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SCHOOL OF BUSINESS

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Kellogg College, University of Oxford

Editors:

Suthawan Chirapanda

Gilbert Nartea

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Editorial

Welcome to the seventh issue of the UTCC International Journal of Business and Economics (UTCC IJBE). We, the editors, appreciate greatly the support of the University of the Thai Chamber of Commerce and the Thailand Management Association (TMA), as well as the sponsorship of the Kellogg College, University of Oxford in asking us to become involved in this endeavor as editors of the UTCC IJBE.

Over the past few years, we have noticed the rapid development of business, economics, and accountancy within the industrial, academic and governmental sectors. More and more people are talking, researching and applying business, economics, and accountancy within a myriad of contexts. There is much excitement in the field.

The UTCC IJBE has been established in response to this increased interest in business, economics, and accountancy issues as a forum for interested parties to advance their knowledge and science of the said discipline. The geographical scope of the journal is not solely limited to Thailand and the surrounding region.

This seventh issue of the UTCC IJBE represents a compilation of submitted papers. It is hoped that this issue will set a new benchmark in terms of academic publications in Thailand, especially in the field of business, economics, and accountancy.

The Editors would like to invite academicians, practitioners and policy makers to submit their manuscripts on business, economics, accountancy, and other related disciplines. Through the support of our Editorial and Advisory Board, we hope to be able to provide academic articles of the highest quality to all our readers.

Suthawan Chirapanda
Gilbert Nartea
Editors

The Editors

Editors-In-Chief

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A qualitative research in phenomenology methodology: Does good corporate governance enhance transparency of information disclosure?

by

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Abstract

Nowadays, there is a widely held belief that good corporate governance will increase transparency in listed firms and lead to a better standard of stock exchange. Therefore, an increase in transparency would greatly enhance transparency of information disclosure which will help in reducing information asymmetry problems. This research focuses on the qualitative design which is used phenomenology methodology. It will explore the relevant participants with great experience in the research objectives. The good corporate governance components in this research are the board of directors' structure, the shareholders structure and the corporate governance report. The result of 12 in depth interviews with participants' shows there are a linkage and has helped to enhance the transparency of information disclosure. The significant statements from the interviews are shown in the results, together with the four themes output from the research objectives. The results show the essence and ranking of the effect of the good corporate governance component; which has helped in enhance transparency of information disclosure. Lastly there are suggestions, comments and issues relating to the communication tools of information from the listed firms to the stakeholders or shareholders.

1. Introduction

Good corporate governance has become an important concept for all listed firms to follow. After the application of good corporate governance into their listed firms, however, there has been a lack of evaluation or indications of the results. Corporate governance is considered to be difficult to measure or evaluate most because it is involved in policy concepts (Chung and Zhang, 2010). The main purpose of good corporate governance is to reduce or eliminate the problems of agency theory between the management and shareholders (Jensen and Meckling, 1976). Problems can derive from information that is not equal between the two parties, so this research focuses on information disclosure. Good corporate governance involves the concept of acting in good faith which results in transparency and an enhanced quality of information disclosure (Cormier, 2010).

This research uses qualitative research design which is a tool of the phenomenology concept. The researcher has tried to explore the experiences and consider those factors that are relevant and meet the research objectives (Creswell, 2003). These focus on the information disclosure in many tools of communication by listed firms. Good corporate governance is focused mostly measurement component which are board structure, shareholder structure and the corporate governance report.

The problem for this research arises for several reasons and from the gaps revealed in the literature review which follows:

- Investors who use disclosed information to make decisions have to base their decisions on acquired information. In this case, the problem of information asymmetry arises, particularly in a number of fields of study, because the information that investors receive is incomplete and nontransparent. Given that the field of management deals with people, investors, and stakeholders, more information and details about information asymmetry is necessary. The different measures of corporate governance have never been cross checked, and no study explores the various dimensions of corporate governance (Moore, 1983).
- There is a lack of qualitative in depth interviews in the good corporate governance concept in the managerial accounting field. The corporate governance concept and the quality of information disclosure are difficult to evaluate on a numerical basis.
- The objective of this research is to find which corporate governance factors can enhance the transparency of information disclosure in listed Thai firms. And another objective is to study the similarities or differences between good corporate governance components, which are the different dimensions of corporate governance measurement.

