 2001; McWilliams & Siegel, 2001). In this regard, many organizations interpret the concept of CSR in the strategic manner, similarly to the academia in this area who adopted the strategic approach in order to create differentiation in enhancing its business performance of the firm (Basu & Palazzo, 2008; Lee, 2008; Vaaland, Heide, & Grønhaug, 2008; Windsor, 2001).

By conceptualising the concept of CSR in the strategic approach, operational definition of CSR adopted in this research is referred to as "actions that appear to further some social good, beyond the interest of the firm and that which is required by law…going beyond obeying the law." In other words, an organization engages in additional activities which might not be required as normal business operations to become a part of the society. However, in the business world, society can be translated in a wider range of stakeholder groups including those affected by the organization and those that can influence the outcomes of the organization. (Backhaus, Stone, & Heiner, 2002; Berman, Wicks, Kotha, & Jones, 1999; Freeman, 1984; Jones, 1995). Through the concepts of strategic CSR and stakeholder theory, Suprawan and de Bussy (2011) developed CSR branding scale aiming to investigate the embeddedness of CSR activities to firm's daily operations. The scale was categorized into four dimensions including emplyee concern (e.g., promise to achieve work/life balance for employees), environmental awareness (e.g., focus on reducing energy consumption), community commitment (e.g., focus on making donations in kind to the local community) and financial fairness (e.g., promise to pay suppliers a fair price in all cases). By incorporate stakeholder group into the consideration, it is suggested by an instrumental stakeholder theory which explains that the "connections between certain practices and certain end states" (Jones, 1995, pp., 406). This indicates that a firm employing strategic CSR in their operations can expect desired corporate outcomes (e.g., financial performance, behaviour intention). Accordingly, a number of research has been conducted to examine the effect of CSR on firm performance,with more emphasis on firm's financial outcomes (e.g., Abbott & Monsen, 1979; Aupperle, Carroll, & Hatfield, 1985; Cochran & Wood, 1984; Griffin & Mahon, 1997; Hull & Rothenberg, 2008; McWilliams & Siegel, 2000, 2001; Waddock & Graves, 1997). However, mixed results of the relationship between CSR and financial performance were found (Margolis & Walsh, 2003).

While the relationship between CSR and financial performance is inconclusive, there are various firm performances that were investigated as the effects of CSR including organizational identification, firm's market values, behavioral intention (Luo & Bhattacharya, 2006; Sen & Bhattacharya, 2001; Wang, 2011). Creyer and Ross (1997) explain that in making the decision about a product or brand, customers often use reference point such as ethical behavior or social responsible actions of the firm as the criteria. In other words, if customers acknowledge that a company is acting in an unethical manners, they might decide to discontinue their supports for the company's products or brands. On the other hand, if the consumer's reference point is evaluated as favorable, consumers will reward the firm with the willingness to buy the products or even pay the premium price. Moreover, Wang (2011) suggests that once consumers assign positive information on CSR, it will also enhance the positive attitude evaluation of the firm. In the same line-of-reasoning, if consumers reveal the strategic CSR of the firm to be positive, it is more than likely that a positive attitude towards product brand will occur. Another study by Sen and Bhattacharya (2001) also supports that there is a positive relationship between CSR and company-customer (C-C) congruence—consumer attitudes toward a company. Thus, this research proposes that CSR branding affects the consumer attitudes towards product/brand—the tendency for consumer to respond with some degree of favorableness and unfavorableness to buying behavior intention (Chung, 2015). Consumer attitudes can be conceptualized in two-dimensional construct, i.e. hedonic and utilitarian dimensions. Whilst hedonic dimension of consumer attitudes can be explained as the result of sensational experience consumers derived from products/brand association, utilitarian dimension as the second dimension of consumer attitude is derived from the performance of product's functions (Voss, Spangenberg, & Grohmann, 2003). This research proposed that a strong CSR branding leads to a greater degree of consumer attitude towards a product/brand; thus, the following hypotheses are formulated and research conceptual model is illustrated in Figure 1:

H1a: At least one of the CSR branding dimensions will influence utilitarian product brand attitudes

H1b: At least one of the CSR branding dimensions will influence hedonic product brand attitudes

The relationship between consumer attitudes and purchase intention has been extensively investigated in various research in which its relationship is supported by the theory of planned behavior (TPB) (Ajzen, 1991; Ajzen & Madden, 1986; Creyer, 1997; Hartmann & Apaolaza-Ibáñez, 2012). The TPB explains the individual's intention to perform certain behavior. Although intention is not one of the same with behavior, but the greater degree of intention can predict the likelihood of performing a behavior (Ajzen, 1991; Creyer, 1997). One of the key antecedents to predict behavior intention is consumer attitudes which measures the belief about an object by associating it with a certain outcome (Ajzen, 1991). In other words, the higher degree of consumer attitudes toward a product or brand, the higher degree of behavior intention is predicted. While the TPB explains the relationship between consumer attitudes and purchase intention, prior research of Sen and Bhattacharya (2001) suggested that CSR information can predict the degree of purchase intention. With the missing link between CSR branding and consumer attitudes towards product/brand, this research propositions that CSR branding will predict purchase intention when the mediation effect of consumer attitudes is in place. Thus, the following hypotheses are proposed and research conceptual model is illustrated in Figure 1.

H2: The relationship between CSR branding and purchase intention will be mediated by the degree of product brand attitudes

To summarize all the proposed hypotheses investigated in this study, Figure 1 illustrates the research conceptual model accordingly. The theoretical underpinning these relationships are explained in the previous section.

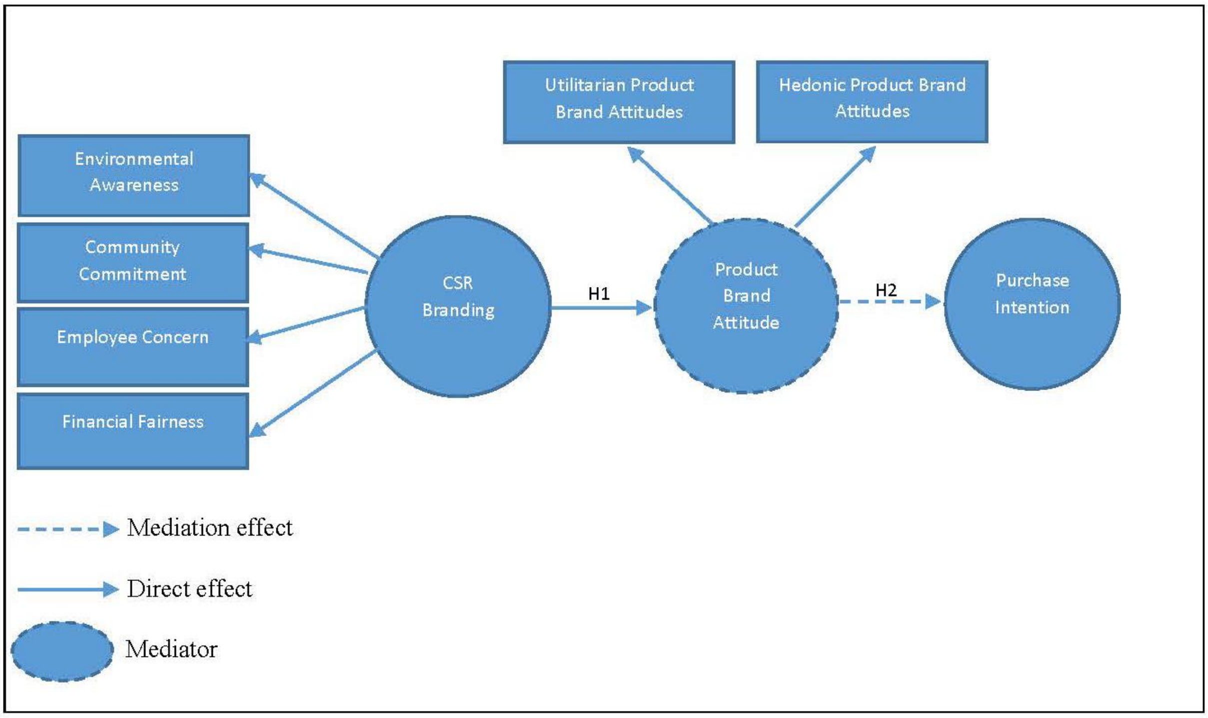

Figure 1: Research Conceptual Model

3. Research Methodology

In order to examine the proposed hypotheses, closed-ended and scale type questionnaires were distributed to college students at a private university in Thailand. The questionnaires were asked about a well-known mobile phone brand merely to associate respondents with a particular brand in mind (Wang, 2011), with no intention to examine mobile phone industry in specific. Convenience sampling technique was employed and questionnaires. The research measurements used in this research were established scales including CSR branding, product brand attitudes, and purchase intention. In terms of CSR branding scale, embeddedness of CSR incorporated in the firm's daily operations were investigated; composed of four dimensions including employee concern, environmental awareness, community commitment, and financial fairness (Suprawan & de Bussy, 2011). Another established scale used in this study is product brand attitudes which composed of two dimensions including utilitarian (the attitudes toward the performance of the product's function) and hedonic (the sensational experience of the consumers) (Voss et al., 2003). Finally, an established scale of purchase intention was employed asking about the willingness of consumer to purchase the products (Schlosser, White, & Lloyd, 2006). The Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree) were employed for each of the question in the questionnaire. The measurements used in this research are as illustrated in Table 1 with acceptable Cronbach's alpha coefficient of .70 indicating these scales are reliable to be repeated (Nunnally & Bernstein, 1994):

Table 1: Measurements and Their Cronbach's Alphas

Variable	Number of Items	Cronbach's Alpha Coefficient (α)
CSR Branding (Suprawan & de Bussy, 2011)		
Environmental Awareness	5	0.914
Community Commitment	4	0.860
Employee Concern	4	0.873
Financial Fairness	4	0.723
Product Brand Attitudes (Voss et al., 2003)		
Utilitarian	5	0.950
Hedonic	5	0.950
Purchase Intention (Schlosser et al., 2006)	3	0.910

Once the questionnaires were distributed to college students, 220 questionnaires were returned. The data were analyze using a number of statistical tools include reliability test, Pearson's correlation coefficient, and multiple regression. The hypothesized relationships were tested using multiple regression, specifically method for mediation effect testing was employed. Prior to hypothesis testing, a reliability analysis was performed for each of the dependent and independent variables as illustrated in Table 2.

Table 2: Reliability Analysis

Construct	Dimension	Cronbach's Alpha Coefficient (α)
CSR Branding	Community Commitment	0.833
	Employee Concern	0.765
	Environmental Awareness	0.848
	Financial Fairness	0.804
Product Brand Attitudes	Hedonic	0.901
	Utilitarian	0.877
Purchase Intention		0.919

Accordingly, Cronbach alpha coefficient for all scales exceeded 0.80 which indicate excellent reliability, except the dimension of employee concern which obtain Cronbach alpha coefficient of above 0.70 which still considered to be acceptable according to Nunnally and Bernstein (1994), illustrated in Table 2.

Research Findings

According to demographic characteristics of the respondents, 64.5% of young Thai consumers aged between 18-34 years olds are female, with majority of the of respondents aged between 18-24 years old (98.2%). With the 220 respondents, only 6.8% of them are non-users of the well-known mobile phone brand. Out of those users, 55.3% of them owned on the average of 2-3 well-known mobile phones and 51.1% of the users still currently own on average of 2-3 products.

Table 3: Pearson's Correlation Coefficient

	Environmental Aware	Community Commit	Employee Concern	Financial Fairness	Utilitarian Attitude	Hedonic Attitude	Purchase Intention
Environ-mental Aware	1	.840**	.706**	.800**	.325**	.315**	.214**
Community Commit	.840**	1	.691**	.823**	.352**	.351**	.255**
Employee Concern	.706**	.691**	1	.727**	.433**	.404**	.308**
Financial Fairness	.800**	.823**	.727**	1	.433**	.426**	.311**
Utilitarian Attitude	.325**	.352**	.433**	.433**	1	.881**	.764**
Hedonic Attitude	.315**	.351**	.404**	.426**	.881**	1	.735**
Purchase Intention	.214**	.255**	.308**	.311**	.764**	.735**	1

Prior to the hypothesis testing, the Pearson correlation coefficient was performed to examine for multicollinearity. It found that there was no multicolinearity between any of the predictors (R>0.9) (Field, 2005), as illustrates in Table 3. It also found that there are were a number of variables that are correlated significantly at r >0.8, p< 0.05, but multicollinearity is not problematic as a supplement of Tolerance and VIF were tested in the following sections.

Table 4: The Relationship Between CSR Branding and Utilitarian Product Attitudes

R	**R^2**	**Adj. R^2**	**Std. Error**		
0.475	*0.225*	*0.211*	*0.833*		
Construct	B	SE B	ß	**Tolerance**	**VIF**
Environmental Awareness	*-0.159*	*0.124*	*-0.155*	*0.246*	*4.057*
Community Commitment	*-0.010*	*0.122*	*-0.010*	*0.229*	*4.366*
Employee Concern	*0.324*	*0.101*	*0.295***	*0.424*	*2.358*
Financial Fairness	*0.369*	*0.125*	*0.351***	*0.256*	*3.910*

p = .000, F = 15.641

Illustrated in Table 4, the hypothesis testing on a relationship between CSR branding and utilitarian product brand attitude (H1a) was examined using multiple regression. The results show that the four predictors explained 22.5% of the variance and only the dimensions of employee concern (ß = 0.295, p<0.001) and financial fairness (ß = 0.351, p<0.001) of CSR branding significantly influenced on the utilitarian product brand attitudes. In addition, the correlation between the dimensions of CSR branding and utilitarian product brand attitudes were tested with the maximum variance inflation factor (VIF) and Tolerance. Thus, multicollinearity was not a problem as VIF is no greater than 10 and tolerance is greater than 0.2 in any of the dimensions (Hair, Black, Babin, & Anderson, 2010). Therefore, hypothesis H1a was accepted.

Table 5: The Relationship Between CSR Branding and Hedonic Product Attitudes

R	R^2	Adj. R^2	Std. Error
0.456	0.208	0.193	0.831

Construct	B	SE B	ß	Tolerance	VIF
Environmental Awareness	-0.167	0.123	-0.166	*0.246*	*4.057*
Community Commitment	-0.027	0.121	0.028	*0.229*	*4.366*
Employee Concern	0.259	0.101	0.240**	*0.424*	*2.358*
Financial Fairness	0.375	0.125	0.361**	*0.256*	*3.910*

F = 14.119, p = .000

Similarly as shown in Table 5, the hypothesis testing on a relationship between CSR branding and hedonic product brand attitudes (H1b) was examined. The results showed that the four predictors explained 20.8% of the variance and only the dimensions of employee concern (ß =0.240,*p*<0.001) and financial fairness (ß =0.361,*p*<0.001) of CSR branding significantly influenced on the hedonic product brand attitudes. In addition, the correlation between the dimensions of CSR branding and hedonic product brand attitudes were tested with the maximum variance inflation factor (VIF) and Tolerance. Thus, multicollinearity was not a problem as VIF Tolerance is generally accepted (Hair et al., 2010). Therefore, hypothesis H1b was accepted.

As illustrated in Table 6, the results found that there were significant relationships in steps 1-3 with the level of significant at 0.05, presumably mediation effect exists. In the Step 4 model, it indicated that the relationship between CSR branding and purchase intention is fully mediated by product brand attitudes as CSR branding is no longer significant when product brand attitude is controlled (Baron & Kenny, 1986; Frazier, Tix, & Barron, 2004). Thus, hypothesis H2 was accepted.

Table 6: The Mediator Effects of Product Attitudes

Testing Steps in Mediation Model	B	SE B	95% CI	ß
Testing Step 1:				
Dependent: Purchase Intention				
Predictor: CSR Branding	0.406	0.088	0.232, 0.580	0.298**
Testing Step 2:				
Dependent: Product Attitudes				
Predictor: CSR Branding	0.471	0.067	0.339, 0.603	0.430**
Testing Step 3:				
Dependent: Purchase Intention				
Predictor: Product Attitudes	0.961	0.053	0.856, 1.066	0.773**
Testing Step 4:				
Dependent: Purchase Intention				
Mediator: Product Attitudes	0.983	0.059	0.867, 1.100	0.791**
Predictor: CSR Branding	-0.057	-0.065	-0.185, 0.07	-0.042

4. Discussion

According to the research findings, only employee concern and financial fairness dimensions of CSR branding influenced both utilitarian and hedonic product brand attitudes. Since both of these dimensions involved stakeholder groups—employees, customers, and suppliers—which are extensively important to the firm's performance (Jones, 1995; Sen & Bhattacharya, 2001), its influence will be assigned to both utilitarian (product's functions) and hedonic (sensational experience) dimensions of product brand attitudes of consumers. In addition, the research findings suggest that young Thai consumers will respond to each dimensions of CSR branding differently based on how the dimensions important to them (de Bussy & Suprawan, 2012). In other words, the embeddedness of environmental awareness and community commitment dimensions of CSR branding to the firm's daily operations might not translate into product brand attitudes due to the detachment of this information in the mind of consumers when making purchasing decision.