So the expected benefits of this research for its practical and academic contribution are as follows:

- When investors or shareholders decide to buy a listed firm’s stock, as a short-term or a long-term investment those investors in the businesses field need to have information about the stock so they can make the decision to buy, to sell or even hold onto those stocks. This will make for a financial analysis better since the financial statement will reflect more truthful information and will be more suitable for analysis. If corporate governance can enhance information disclosure, it will improve the decision making of investors when investing in SET (Gottschalk, 2011).
- There are many or multiple theories that have been used in this research paper and it might be beneficial to cross check the transparency of listed firms in SET. The researcher has tried to reveal the enhancement of information disclosure (Moore, 1983, Hussain, 1994, OECD, 2010).

2. Literature Review

From the literature review three main topics emerge; information disclosure, overall good corporate governance and lastly corporate governance report by regulators.

3. Information Disclosure

Information disclosure is the disclosed information from the listed firms that is distributed or shown to the public or all stakeholders. Information disclosure is normally done through the annual report or quarterly reports which are the basic way of communication (Levinthal, 1988). There is always the problem of unequal information being given which is known as information asymmetry (Akerlof, 1970). Reducing information asymmetry by increasing the amount of information follows the concept of corporate governance which enhances transparency of information to stakeholders (Eisenhardt, 1989). This research focuses on whether good corporate governance can provide or give more information all stakeholders or not? This is to estimate better decision making and reduce information asymmetry.

The researcher need the definition of information disclosure formulated by the SET, 2010; "To ensure market transparency and integrity, listed companies' information disclosures must always be full, accurate, adequate and timely for investor's investment decision-making. Firms are to simultaneously transmit data by facsimile and on-line through the SET Information Disclosure System, in both Thai and English."

4. Corporate Governance Overview and Definition

In 1999, the OECD published its Principles of Corporate Governance, the first international code of good corporate governance approved by government. These Principles focus on publicly traded companies and are intended to assist governments in improving the legal, institutional and regulatory framework that underpins corporate governance (Said, 2009).

The Principles of Good Corporate Governance for Listed Companies, revised in 2006. The principles and the recommended best practices are presented in 5 categories, namely,

1. Rights of Shareholders
2. Equitable Treatment of Shareholders
3. Role of Stakeholders
4. Disclosure and Transparency
5. Responsibilities of the Board

The principles cover all the important issues concerning good corporate governance, whilst the content in the recommended best practices offers supplementary descriptions or the means to enable companies to implement the principles (Thai SEC). In this research the corporate governance concept will focus on the board of director structure, shareholder structure and corporate governance report. Because these components can, at least, be measured and evaluated they might be suitable for comparison and contrast in qualitative research.

The researcher has chosen the definition that Thai SEC uses as its basis because it is the most widely used and the most international and is the corporate governance definition from OECD or the Organization of Economic Cooperation and Development. So the following definition will be the corporate governance definition for this research paper "Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance", OECD April 1999. OECD's definition is consistent with the one presented by Cadbury (1992).

5. Regulator's Report on Corporate Governance

The Thai Securities and Exchange Commission has been assigned by the government to look after the stock exchange of Thailand in relation to firms, investors and related parties, so the SEC has the responsibility to provide some information or report to stakeholders. The best way of providing such reports is through scores or similar reporting since they are easy to compare and contrast among SET firms.

The CGR or corporate governance report operational definition is a report presenting the results of the study of corporate governance practices of Thai listed companies conducted by the Thai Institute of Directors Association (IOD). All the stars follow the regulation of five topics and are weighted by regulation by IOD. Only the stars are disclosure to the public access.

6. Research Methodology

This research is designed within the scope of qualitative design. The design uses phenomenology methodology (Creswell, 2003). The researcher needed to prepare all the concepts and questions before conducting interviews which focused on experiences and factors relevant. The analysis focuses on theme and the essence of significant sentences from the interview results.

The main objective of this research is to explore the experiences and effect of good corporate governance to enhance transparency of information disclosure. The researcher conducted the interviews with relevant people who are from listed firms and academic areas or are regulators.

The qualitative data collection. A sample is taken from the data collected from in-depth interviews, which each lasted for approximately 60 minutes. The first sample is the person involved in the disclosure in the SET100 listed firms. The second sample is the person relevant to corporate governance and information asymmetry in the government or academic field. The product of the qualitative stage is the interview data called the text data. In analyzing the qualitative data in terms of the phenomenological research design, significant statements are classified by focusing on the research objectives, quantitative result, and research variables. Then, the themes are classified by significance by narrowing down the statements, cutting redundancy, and combining similarly formulated ideas. Finally, essence analysis is drawn from the theme possessing a fit explanation for the best result obtained using the phenomenological methodology.

Finally, data results were encrypted to the sentences' wording. Then the researcher read the data again to analyze significant sentences, theme and encapsulate the essence in a conclusion. Discussion, implications and suggestions for further research follow.

7. Population and Sample

The population that is applying good corporate governance in Thailand is all of the listed firms which are both in SET and MAI. The sample size in phenomenology does not established guidelines to identify how many selected samples there should be (Creswell, 2003). So the qualitative research sample selected by criteria sampling first and then random sampling. So the first criteria sampled SET100 index firms and then random sampling after a permission letter was sent to random listed firms in SET100. The number of sample in this qualitative first part was about 5-10 participants. After that, the government and academic field was chosen to do an in depth interview with which to compare and contrast the results. The second part included about 3-5 participants so, altogether, the sample in the qualitative in depth interview in phenomenology methodology was about 8-15 participants which is enough for phenomenology methodology (Morse, 1991, Creswell, 2003)

8. Qualitative Research Instrument

The content of the structure interview was devised from literature review and research questions (Yasamorn, 2011). This qualitative research was to explore the core essence in good corporate governance and information disclosure (Morse, 1991). The structure interview had some guidelines but not did let the interviewees flow freely to new topics but try to stick with topics and the factors there were relevant (Creswell, 2003). This research followed phenomenology methodology so the interviews focused on the experiences and perception. A powerful instrument in this research was the in-depth interview. The in-depth interview made a great contribution to seeking truthful answers or ideas from the specialists or the listed firms that complied with most of the rules and regulations. After the researcher had gathered all the information from the interviewees and was satisfied with the data, the researcher used the instruments in qualitative research, on theme, statement and quotation, to conclude with a great and powerful argument.

9. Data Collection

For the in-depth interview which is the research's primary data the researcher needed to collect from specialists in a particular area. The places to collect the information from needed to be a suitable environment for the interview because sound recording was needed. A specific place was not provided and it remained flexible dependable upon the respondent.

10. Qualitative Analysis

The interview data was made into a transcript in text data format. Researcher tried interpret the ideas, combined with the inductive data, in order to come up with an interpretive paradigm, which is the philosophy of discussion in which he tried to explore the essence in order to conclude the research objectives. As the researcher who used field-based information (Colaizzi, 1978) He had to classify significant statements, themes and lastly essence analysis which contain both statements and quotations. For the structured interview, the researcher needed to use technique of statement significance and theme which could suit the text information (Creswell, 2003).

11. Result

11.1 The Interviewees' Results

There are 12 interviewees' results from three participants from good corporate governance academic areas, another three from government regulators and the last six participants are people involved in corporate governance in SET 100 index firms. All respondents were competent in good corporate governance and information disclosure with a well-educated background. The researcher reviewed the data from the interview transcripts over four times. The researcher then identified and listed significant statements or those related to the research objectives, quantitative results, research variables, research questions, and problem statements. Over 30 such statements were extracted from 12 interview transcripts.

Table1 Selection of Significant Statement of Interview and Related Formulated Meaning

Significant statement	Formulated meaning
The insider trading problem is very difficult to prove in reality. There has been no one had sent to jail due to the court process which is slow; up to 10 years and still not finished. People are not afraid of the penalty which is not strong enough to put someone in jail in this case, so many people still continues offend.	Thailand laws are still very slow and weak on enforcement.
Tools other than the annual report used to communicate are the firm's website and quarterly newsletter. Lastly, the IR of the firm and the call center.	There are many other communication tools other than the annual report.
All listed firms are following good corporate governance guideline, rules and regulations to meet the minimum requirement which avoids penalty.	The key is applying good corporate governance at the level to which avoid penalty.
In theory the audit committee is directly responsible for information disclosure and enhances transparency. But in practice it is otherwise and sometimes the audit committee just sits and does nothing.	Sometimes, the audit committee can be promoting form over substance.
Information disclosure is for the sake of stakeholders who use information and stakeholders who want to know whether the information has been received or not?	Information is dependent upon receivers.
To invest in stock, investors needed to analyze many stocks and compare them. All information is compiled to reach a conclusion but the information after the conclusion cannot indicate whether or not there was enough for decision making because information is not of the same level or standard.	The quality of information is difficult to measure and compare.
The audit committee has more responsibility than the independent directors. The Audit committee has more requirements than the independent directors, due to the quality of finance and accounting knowledge.	The audit committee can enhance transparency of information disclosure more than independent directors.
Even though Thailand is good for Asian standards it is hardly comparable with Europe and the USA. The main differences are in shareholder structure, culture, and management. So we can	The Thai corporate governance standard is high compared to Asian countries but cannot