Although some dimensions of CSR branding might influence on product brand attitudes of consumers, the concern of this research lies on the likelihood of CSR branding effect on purchase intention. Thus, it was found that CSR branding influences purchase intention when product brand attitudes is fully mediated. According to TPB, product brand attitudes relates significantly to purchase intention (Ajzen, 1991). This research contributes to TPB by suggesting that the source of consumer attitudes can come from various aspects particularly the firm's authentic performance of CSR branding. However, by being aware about the firm engagement in CSR branding will not respond immediately to purchase intention, the consumer needs to assign attitudes to the particular product brand. The findings also implies that CSR branding can be strategically implement depending on the outcomes that a firm intend to obtain. For instance, if a firm aims to increase buying behavior, then the focus of employee concern and financial fairness aspects of CSR branding must be highlighted in the implementation procedures.

5. Implication, Limitation and Future Research

The finding of this research contributes to practitioners in which the firm can incorporate the concept of CSR branding in order to enhance positive consumer attitudes about product/brand which lead to purchase intention. However, in the Thai context, specific components of CSR branding should be prioritized, especially for a firm with limited resources. It is important for the manager to realize that the effectiveness of CSR crucially based on authentic/actual involvement in CSR activities in order for consumers to respond positively to such practice.

This research acknowledges the quality of the data which was drawn from student samples which were responded to by a single well-known product brand. Thus, future research should consider broaden the data collection to include different respondents with various demographic characteristics in order to generalize the research findings. Future research should also consider conducting a similar research in different countries to enhance cross-national comparisons, while the extant research suggests diverse effect of CSR initiatives among countries (Maignan & Ralston, 2002). Indeed, research from other regions should increasingly be prioritized as most of the current research conducted in the Western context (Bhattacharya & Sen, 2004; Bhattacharya, Sen, & Korschun, 2008; Sen & Bhattacharya, 2001; Suprawan & de Bussy, 2011).

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Localization of Management Posts in Subsidiaries of Japanese Multinational Corporations in Thailand

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Abstract
This paper aims to provide new empirical evidence on the localization of human resources in the subsidiaries of Japanese Multinational Corporations (MNCs) in Thailand. Data was collected from 24 subsidiaries of Japanese MNCs in Thailand through a questionnaire supplemented by interviews (including telephone and face-to-face interviews) and desk research on publically available information (such as websites, brochures and annual publications). Statistical analysis and qualitative approach were adopted for data analysis. This paper reveals that the localization of human resources in Japanese subsidiaries in Thailand has taken place especially at junior and middle management levels, often on an ad-hoc basis without a long-term guiding strategy. On the other hand, some senior posts were reserved for Japanese managers for the long term because assigning Japanese managers overseas, including Thailand, is part of the human resource management strategy of many Japanese MNCs. This paper contributes to the existing literature by providing new empirical evidence on localization of human resources in the subsidiaries of Japanese MNCs in Thailand. Despite the fact that Japan has been Thailand's largest foreign direct investor since 1980s, studies on a similar topic in the context of Japanese subsidiaries in Thailand have been very limited with only a few notable exceptions.

Keywords: Localization, multinational corporation (MNC), cross-cultural management, expatriate assignment, Thailand, Japan business

1. Introduction

Japan has a long history in investing in Thailand. Some pioneer companies such as Marubeni set up branches in Thailand as early as the 1950s. Japan has remained one of Thailand's premier trading partners since the 1980s (Ichikawa, Cusurmano and Polenske, 1990; Suehiro and Yabushita, 2014). Today, Japan is Thailand's largest foreign direct investor with a total investment value of over US$9 billion by 2013 (Thailand Board of Investment, 2014), covering a range of industries such as automotive, electronics and chemical manufacturing sectors. In 2013, the Japan-Thailand trade value reached over US$63 billion (Thailand Board of Investment, 2014). Japanese investment in Thailand will certainly continue to be active in the future. A recent report from the United Nations (2014) revealed that Japanese investment in manufacturing in Thailand had risen significantly during the past few years and was likely to continue to drive up FDI to the country.

Such active investment yields a large number of Japanese companies in Thailand, which are often the overseas subsidiaries of parent Multinational Corporations (MNCs) in Japan. Among other matters, the MNCs have to decide the human resource strategies for their overseas companies. Traditionally, Japanese MNCs have often adopted a strategy to dispatch a large number of Japanese expatriates to fill their overseas managerial positions (e.g., Kopp, 1994; Oddou et al, 2001). On the other hand, some Japanese MNCs also implement strategies called 'localization' (Petison and Johri, 2008a) which in simple terms refers to filling some senior management posts, which had traditionally been occupied by Japanese managers, with local hires.

This paper aims to investigate the latest developments in staff localization in the selected subsidiaries of Japanese MNCs in Thailand and examines the main reasons for expatriate assignments, the key motives for staff localization, as well as the most important measures for retaining and developing local managers. In so doing, the paper will provide managerial insights on how to better manage staff localization in Thailand.

The topic on localization has been widely studied in other countries such as China (e.g., Bjorkman and Lu, 1999; Wong and Law, 1999; Fryxell, Butler and Choi, 2004; Kuhlmann and Hutchings, 2010), Papua New Guinea (e.g., Bhanugopan and Fish, 2007) and Singapore (e.g., Tait, De Cieri and McNulty, 2014). However, studies on a similar topic in the context of Japanese subsidiaries in Thailand have been very limited with a few notable exceptions such as Johri and Petison (2008), and Petison and Johri (2008a; 2008b).

2. Literature review

2.1 Localization of human resources in Japanese subsidiaries in Thailand

Existing studies directly relevant to the topic are very scant with the following notable exceptions.Petison and Johri (2008a and 2008b) and Johri and Petison (2008), using the same case study and interview methodology, examined the staffing arrangements in four Japanese automobile manufacturers: Toyota Motor (Thailand); Hino Motors (Thailand); Honda Automobile (Thailand) and Isuzu Motors (Thailand) and three international companies in Thailand: BMW (Thailand), DaimlerChrysler (Thailand), and Auto Alliance (Thailand). Johri and Petison (2008) revealed that the companies under study implemented a wide range of localization strategies to achieve multiple benefits and identified nine areas of localization: localization of strategic decision making, building and exploiting the local knowledge pool; deployment of local human resources; localization of R&D; localization of products; use of local supplier networks; adaptations to manufacturing processes; local deployment of subsidiary profits; and localization of corporate image. Petison and Johri (2008a) identified four drivers for automobile manufacturers to adopt localization strategies: host country characteristics, industry characteristics, company characteristics, and market characteristics.

Petison and Johri (2008b) summarized four types of expatriate roles in the companies under study: commander, conductor, coach, and connector. As a 'Commander', the expatriate monitors and controlsthe behavior of local employees or subordinates. As a 'Conductor', the expatriate is in charge of managing employees to run their assigned tasks effectively and ensure collaboration among all involved parties in performing tasks. As a 'Coach', the expatriate trains and develops local employees' potential, ability, and knowledge; and finally as a 'Connector', the expatriate plays a role in building relationships between involved parties in order to promote good understanding and to create and enhance commitment and long-term relationships between the subsidiary, parent company, local suppliers, and local community.

Although it was not intended to directly address the issue of localization, Jackson (2002) critically reviewed the Japanese management and pointed out that "subsidiaries are more likely to take positive steps to 'Japanize' themselves in South East Asia than in Germany or the United States". Swierczek and Onishi (2003), employed a combination of data collection methods, such as questionnaires and interviews, to review the conflicts between Japanese managers and Thai subordinates in 50 Japanese companies in Thailand and argued that the localization of management could be a solution to such conflicts. Similarly, Sriussadaporn (2006) reported useful findings on cultural conflicts and management issues in 4 Japanese companies in Thailand (together with 4 other international companies) although localization was not discussed in the paper.

2.2 Literature on localization of Japanese MNCs in other countries

The first batch of literature analyzes the general localization strategies and practice of Japanese MNCs vis-à-vis their international counterparts especially from the US and Europe based on survey data (Tung, 1982; Beamish and Inkpen, 1998; Kopp, 1994; Oddou et al, 2001; Pudelko and Harzing, 2010). A common finding of these studies is that Japanese companies were more likely to use parent country nationals in their overseas operations at the senior and middle management levels than the European and US firms. Kopp (2000) pinpointed a 'rice-paper ceiling' phenomenon, meaning that non-Japanese employees have often been excluded from enjoying successful careers and rising to key managerial positions in Japanese companies.