compare Thailand CG in Asia, but not the globally.	compare with Europe and the USA.
Listed firms think annual reports cannot reflect the whole firm's performance for the year and cannot reflect the true product they can merely help to understand profit or loss.	The annual report can be presented only as a financial number but other information disclosure is not good enough.
CGR is the easiest way for stakeholders to choose the listed firm for investment but high CGR doesn't always mean good listed firms.	CGR is the easiest way to look at listed firms' corporate governance.
All information disclosure is the same for all shareholders. All minor shareholders will receive the same information but major shareholders may possibly receive the same information but in more depth and detail than minor shareholders.	The major shareholders have more access and more detail in some information than minor shareholders.
Listed firms need to say that copying and improving is better with updated information, but not inserts junk information in order to pad out the annual report. "A Good annual report needs to have complete information but not a lot of pages."	Some information in the annual report is junk and a good annual report need nor have lot of pages but needs to disclose all the relevant information.

11.2 Theme Results

The researcher developed significant statements, which were then grouped into a theme. The theme was developed based on significant statements duplicated and repeated by many participants. Another criterion for the development of the theme is that the theme must be an issue or experience related to the research objectives and research problems. Moreover, the theme was developed using statements related to all independent variables that are components of good corporate governance and dependent variables that are components of information asymmetry. Thus, the experiences related to this theme serve as an effective tool for exploring and confirming the mixed method and completing a phenomenological methodology. The researcher evaluated all the significant statements that matched the research objectives and variables as well as the similarities in their implications, thus revealing four themes.

Table 2 4 Themes in the Research Phenomenology Qualitative Analysis

1. The improvement of good corporate governance in the SET
2. The annual report standards and problems in the SET
3. The other communication tools from listed firms rather than the annual report
4. The properties and effectives of corporate governance to information disclosure

Theme 1: The improvement of good corporate governance in the SET. This theme focuses on past and present comparisons in all perspectives and dimensions of good corporate governance in the SET or Thailand.

The first experience of the corporate governance regulator is to mention the past with the present day of corporate governance. "There have been many improvements with better manual guidelines. At first corporate governance improvement and understanding went at a slow pace but now, there are many pressure and factors from stakeholders which make this significant in the capital market. This can be concluded as an improvement and a significant move forward.” This is the same as the second regulator which states: “Corporate governance improved a great deal in the period from 2007 to 2012. The rules and regulations neither were just as loose and could nor are incrementally used as a rule basis. Some of the rules in corporate governance cannot state to be doing this or that, but it can be viewed in terms of encouragement which affects market forces.” Form the IOD experience and suggestions if in the present day all listed firms performance can been considered to be number one, corporate governance should be number two.

For the academic area participants that are involved in a great deal rules and regulations, the first participant states that: “Corporate governance is more widely known than before. Before the Tom Yam Kung crisis just a few people knew about corporate governance because the economic situation forced Thai listed firms to do so.” This is the same as the other participants as “The CG concept for listed firms is like a concept from the outside to the inside. This means outsiders make CG become important by forcing firms to follow the expectation of investors. When listed firms are larger and strong, then sustainability is another important issue.”

The theme 1: the conclusion is in the same direction that corporate governance has existed for a long time which most of listed firms know. The improvement of good corporate governance gets better as time passes on which all participants strongly agree and give their ideas and experiences to support this opinion.

Theme 2: The annual report standards and problems in the SET. This theme considers the rules and standards of listed firms’ annual report which are directly linked to information disclosure and quality.

The experience in the annual report theme from academic participants is: “The annual report is the firm’s presentation which is in accordance with the basic rules and regulations of what to do and what needs to be disclosed. But sometimes listed firms consider making it like public relations or marketing. Many listed firms still think of corporate governance as an enforced requirement.” But the comment from other academic participants asserts that it is the template which is the standard as: “The annual report is good enough, but I want it to have the same standard. All of the detail needs to be good to have a presentation which is good to compare, contrast and judge if it same position. Nowadays if we need to interpret information, we might need special skill which many investors lack.”

For the regulator’s experience about the theme of the annual report, the first participant has a very different dimension saying: “All corporate governance can be improved and made better but it something is not ready non disclosure will be better. Some detailed issues will hurt or affect the listed firms so these listed firms are not ready for disclosure. It will affect the strengths and weaknesses to both pros and cons. Disclosure will never be enough and it is not possible to disclose all information. Some information contains detail that is not necessary for investors in decision making.” The comments from the regulator criticize the quality and seek improvement. “The annual report is divided into two parts which are the financial part and the non-financial part. The financial part is of a very high standard in its method of disclosure, complete detail and timeliness but the problem is in the non-financial part which seems to be easy but which listed firms are still completing in a sub standard manner.”

About the participant who is experienced in doing and disclosing the annual report, the first participant is opening minded: “the annual report is not the best 100 percent, it can be developed through time and effort.” Another one comments that, nowadays the listed firm has no budget to do more than basic requirements. Participants doing the annual report’s contents are copying from last year and updating all information from the new requirements of the SET and the SEC to the present day. Firms have considered the annual report is just like the SET 100 standard, not the best, due to budget and time constraints. Some participants have aimed to improve the annual report every year, in both quality and quantity with good annual reports needing to have complete information but not a lot of pages.

The theme 2: conclusion has shown many different problems. This can come within our scope as every participant states that the annual report is very important though still complicated for the reader and the maker, the disclosure person. The annual report can be developed over time and the budget is the constraint. The financial part of the annual report contains disclosure of a very good standard but the non-financial part still has a lot of problems which involve too much marketing and junk information.

Theme 3: There are other communication tools from listed firms other than the annual report. This theme focuses on the information disclosure by listed firms which have other communication tools other than the traditional annual report. These can see the new trend for the transfer of information or communication between the management of listed firms to investors or stakeholders. This theme shows the experiences relating to other communication rather than the annual report from each individual participant.

There are many communication tools that each participant experiences and uses. The first participant mentions: “The annual general meeting might be the most interesting event for investors who do not consider only the yearly annual report anymore. The quarterly report and news are also important.” Or there is more than just face to face but: “Another tool in communication is the website for both listed firms and the SET website, which now the SET has been improving to included an application on mobile phones for updated news.” The listed firm, normally communicate to investors through IR and PR which use newsletter or telephone. The website is another important tool for all listed firms. There needs to be at least two languages which are Thai and English. Another participant with differences but of the new trend: “Firms have an international road show and press conference in every quarter.” Or some advanced listed firms have a call center where: “The firm and call center consider all the calls and reports to the department that are involved in a particular issue.”

The theme 3: Conclusions about the other communication tools which are other than annual report are important. Most of the listed firms agree to have a website and IR to give out disclosure information but advances like the call center or international road show need to take account of the cost and the investors who get the information.

Theme 4: The properties and effectiveness of corporate governance in information disclosure. This theme is the most detail theme because there are many sub themes which are from many components of good corporate governance in this research. Each participant has had a different experience in each component which make this theme more detailed and with many sub-themes.

The first sub-theme is related to quantitative result from the previous part which considers number of the board of directors, independent directors and the audit committee. The number board of director issue does not directly affect nor effect information disclosure according: “The number of the board of director is not clear cut in terms of high good or low. This depends on quality over quantity. But in term of specialist ideal low numbers the BOD will be less in conflict." This interview question leads to some interesting comments about the board of director size which is: "The number of the board of directors is too low it will have the effect of no new ideas or argument. But if it is too high there will be slow decision making, which is related to performance and not to corporate governance and does not reflect information disclosure." Or "So the number of directors won't affect the disclosure of information, which depends on policy more." Even though this comment is a great to see which is: "If the firm has too many directors there is the possibility of a unity problem and too many ideas may lead to the instability of the board. If it too low it will effect to information disclosure."