The second batch of literature reviews the key role of Japanese managers in their subsidiaries. Harzing (2001) found that Japanese and German companies regard coordination and control as primary objectives for expatriate assignments, while the MNCs from US and Europe attached importance to other objectives such as position filling and management development. Similarly, Rose and Kumar (2007) found that 'control' seems to be the key function of Japanese managers in Japanese subsidiaries in Malaysia.

Another stream of research has examined the reasons for success and failure of the localization of Japanese MNCs. For instance, Wong (2010), by studying the Japanese MNC Yaohan in Hong Kong, argued that the 'home country effect' is the fundamental reason for the failure to localize management. The 'home country effect'emphasizes and perpetuates the distinction between Japanese and non-Japanese staff in the company's overseas operations, with the former being the 'in-group' and the latter being the 'out-group'.

2.3 Literature on pros and cons of localization

A large body of literature exists on the pros and cons of the localization of MNCs internationally, therefore, it is almost impossible to provide an exhaustive literature review. Nevertheless, apart from the studies mentioned in sections 2.1 and 2.2, a number of other studies on localization in Asian countries such as China (Bjorkman and Lu, 1999; Wong and Law, 1999; Fryxell, Butler and Choi, 2004; Groenewald, 2008; Kuhlmann and Hutchings, 2010),Singapore (e.g., Tait, De Cieri and McNulty, 2014) and Papua New Guinea (e.g., Bhanugopan and Fish, 2007) are also reviewed in this paper in order to summarize the key pros and cons of localization, as summarized in Table 1.

Table 1. Pros and Cons for Expatriate Assignments and Local Hires

Key reasons for expatriate assignments: • Successful implementation and attainment of global business strategies of MNCs (e.g., Kühlmann and Hutchings, 2010) • Easy communications with headquarters (e.g., Bjorkman and Lu, 1999) • Maintaining expatriate positions can promote a global perspective among senior managers (e.g., Wong and Law, 1999) • Expatriates can better control overseas subsidiaries (e.g., Harzing, 2001; Bhanugopan and Fish, 2007)
Potential disadvantages for expatriate assignments: • Expatriates experience a significant rate of failure on international assignments (e.g., Harvey, Novicevic and Speier, 1999). • Dual-career couples can be a serious family problem for the expatriate (e.g, Collings, Scullion and Morley, 2007). • Higher remuneration costs for expatriates compared with local hires (e.g., Bjorkman and Lu, 1999)
Key reasons for local hires: • Total compensation costs will drop after localization (e.g., Fryxell, Butler and Choi, 2004) • Local managers can easily help to build local business networks (e.g., Tait, De Cieri and McNulty, 2014) • Localization can enhance the morale of local employees (e.g., Wong and Law, 1999)
Potential disadvantages for local hires: • Local managers may not be conversant with the MNC values and norms (Kühlmann and Hutchings, 2010) • High turnover rate among local managers (Groenewald, 2008) • Local managerial and technical skills are in short supply (Wong and Law, 1999)

Source: edited by the authors

2.4 Key Findings from Literature Review

The literature review shows that the localization of the subsidiaries of Japanese MNCs in Thailand has received very limited study. It seems that only three articles addressed the issues directly (Petison and Johri, 2008a; 2008b and Johri and Petison, 2008).

In terms of data collection methods in the existing studies, data are mainly collected through questionnaire survey (or mail survey), interview and field visit, or a combination of different data collection methods. In terms of the samples included in the existing studies, most studies cover less than 40 Japanese companies. In a few studies, the samplescover 1 to 4 Japanese companies, together with other international companies.

According to the literature review and under the overarching research objective, the following research questions will be answered in this paper.

1. What is the current status of staffing arrangements in selected subsidiaries of Japanese MNCs in Thailand?
2. What are the key motivations for localization?

3. What are the key reasons for not localizing some posts?
4. What are the key measures for keeping and developing local managers?
5. What issues may the company need to address in order to further enhance localization?

3. Data collection

Data was mainly collected through a survey questionnaire which comprised both close-ended and open-ended questions according to the literature review. A pilot study had been carried out to test and improve clarity of the questions before the questionnaire was sent out.

The initial questionnaires (and the cover letters) were sent to the selected 50 companies by post, Email and fax, with follow-up phone calls. The response was extremely low mainly because the questionnaires could not reach the right people in the company. For example, even though the companies have a unit or persons who were in charge of receiving letters or post, or there was a generic email of the company, no one seemed to know what to do with the questionnaire.

The lesson learnt was that the questionnaire must be sent to the right persons directly. In this regard, the authors tried alternative ways including mobilizing social networks to get contact details of 187 Japanese and Thai managers from 148 major Japanese companies in Thailand. The questionnaires were sent to these people during November 2014-March 2015 and all of them were assured that their response would remain anonymous. Extensive follow up by Email and phone calls were carried out to increase response rate.

In the end, 29 individuals from 24 companies completed the questionnaire during November 2014-March 2015. All participants were senior managers in their companies such as president or vice president, managing director, CEO, HR manager and finance manager from Japanese subsidiaries in Thailand and have in-depth understanding of the topic. The time periods they have worked in the company ranged from 1 to 26 years, with an average time period of 7.3 years. Among the respondents, 11 were female and 18 were male. Such gender imbalance can be explained by the fact that in most companies, senior management posts are filled more by male than female managers.

Follow-up emails, telephone calls or interviews were arranged during the first half of 2015 to verify the data and information and to collect additional insightful information which generally cannot be captured by questionnaire survey. Desk research was also carried out to gather publically available information (such as websites, brochures and annual publications).

The dataset was finally grouped according to the companies rather than individuals, covering 24 Japanese companies in Thailand including 14 major automobile and electronics manufacturing companies and 10 companies from other industries. The time periods for which the companies have operated in Thailand ranged from 3 years (since 2012) to 62 years (since 1953), with an average time period of 27 years. The primary markets of the 11 companies were Thailand, 8 companies re-export products to overseas markets, and the remaining 5 companies' markets were both Thailand and overseas.

4. Research findings

4.1 Current status of localization and the prospects

One-half of the companies surveyed reported that the percentage of Japanese managers relative to the total number of employees has been decreasing over time, while the other 12 companies reported that the percentage has been quite stable over time. It is interesting to note that there is not a single Japanese manager working at a Japanese company in Thailand, although the managing director is not Thai either. The company hires approximately 240 Thai staff.

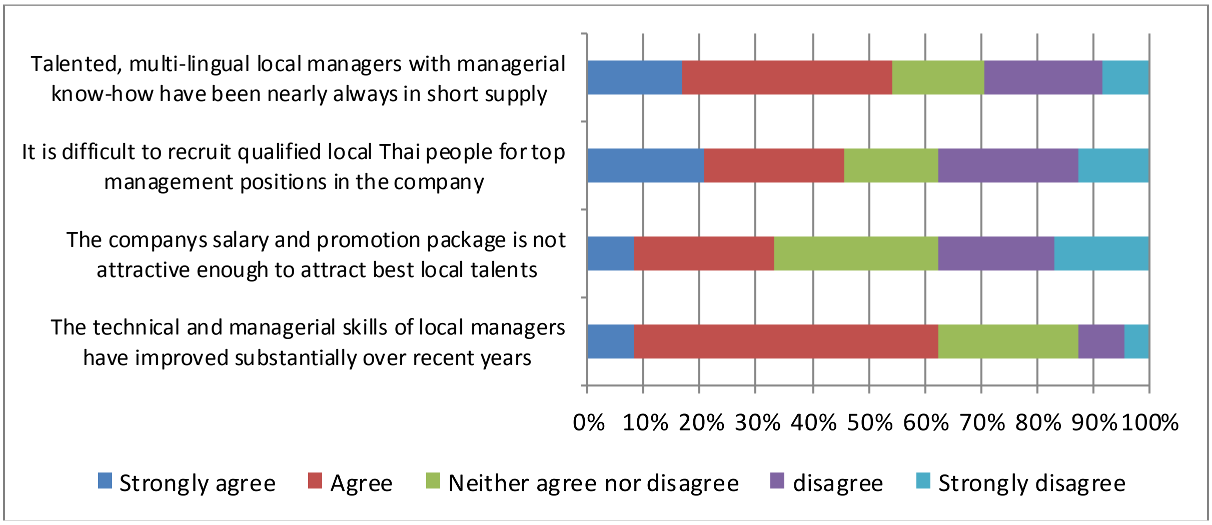
Respondents were asked if they had plans to replace Japanese managers. Eighty percent of the companies asserted that there would be no definite plan or strategy to replace Japanese managers with Thai managers. Among them, 12 companies indicated that localization actually took place in their companies largely on an ad-hoc basis. On the other hand, 20% of the companies indicated that there are some loosely defined policies for localization in their companies. A Japanese manager mentioned during the interview:

'Strictly speaking, we (the company) do not have a stand-alone localization policy, at least I am not aware of it. However, our company HR policy did mention the company places great emphasis on the career development of local talents.'