For the independent director and the audit committee all participants record their experiences and suggest similar things. The independent director effects to enhance transparency and information disclosure. Therefore the audit committee is more valuable for responsibility in information disclosure. "A high number of independent directors will lead to enhanced information disclosure at a significant level. Audit committee and the independent directors is the same person so the effect is the same." Or "Number of independent directors is a driver to have better disclosure and fair treatment. Nowadays independent directors are more knowledgeable about their responsibility but the audit committee is a key driver which directs responsibility to information disclosure. So quantity and quality are needed." As researcher got information and experiences from the participants they were not only concerned about the form of the existing audit committee, but also the substance or the quality needed, "Independent directors and audit committees are the people who are involved in information disclosure directly, especially the audit committee but it depends on the knowledge and capability of the audit committee as well." In most of the listed firms the audit committee and independent directors is the same people and all participating listed firms had at least one third independent directors to BOD which is the minimum requirement but some listed firms can have more than 50 percentage independent directors.

These independent directors and the audit committee reported the strongest issues and experiences from participants to have a better information disclosure. The quality of independent directors and the audit committee is a difficult this to measure but all listed firms and stakeholders believe or have faith in this group of people who can influence better good corporate governance or enhance the quality of information disclosure.

The next sub theme is about CEO duality or the independence of the chairman. In terms of theory and experience from academic participants they are the same; "CEO duality is a basic concept of corporate governance which increases independence and enhances information disclosure. So there should not be duality in any firms." Or "CEO duality is part of corporate governance policy." But all participants cannot state the degree or number effected but it should have an effect on information disclosure. Regulator participants' comment: "If there is CEO duality, this person has all control power in hand."

This sub-theme in CEO duality affects information disclosure but cannot measure it to any certain degree. Good corporate governance guidelines state this is clearly prevented from happening because of checks and balances the power concept is quite strong. But some listed firms that have CEO duality tried to mention that there is no relationship to information disclosure, to protect them and make them look better.

The last sub-theme in this area is director shareholders and the top 10 shareholders of the listed firms. These have many different experiences for each participant. The first participant commented: “If directors own their own shares there will be a lack of independence, which could affect the disclosure of information directly. Sometimes it depends on the degree in which can be considered as shares that are too concentrated into one area. The negative impact is directly on the corporate governance. This is same effect as the high percentage that holds shares as the top 10 shareholders.” For the regulator participants the experience is: “Director Shareholders in terms of business won’t have an effect on the operation of the business due to the management choice to open information that does not harm their listed firms. If the top 10 shareholders have power in operational business it will similarly affect the director shareholders.” Or “Director Shareholders could affect information asymmetry but it depends on the percentage of shares held too. But other theory states that it’s good because directors will feel the senses of ownership but not too much cause it will affect the independent and information disclosure or even minor shareholders. Top 10 shareholders are normal in listed firms in SET, due to the fact that Asian businesses are family businesses which then change to publicly listed firms to finding more funding.” This can be defined as the regulator and academic views of experiences effect information disclosure, while different experiences to listed firms side which are experiences that do not present any problems. Such as “Top 10 shareholders make insider trading impossible because all shareholders receive information of the same time through IR and by quarterly meetings.”

This sub-theme can conclude that director shareholders and top 10 shareholders can possibly effect information disclosure, but to an unknown certain degree.

The Theme 4: Conclusion that board of director size can either effect or have no effect on information disclosure, which is effected in a low degree. Independent directors and the audit committee confirm the affected on information disclosure and information asymmetry, which is the highest among other variables. CEO duality is not recommended to happen because of good corporate governance guideline, which can possibly affect information disclosure to a certain degree. Lastly for both director’ shareholders and top 10 shareholders effect on information disclosure the degree of effected depends on the percentage owned and the environment or situation.

12. Discussion and Conclusion

The researcher generated conclusions based on the experiences of the participants, ranging from the theme to the essence of a phenomenological methodology. The essence analysis based on the seven themes represents the combined experiences with the weight of participants’ data. The essence is the core of the results in a phenomenological research that explains or summarizes qualitative results.
The results of this research have focused on the essence from the themes in result which the essence analysis results are followed:

Table 3 The Essence Analysis Results Table

Theme	Essence
1. The improvement of good corporate governance in the SET	Good corporate governance has existed for a long time which most of the listed firms know. The improvements in good corporate governance will get better as time pass.
2. The annual report standards and problems in the SET	The annual report is very important but is still complicated for reader and the maker, the disclosure person. The annual report can be developed over times but budget is the constraint. For the financial part of the annual report disclosure is of a very good standard but in the non-financial part there are still a lot of problems.
3. The other communication tools from listed firms other than annual report	The other communication tools than the annual report are important. Most of the listed firms agree to have a website and IR to disclose information.
4. The properties and effectiveness of corporate governance to information disclosure	Each variable has its own essence which is the board of directors' size which can either effect or have no effect on information disclosure, which is effected at a low degree. Independent directors and the audit committee confirm being affected by information disclosure and information asymmetry, which is the highest among other variables. CEO duality is not recommended to happen for the good corporate governance guideline, where it is possible to effect information disclosure to a certain degree. Lastly both director shareholders and the top 10 shareholders are effected by information disclosure, but the effected degree is depends on percentage owned and the environment or situation.