Respondents were asked which jobs should be reserved for the Japanese employees. Fifty-four percent of companies indicated that at least one senior management job (such as president or vice president, managing director, or country head) should be reserved for a Japanese manager in order to conduct planning and strategy, to ensure effective implementation of the corporation strategy, or to communicate with the headquarters. Three companies indicated that the officer responsible for liaison with the Japanese headquarters – which can be at the vice president or general manager level - should be reserved for a Japanese employee. Three companies indicated that at least one post related to quality assurance and control should be reserved for a Japanese employee. Two companies indicated that marketing and sales posts should be reserved for Japanese staff as some clients of the companies are actually Japanese. The remaining three companies indicated there should be no particular job reserved for Japanese staff.

The study also examined the availability of local talent that can be employed in senior posts. Figure 1 shows that approximately half of the companies surveyed indicated that talented, multi-lingual managers with managerial know-how are nearly always in short supply, and therefore it is difficult to recruit qualified Thai people for the top management positions of the company. On the other hand, approximately 30% of companies either disagreed or strongly disagreed with this statement.

Figure 1. Availability of Local Talent for Management Posts in Japanese Subsidiaries



Source: the authors

Approximately 45% of the companies indicated that it is difficult to recruit qualified Thai people for top management positions in the company, while nearly 40% of the companies disagreed or strongly disagreed with this statement.

Over 30% of the companies surveyed indicated that the company's salary and promotion package is not attractive enough to attract the best local talent. On the other hand, nearly 40% of the companies believed their salary and promotion package is attractive enough to attract the best talent.

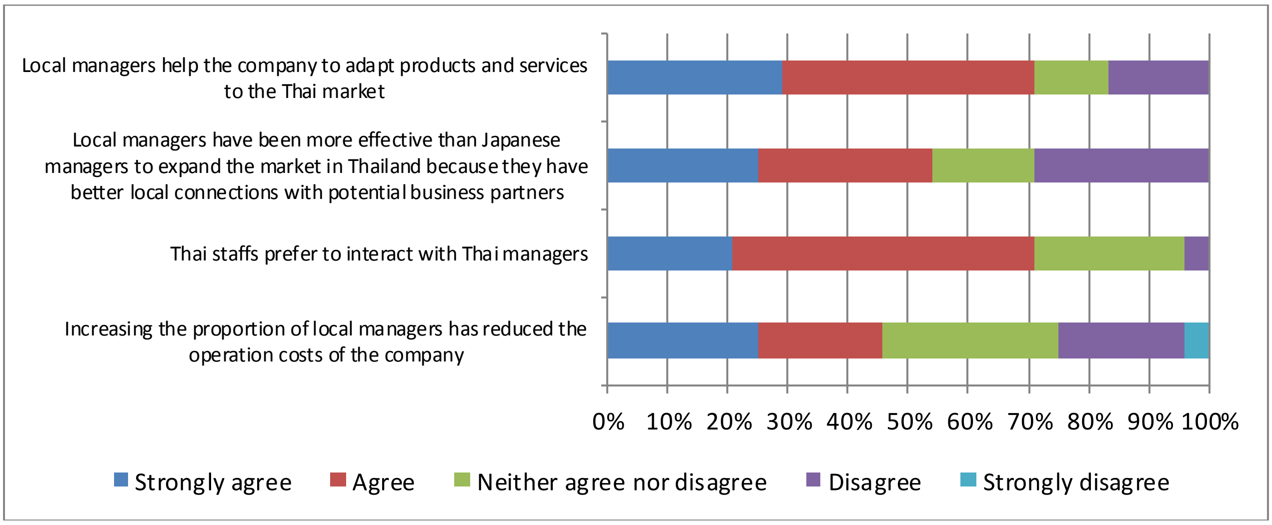
Finally, it seems there is some level of consensus that the technical and managerial skills of local managers have improved substantially over the recent years – which was agreed with by over 60% and disagreed with by slightly over 10% of the companies surveyed.

4.2 Key reasons for localization of management posts

In terms of the benefits of localization, as shown in Figure 2, over 70% of the companies surveyed indicated that local managers help the company to promote products and services to the Thai market, and over 50% of the companies surveyed indicated that local managers have been more effective than Japanese managers to expand the market in Thailand because they have better local connections and potential business partners. Most companies agreed that Thai staff prefer to interact with Thai managers.

Interestingly, only 45% of the companies surveyed indicated that localization reduced the operation costs of the company. Over 20% of the companies stated that localization did not actually reduce the costs. Results from interview revealed that there were other related costs such as the cost of training local managers. There is also an opportunity cost if local managers cannot get the job done.

Figure 2. Potential Benefits from Localization



Source: the authors

The companies were further requested to rank the key reasons for localization. The results from the survey show that primary reason for localization is that local managers can easily build business relationships because they have better connections. 15 out of the 24 companies surveyed ranked this as the most or the second most important reason for localizing some posts.

The second important reason for localization, according to the survey, is that localization is an effective way to boost the morale of Thai managers and therefore to keep local talent in the company. 12 companies ranked this as the important or the second most important factor.

Cultural differences and communication between managers and junior staff are also important factors for localization. Many Japanese managers, to some extent, have marginally adapted to Thai culture, so cultural conflicts still exist in the work place; localization is regarded as a useful solution as Thai managers can easily communicate with Thai subordinates.

Interestingly, to reduce the operation costs does not seem to be the key reason or motive for localization according to the companies surveyed; only 4 out of 24 companies surveyed indicated that cost is the primary reason for localization. Even though companies recognize that one of the benefits of localization is reduced operation cost, they feel payment to Japanese managers is marginal compared with the total operations costs in Thailand and therefore, this factor should not be regarded as a matter for deciding localization strategy.

Results from the survey shows that the high failure rate of expatriates does not seem to be the case for Japanese subsidiaries in Thailand. Not a single company ranked this as one of the important factors for localization. Results from interviews reveal that the common key reason is that Japanese managers are guaranteed to get a job either back at headquarters or at another country office after their assignment in Thailand. Importantly, many Japanese managers also indicated that they and their families actually enjoy living in Thailand because the remuneration packages enable them to live in big apartments and receive excellent medical care. Therefore, they do not feel it difficult to work and live in Thailand.

Information gathered from interviews shed more light on the motivations for localization which do not always appear in the literature. One manager shared his observations:

> '*... certainly, appointing local Thais to senior posts can be very important. Most boards of directors include Thais. This is a genuine value-added by having Thais as senior staff as they can help in making strategic plans. In the meantime, Thai local communities are also concerned about how many senior posts are occupied by Thai managers, which can be an indicator of how the companies are dedicated to Thai society in developing local talent*.'

4.3 Key reasons for not localizing specific posts

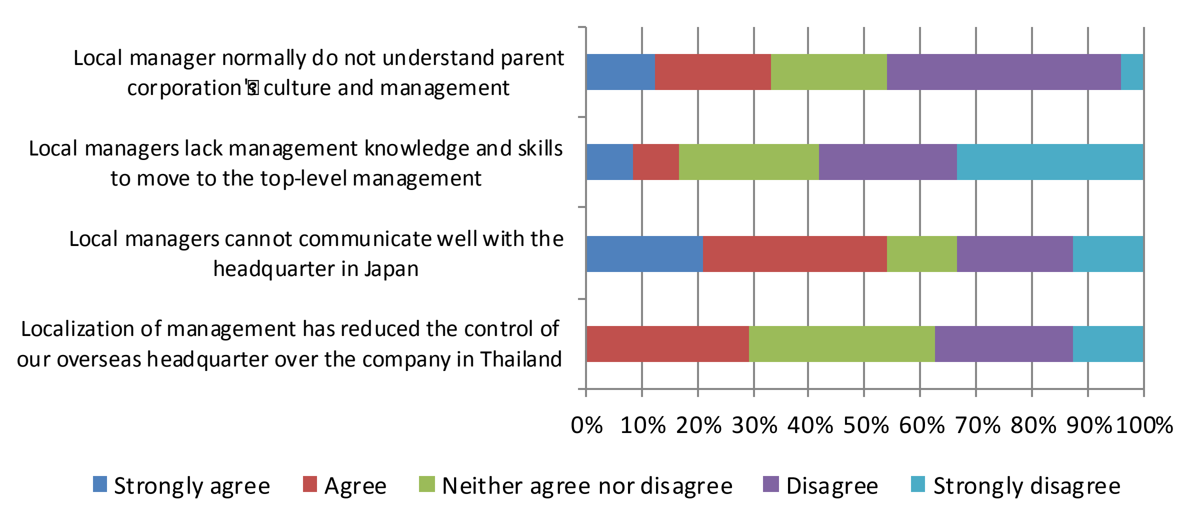
Figure 3 shows the potential reasons for not localizing specific posts. Over 30% of the companies indicated that local managers normally do not understand the parent corporation's culture and management. In contrast, approximately 55% of the companies disagreed with this statement.