For this research in qualitative analysis after the essence had been completed. The researcher asked about the experiences and for suggestions about the rank components which reflect good corporate governance.

Table 4 Ranking the Best Reflection of Good Corporate Governance by Participant Experiences

1. Number of independent directors
2. Number of audit committee
3. Corporate governance report
4. CEO duality
5. Directors' shareholder
6. Top 10 shareholders
7. Number board of directors

13. Conclusion

The research shows that the good corporate governance components had an effect on information disclosure by the participants' experiences. Table 4 shows the ranking which is useful in concluding the priorities but all the results focus on the degree of the effect which can be derived from the percentages or even depends on the situation (Cormier, 2010). The first and second priority has been suggested as independent directors and the audit committee which focuses on quality more than quantity. This is to prevent the problem of form over substance in the listed firms. The number of the board of directors or board of director size has least effect on information disclosure but it can be affected in term of policy (Elbadry, 2010). All the listed firms try to do at least minimum requirement in good corporate governance to avoid penalties and act in good faith. So good corporate governance can enhance information disclosure which differs in degree in each component (Solomon, 2005, Cai, 2009).

Information disclosure is very complex because there are many communication tools in the present day (Armstrong, 2010). Only the annual report and quarterly report are required by the regulator to make disclosure but other tools are optional and vary due to the firm's size, budget and intention. So all listed firms have their own intention to present information disclosure by their own method and in their own and degree, these are linked to the listed firms' policy. The firms' policy is always linked to good corporate governance policy as well.

14. Implementation

The benefits of this paper are to guide the way through alternative of communication tools which directly affect information disclosure and enhance transparency. Good corporate governance concepts are an act in good faith which is a tool that can be of help to enhance information disclosure to a certain degree. This implementation might see the result, it needs to take times to be proved or seen. So the good corporate governance is a good for all listed firms to be implementing.

The research paper has seen the problem of form over substance which must be eliminated or be of concern for all listed firms because if listed firms implement only form, it will be useless, if there is no action or good quality in the implementation. The relationship and the effect are according to the literature and theories through which this research has shown the experiences of participants facing and raising some issues or comments.

15. Limitation and Further Studies

One of the limitations of this research is the cooperation from the participant which was low and gave such a limited interview time because all the participants are management or knowledgeable people in the listed firms who are so busy and have a tight schedule.

For further study, there are possible considerations: first, change the qualitative tools from phenomenology to case studies or grounded theory. Secondly, the researcher could focus some of the sample or the scope industry and comparisons. Lastly, it should be possible to add on the all dimension components of good corporate governance in the interviews.

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Factors Affacting Purchase Intention on Electronic Cooking Appliance in Thailand

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Abstract

The objective of this research is to investigate the relationship between dependent variable purchase intention and the dependent variables demographic, perceived behavior control, subjective norm and attitudes on the electric cooking appliance, and also to investigate the determinants as brand image, country of origin and beliefs in product attribute on their attitude. The research result is beneficial for relative electric manufacturer or distributor to create competitive advantage for the customer purchase intention on product designing or marketing strategy making. Hypotheses were tested by questionnaires, which collected from BIG C supermarkets and Tesco Lotus supermarkets in Bangkok and Chiang Mai, some are collected from internet questionnaires, finally 400 questionnaires were chosen. The research found the relationships as demographic (gender, marital status and education level), perceived behavior control, subjective norm and attitudes have effects on purchase intention, and brand image, country of origin and beliefs in product attribute have effects on purchase attitude.