Less than 20% of the companies surveyed believe local managers lack the management knowledge or skills to move to the top level of management. On the other hand, almost 60% of the companies disagreed with this statement. Over 50% of the companies surveyed agreed that local managers cannot communicate well with the headquarters in Japan. On the other hand, over 30% of the companies disagreed with this. Finally, nearly 30% of the companies agreed that localization of management has reduced the control of overseas headquarters over the companies, while nearly 40% of the companies disagreed with this statement.

It seems that there are no prevalent reasons for the companies not to hire local managers. When the companies were asked to rank the key reasons for not localizing some posts, 'to assign Japanese managers to Thailand is part of the strategy of the MNCs to enable the managers to have global work experience' was the most frequently mentioned reason; 14

out of 24 companies surveyed ranked this as either the most important or the second most important reason why some posts are reserved for Japanese employees.

Figure 3. Potential Reasons for not Localizing Specific Posts



Source: the authors

An equally important reason is that Japanese MNCs believe Japanese managers can better exert control over the most important posts (such as managing director, financial director). 14 out of 24 companies surveyed ranked this as either the most important or the second most important reason why some posts are reserved for Japanese staff. This finding is consistent with (Kühlmann and Hutchings, 2010) who observed that German and Australian companies in China exert some control over the most important posts by expatriate assignments.

The third important reason for sending Japanese managers is to facilitate communication with the Japanese headquarters. One of the most frequently mentioned reasons is the language barrier. Several managers mentioned that not everyone in Japanese headquarters can speak English; unless the Thai managers speak good Japanese, it is difficult to keep regular communication.

Interview with some Japanese managers yielded additional insights. One Japanese manager commented that

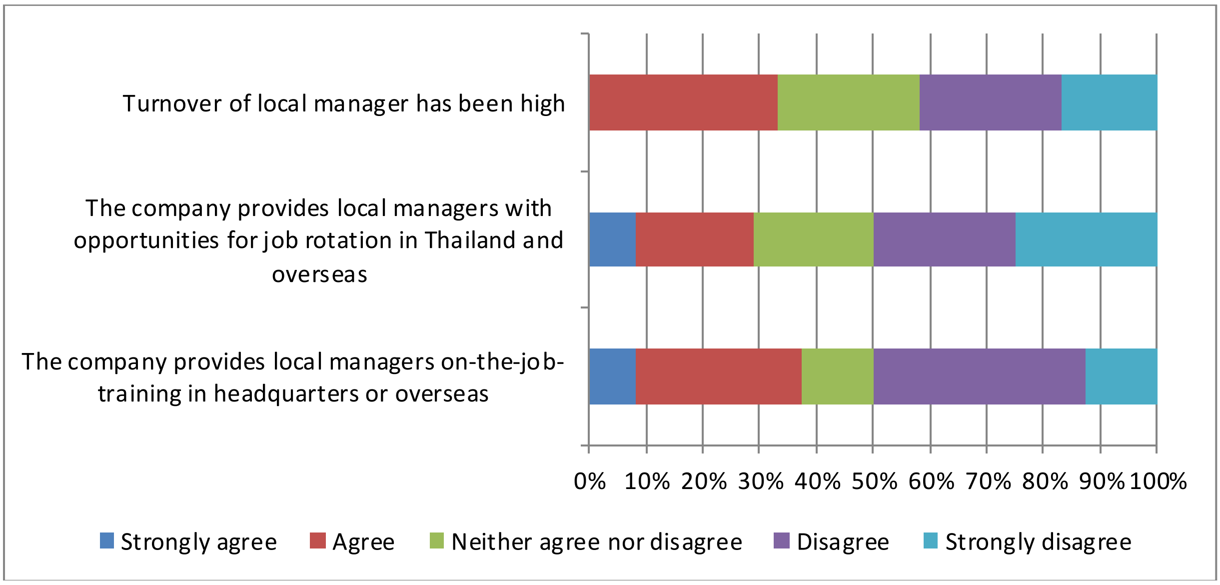
> '*My company is pragmatic about localization. If would like to open a new local market, very likely we can appoint a local Thai manager. However, if my company decides to preserve some core technology, we may decide to appoint a Japanese operation manager*.'

4.4 Measures for the retention and development of Thai managers

As explained by Wong and Law (1999), localization means multiple stages of development. To replace expatriate managers with local hires is an important step for localization. Equally important is the retention of local managers in the companies.

The turnover of local managers can be an important indicator to measure the success or failure of localization. As shown in Figure 4, approximately 30% of companies stated that the turnover of local managers has been high. On the other hand, over 40% of companies disagreed with this statement.

Figure 4. Measures for Retaining and Developing Local Managers



Source: the authors

Nearly 30% of the companies provide local managers with opportunities for job rotation in Thailand and overseas, while 50% companies do not provide such opportunities. Nearly 40% of the companies provide local managers with on-the-job training at headquarters or overseas, while 50% of the companies do not provide such training opportunities.

When the companies were asked to rank the most important measures they had taken to keep the local managers in the company, it seems that offering competitive salaries and remuneration packages was identified as the most important measure to keep local managers; 22 out of 24 companies identified this factor as very important.The second important measure to retain local managers is to provide local managers with training and development opportunities, internal promotion and career prospects in the long term; 19 out of 24 companies regarded this as a very important measure.

5. Discussions

5.1 How are the findings of the paper related to the existing literature?

Existing studies often pointed out that the use of Japanese expatriates in a large proportion of overseas managerial positions, reluctance to consider locally hired employees for those positions, friction between Japanese expatriates and local employees, and difficulty in recruiting and retaining high-caliber local employees have been the key weaknesses of Japanese HR policy and practice (e.g., Kopp, 1994; Oddou et al, 2001). Such conclusions may not be entirely correct. As shown in this paper, the Japanese subsidiaries under study are very heterogeneous in terms of staff localization policy and practices. Some senior posts in some companies have been filled by local hires. In an extreme case, a Japanese subsidiary in Thailand hired no Japanese managers. Generally speaking, localization has taken place in most of the Japanese companies under study often on an ad-hoc basis. Nevertheless, most Japanese subsidiaries in Thailand hire a small number of Japanese expatriate managers. This finding is in line with Beamish and Inkpen (1998).

In terms of the major motives for expatriate assignments, this paper found that the key reasons for expatriate assignment in Japanese subsidiaries in Thailand was to enable the

Japanese managers to gain overseas experience, to exert control over the subsidiaries and to enhance communication between subsidiaries and headquarters. These findings are largely consistent with the findings of similar studies in different countries such as Bjorkman and Lu (1999), Wong and Law (1999), Harzing (2001), Kühlmann and Hutchings (2010) and Bhanugopan and Fish (2007), as summarized in Table 1.

On the other hand, this paper finds that the possible cons for assigning Japanese managers to Thailand, such as the high failure rate of expatriate managers and the problem with dual-career couples as mentioned in some studies, (e.g., Harvey, Novicevic and Speier, 1999; Collings, Scullion and Morley, 2007) are not applicable to Japanese subsidiaries in Thailand.

In terms of the pros for localization, this paper finds that the key advantage for localization in Thailand is that Thai managers are more effective in building local business networks, and localization is regarded as an effective way to boost the morale of Thai employees. These findings are consistent with Tait, De Cieri and McNulty (2014) and Wong and Law (1999). On the other hand, no overwhelming evidence was found in this paper to support the typical disadvantages of local hires such as local managers lacking understanding of MNCs' values and norms (Kühlmann and Hutchings, 2010), a high turnover rate among local managers (Groenewald, 2008) and the short supply of local managerial and technical skills (Wong and Law, 1999) as listed in Table 1.

5.2 Will internationalization of senior posts in Japanese companies become a new norm?

According to Hofstede's cultural dimensions, Japan is a nation with a high level of uncertainty avoidance – Japan is ranked 8th in the world in terms of uncertainty avoidance (http://geert-hofstede.com/japan.html). This probably explains why Japanese MNCs, compared with US and European MNCs, tend to send more Japanese staff to their overseas subsidiaries or reserve some key posts for Japanese staff in order to make sure that each subsidiary's operation is in line with the corporation's policy.

In contrast, this paper found evidence of no Japaneese management working in a Japanese subsidiary in Thailand, although the company hires approximately 240 Thai employees. Also, interestingly, the top manager of the Japanese subsidiary is neither Thai nor Japanese. Further investigation reveals that the top manager at the Japanese headquarters is not Japanese either.

Is this just an exceptional case, or does it indicate that Japanese companies will increasingly internationalize their staff in the sense that senior managers will be selected based on the merits of candidates rather than their nationality? It is not the intention of this paper to answer this question, but the question no doubt deserves further study. In this respect, a recent article published in *The Economist* (2015) deserves special attention as it may point to the future HR policy and practice of Japanese companies. The article, among others, pointed out that many Japanese companies are abandoning the tradition of always appointing their next boss from time-serving insiders, and look for outsiders – or even abroad. It further listed a number of companies, including Takeda, Nissan and Sony that hire French, Brazilian and Welsh top managers respectively.

6. Managerial implications

In order to maintain the competitive edge of a subsidiary in its host country, it is important for the subsidiary to harness local advantages and build strong bonds with the host country. Petison and Johri (2006) argued that companies expanding into other countries need to place ''local people'' at the core of their subsidiary level strategy, and promote a symbiotic relationship between local and expatriate employees along all the functions in the value chain.

This paper reveals that very few Japanese companies surveyed seem to have a comprehensive strategy for localization including the strategic objective, recruiting process design, and training and development. Most existing efforts for localization in Japanese companies in Thailand seem to be *ad-hoc* and lack long term planning. Indeed, successful localization is seldom an easy task as there are multiple factors thata company needs to assess in order to successfully implement a localization strategy. It requires the MNCs not only put a comprehensive strategy and long-term objective in place, but also to implement such strategies effectively.

This paper argues that for the Japanese MNCs that have put localization strategies in place, such strategies should be clearly passed on to Thai staff and the general public. During the study, the authors noticed that in some cases, some Japanese managers are aware of localization strategies and plans but local Thais are not aware of them. As discussed in the paper, the interview results show that many Thai employees attach great importance to career advancement. If they understand some posts will be localized in the future, they would be more motivated and dedicated to prove they deserve the posts when the posts are open to locals. In a broader sense, communication with the general public on localization policies and practices would no doubt help the companies to be more accepted by the host country and the community.

Finally, the roles of Japanese managers, especially in coaching roles, in Japanese subsidiaries in Thailand should be more clearly defined. During the process of research, the authors noticed that Japanese and Thai managers seemed to be very clear about the Japanese managers' roles as 'commanders' and/or 'communicators'. Another important role, 'coaching', has been less emphasized. Kühlmann and Hutchings (2010) argued that the interactive and iterative learning process is essential to develop local managers. Therefore, Japanese managers should be more proactive to play coaching roles to pass on their knowhow to local employees. From the perspective of MNCs, this should be clearly mentioned in the job description when Japanese managers are assigned to Thailand.

7. Conclusion

This paper, based on data collected from 24 Japanese companies in Thailand, provides new empirical evidence on the localization policies of Japanese companies in Thailand. It reveals that these companies are very heterogeneous in terms of localization policy and practice; some companies only keep the minimum number of Japanese managers for the most senior posts, while other companies also employ Japanese managers in junior management posts. Therefore, it may not be totally correct to generalize the localization policy and practice of Japanese companies in Thailand.

This paper reveals that the key reason for the localization of some posts in Japanese subsidiaries in Thailand is because local Thai managers are often more effective in building local business networks than Japanese managers. Another important reason is that localization is a useful measure to boost the morale of local managers once they know that it is possible for them to secure senior posts in the company. This paper also found that the most important measure to keep local talent is through competitive salary and remuneration packages, as well as opportunities for career advancement in the companies.

This paper also found that very few Japanese companies have actually put a localization strategy in place. Although localization was evident in half of the companies under study, it often happened on an ad-hoc basis. This paper concludes that a more comprehensive strategy needs to be put in place by Japanese MNCs for their localization strategies in Thailand. Such strategy should be long-term, comprehensive and be able to address alternative aspects of localization such as recruiting, retaining and developing local managers. In addition, information on such strategies needs to be clearly passed on to Thai staff and the general public as a measure to motivate internal staff and to harness the civic relationship with the host country and the local community.

This paper covered 24 Japanese subsidiaries in Thailand. Although it may represent one of the largest samples in the existing studies, the sample is still small from a statistical perspective. Further work should be directed towards data collection from more companies to make the analysis more robust. It is certainly easier said than done in this respect considering the difficulties the authors faced in data collection for this paper.

This paper only collected data from MNC subsidiaries in Thailand, including Japanese and Thai managers. It would be useful to collect data from the headquarters in Japan to better understand the vision and strategic direction of the international human resources management of MNCs.

Compared with existing studies (such as Tung, 1982; Kopp, 1994), the sample in this study included only Japanese subsidiaries. It would be very useful to collect more data from the US and European subsidiaries for comparison, which will further shed light on the localization policy and practices of Japanese companies in Thailand in an international context.

Acknowledgements

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BOOK REVIEW

A History of the Thai-Chinese

Jeffrey Sng and Pimpraphai Bisalputra

Singapore: Editions Didier Millet, 2015. 448 pp. ISBN 9789814385770, (hbk)

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This is an extremely ambitious book, generous with wonderful illustrations, that attempts to tell the long story of Chinese immigration to Thailand and the impact of one of the largest and most influential diasporas in recent history. Indeed, the Thai-Chinese have made a tremendous contribution to Thailand, particularly in the business world where their approximately 14% of the country's population (more directly - about fifty ethnic Chinese families) controls 80% to 90% of the overall market capitalization of the country, 90% of its manufacturing section, 50% of the banking and financial services sectors (including the four largest private banks) and about 80% of the companies listed in the Thai stock market (Haley, Haley, & Tan, 2009; Seagrave, 2010; Weidenbaum & Hughes, 1996; Yeung, 2006). The five top billionaires in Thailand have Chinese blood as well as 17 former prime ministers and at least one prior king.

The authors, who are acknowledged scholars of the Thai-Chinese community, structured the book as parallel chronologies between Chinese dynasties and Thai kingdoms, beginning with the Ayudhya kingdom (1351 to 1767). The two histories are intertwined throughout by successive waves of Chinese immigration that covered all the socio-economic strata. This narrative is reinforced throughout the book with a series of individual or family stories, some "rags to riches" (Thai version is "mat to riches") of immigrants who rose to some level of prominence.

The immense work conducted by the authors is highly laudable. However, the structure of the book itself is problematic in two ways. First, there are disparities as to time periods. Over 140 pages are taken up with the period prior to 1900 when the immigration numbers and impact was less while only 21 pages are devoted to the period of 1975 and beyond when the impact was greatest and most profound in terms of cultural impact, dominance in market capitalization, media influence, and the development of the business environment in Thai urban centers. Also, problematic is the actual infusion of the individual or family stories throughout the book which unintentionally served to disrupt the historical narrative rather than reinforce it.

Another questionable aspect of the book is its methodological approach. Since it purports to focus on the evolutionary development of an ethnic subculture within Thailand, it would seem logical to apply an ethnologically based inquiry within the context of social history. The social history approach, an approach that has become mainstream historiography with its own investigative techniques and analytical tools, allows for a better understanding of the dynamics at the street level; the hushed voice of the common man becomes audible and there arises a richer understanding of history than the top-down orientation and elitist-focused approach of traditional history with a narrative emphasizing political and economic high points.

A social history approach would have highlighted important aspects of the contributions made by the Chinese in developing the country's business environment through characteristics distinctly found within the overseas entrepreneurial Chinese: family patriarchic control, simple organizational structure, centralized decision-making, internal financing, conservative R&D, and the implementation of *guanxi*, to name a few (Ahlstrom, Young, Ng, & Chan, 2004; Haley, Haley, & Tan, 2007; Redding, 1995; Yeung, 2006). Yeung (2006) argues that these imported traits have actually undergone a transformative process resulting in a hybridization of ethnic Chinese capitalism and global capitalism that has emerged with prominence within the "Southeast Asian business landscape." Such discussions are missing from the book even though so much of the text focuses on the business world.

A social history approach would have also brought out the distinctions between village-based Thai culture and the imported culture of the Chinese. Some works (Cooper, 2008, Mulder, 2000; Welty, 2004) focus on the rural-based cultural norms of Thailand but do not explain or prepare foreigners for different norms that are operationalized by Thai-Chinese in the business and academic settings of Thai urban areas. In reality, Thais from the countryside, as well as foreigners coming from abroad, have to undergo an acculturation to succeed in the business world beyond the street kiosk. Hofstede (1980) grouped most Southeast Asian nations as displaying weak uncertainty avoidance and using the family as an implicit model of organization. Yet, he characterizes China with strong uncertainty avoidance and a hierarchical pyramid as the implicit model of organization. Indeed, it is this pyramidal organizational model that is found in most urban-based institutions where the Thai-Chinese dominate management. It is unfortunate that this book did not attempt to explore the possibility (unique or not) of a powerful, ethnic subculture of immigrants succeeding in having its cultural norms supersede that of its host country in the large urban settings where most Chinese immigrants chose to reside.

A historiographically different approach might also have explained the dynamics of the sixty billion baht industry in Thailand of skin whitening products. With the impact of colonialism or pervasive western media being eliminated, colorism – the discrimination or prejudice against individuals with a darker skin tone within a given nation state – becomes a viable, though perhaps not complete, explanation for a skin whitening phenomenon that has lasted for over a decade and which remains strong. "*Pay tham phiw"* ("going to get white skin") usually describes a Thai rural girl going to an urban area to work in an office setting. In other words, a dark skin tone person going to a business environment dominated by white skin tone Thai-Chinese, particularly in greater Bangkok where most of the Thai-Chinese population resides. Perhaps there exists here the possibility that an ethnic subculture has come to define an aesthetic standard of beauty that runs counter to the aesthetic norms of most of the country's population – and which cannot be reconciled with skin whitening products.

The most troubling aspect of this book is its hagiographic approach and what can be perceived as the potential loss of critical distance needed in order for it to be considered a serious academic work. The critical distance can also be seen as potentially compromised by the fact that the book had large corporate sponsors including one of Thailand's largest private companies run by a Thai-Chinese family. The family stories told in the book are laudatory in nature and simply replicate the positive that was provided in interviews. Some similarities exist between the Miami-based Cuban exile and the story of Chinese immigration to Thailand since so many of the exiled Cubans consisted of the business class of the island before the Castro revolution. A book similar to this, *Great Miami: Spirit of Cuban Enterprise,* (Gonzalez-Pando, 1996) was written with a similar pattern of family success stories. However, that book suffered the fate of being ignored in academic citations because of its hagiographic approach and because of the one-sided presentations of the family "rags to riches" stories. It deliberately ignored the luck that Cuban exiles had in arriving during a time that Miami was *the* main portal to drugs and during which time the city and its county were the major recipients of capitalization from the proceeds of narcotic sales, mainly cocaine. When money laundering laws were passed in 1990s, Miami reversed its course towards a steady and continual decline, and came to reflect the socio-economic dimensions of a third world city while the Cuban exile rose to its zenith in power in both the private and public sectors of that city. Yet little has been written about this historical reality thus maintaining the mythology of the Cuban exile success story despite the huge and growing percentage of Cuban exiles that are now on government welfare assistance. The legacy of history books are ultimately determined by their adherence to conveying the objective reality of the past and not to honor or pay tribute to the subjects under examination as the authors professed to have done in the preface of this book.

This reviewer is not convinced of the authors' assertions that the historical periods of discrimination against the Chinese community in Thailand were primarily provoked by foreign influence: that "cumulative encounters [with] Western civilization" (p. 259) was the primarily reason that the "Western-educated Siamese" exercised their "racial prejudices" against the Chinese (p. 261). No substantive empirical evidence is provided for this in the book and the linkage of the adoption of theses prejudices at the street level is missing and quite doubtful. Indeed, this resembles Marxist analysis and its paradigmatic flaw of using a historiographic approach towards analyzing Thailand in terms of semi-colonialism (Harrison & Jackson, 2010). The historical evidence indicates that periods of anti-Chinese sentiment were largely correlated to peaks of Chinese nationalism and/or domestic violence within the immigrant community itself (Chantavanich, 2008; White, 2009). Over three thousand Chinese were killed in 1848 and in 1878 when Triads (Chinese organized crime) triggered confrontations with government authorities and murdered government officials. This resulted in the passage of the Secret Society Act in 1897. In 1910, the Chinese general strike in Bangkok, led partly by non-assimilationist secret societies (or *angi-yi)*, provoked violence and fear while depriving the citizens of inner Bangkok of food and commerce. Throughout the 1920s and 1930s, Chinese organizations such as the Chinese Club of Bangkok encouraged immigrants to raise Chinese flags on various occasions throughout the year while also sponsoring manifestations that dealt with mainland Chinese politics (Chantavanich, 2008). Assassinations and terrorism riddled the immigrant community as anti-Japan *angi-yi* targeted Chinese businessmen accused of doing business with the Japanese. Between 1939 and 1940, sixty-one Chinese traders were murdered by the *angi-yi* (Chantavanich). Fear of resistance to assimilation, lack of loyalty or "divided loyalties" (p. 279) to the country led to assimilationist legislation that required private schools to teach the Thai language and inculcate Thai cultural values and, under Field Marshal Philbun Songkram (during 1939-40), to close all of the 250 Thai-Chinese community schools and 9 of the 10 existing Chinese newspapers.

An argument can be made that Thai nationalism was brought about to a great extent in reaction to Chinese nationalism within Thai borders. The Thai intelligentsia expressed concern about the slowness or resistance to assimilation. National ideologues felt that Chinese immigrants were "sucking Thai blood to the marrow" (Baker & Phongpaichit, 2014). This triggered, among other things, the creation of a nativist newspaper entitled *Thai Tae* (true Thai) (Baker & Phongpaichit, 2014). At the street level, the hostility manifested itself in resentment over competition for jobs and Thai wives (since a majority of early Chinese immigrants were male) as well as simple human envy regarding the economic climb of foreigners, especially those seen engaging in the "Chinese vices" (p. 203) of drugs (particularly opium), gambling, liquor, and prostitution by way of organized crime. It is interesting that Thai nationalist resentment emerged again in 1972, this time by way of anti-Japanese protests as a result of fears that Japan was engaging in "economic imperialism" in Thailand as well as cultural domination (Thipakorn, 2014). This was not inspired by foreign influence but, rather, was a national reaction over what the Thai academic journal *Sangkhmosat Parithat* (Social Science Review) perceived to be a "yellow peril" (Thipakorn).

Clearly, the process of assimilation for many Chinese immigrants in Thailand had very difficult moments. This process seemed so slow and perilous that it has been recognized as an important impetus for Thai nationalism. Therefore, it is difficult to accept the authors' assertion that "Chinese immigrants demonstrated a natural tendency to assimilate into the native populace" (p. 235). Organized crime, by way of secret societies, was a sore point for the native Thai as would be the case for anyone that was suddenly surrounded by foreigners engaging in criminal behavior on an organized scale that corrupted the local rule of law. The authors ceased to mention any more Triad activities beyond the 1920s. And yet, they have never left Thailand and continue to contribute to narcotics, gambling, contraband, counterfeit goods, prostitution, human trafficking, and the arms trade (Phongpaichit, Piriyara, & Treetrat, 1998; Posner, 1988; Seagrave, 2010).

The last big wave of Chinese immigration to Thailand was in the 1920s. With victory in 1949 by the communists in the Chinese Civil War, "Thailand had practically no Chinese immigrants" (Phongpaichit & Baker, 2004). The authors mention that the Thai-Chinese business community surged in Thailand after World War II. They cited, as one example, Bangkok Bank – a Thai-Chinese run business – that, by the mid-1950s, had 16 domestic branches and overseas branches holding declared assets of about $50 million dollars (p. 371). Since Thailand was cut off from China from the 1950s to 1979 due to the Cold War, this begs the question of where the immigrant community was receiving its capitalization. This is where the book may have gone askew in a fundamental way. Perhaps, instead of focusing primarily on the Chinese mainland, this study should have primarily focused on the relation between the Thai-Chinese community and the overseas entrepreneurial Chinese network. This overseas community consists of only 55 million people but holds a "GNP" equivalent to over $450 billion dollars (Seagrave, 2010). It consists of a transnational network of clans or extended families creating a nexus of conglomerates and, more importantly, powerful banks in Taipei, Hong Kong, Singapore, Bangkok, Jakarta, Manila, and other locations. It is a key financial and political power within ASEAN. It played a substantial role in transforming China ("reinventing Leviathan" p. 404) and guiding the mainland into capitalism while also competing against it. The two are not the same and the Thai-Chinese, while proud citizens of Thailand and a major force of development to their country, can also be seen as part of this network, sharing powerful financial and familial connections as well as distinct cultural values that differ from the mainland as well as from the rural areas of Thailand. Unfortunately, the book, for the most part, chose to treat the overseas entrepreneurial Chinese network as invisible.

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