Keywords: Electronic Appliance, Attitude, Purchase Intention

1. Introduction

Kitchen appliances usually defined as a machine which accomplishes some routine housekeeping task, includes functions such as cooking, food preservation or change the foods shape. These kind appliances generally work by electricity to cook or preserved food. The common type of electronic household cooking appliances includes microwave oven, blender or mixer, rice cooker, induction cooker, toaster and so on. During the years 2007-2011, Asia-Pacific household appliances market value increased from 88,557.80 to 110,981.50 million USD, and forecasting the market value will reach 150,223.2 million in the year 2016 (Marketline, 2012), The household appliances products are the most common product in people's normal life, and still have a huge potential market in ASEAN because of the Southeast Asia population growth rate still higher than other origin, at the average growth rate of 2.5-3.5%.

Thailand is an important market in the Southeast Asia. By signs of economic recovery become evident increasingly and a significant rebound in consumer confidence in year 2011, promotes domestic appliance market in Thailand achieve a positive growth, the year 2011's increase rate about between 4-6.6 percent, the total domestic appliance market size reaches about 83 billion - 85.1 billion Baht (Kasikorn Research Center, 2011). Recently, due to the zero tariff policy in the Association of South-East Asian Nations (ASEAN), Thailand's domestic appliance competition will become fiercer and fiercer (Thailand's Kasikorn Research Center, 2011). At the same time, through the finished of the "Chinese Government's Consumer Electronics Subsidy Program" in 2011, Chinese household appliance market shows saturation and decline, and Thailand become the next important market in Asia or Southeast Asian.

Although Thailand is a developing country, the commercial market in Thailand has been relatively mature. Recently, most Japanese and Korean household application brands set up factories in Thailand, Chinese brand export goods to Thailand, and Many Thai brands occupying the low household appliance market. The Thailand household appliance markets will be a fierce battleground in the follow years.

Presently, more than 15 electronic cooking appliance brands in Thailand market include western brand, Japanese brand, Korea brand, Chinese brand and local brand, there are manufactured from different countries. The electronic cooking appliance market in Thailand is not stable and the competition among brands are intensifying. Consumers have a wide choice on this kind product and what elements will affect their intentions are still not clear, its interests to study.

In this research, the researcher focuses on the electric cooking appliance part, which directly related to people's daily life and greatest demands daily-use products. The research places were selected the relatively strong purchasing power region as Bangkok and Chiang Mai in Thailand.

2. Literature Review

Literature review provided the related factors information which other studies had been found in their study. Although there are no researcher studies the factors affecting purchase intention of electric cooking appliances in Thailand before, there still have some studies can provide the relative view point or research model to support this research.

The Theory of Reasoned Action (TRA) was developed by Martin Fishbein (1975), based on the social psychology, describe the conscious behavior to identify the relationship between attitude and behavior. The basic assumption is: human behavior is under the control of the will, and thinking is systematic, that is, a person's behavior is rational and systematic use of gained information, the activities undertaken after reflection. In the theory of Reasoned Action (TRA), there are three general constructs are Behavioural Intention (BI), Attitude (A) and Subjective Norm (SN). A Behavioural Intention (BI) is guided from the merger of Attitude (A) and Subjective Norm (SN), or it could be rewritten as (BI) = (A) + (SN).

The theory of planned behavior (TPB) developed by Ajzen (1985), based on the theory of reasoned action (TRA). The theory of planned behaviour is used to explain and predict the intention in particular tendencies (Ajzen, 2002). The theory is the extending of Theory of Reason Action (TRA) to account for condition that individuals do not have complete control over their behaviour (Safavi, 2007; Leelayouthayotin, 2004). Due to the limitation, Ajzen has added the variable called perceive behavioral control to the model of TRA.

According to the theory of planned behaviour, the intention is affected by three variables as: personal factor (attitude), social influence factor (subjective norm) and control factor (perceived behavioral control). Subjective norm was considered as the influential factor encouraging intention (Leelayouthayotin, 2004). From TPB model argued that an actual behaviour was the result from behavioral control, attitude and subjective norm. The model has ability in predicting the behaviour (Ajzen, 2005). Many purchase intention studies mainly using this model. The research of Safavi (2007) indicates that behavioral control and attitude were the strongest antecedent towards intention. (Sutanita, Waritthar; 2009).

2.1 Subjective Norm

Bamberg (2003)'s consumer behavior research shows the strong relationship between subjective norm and intention. Subjective norm is the customer's pressure felts which from the social custom and the opinions of surrounding people while using the services provided or produced by any company. The subjective reflects the consumers' perception of what other people want them to do (J. Paul Peter and Jerry C. Olson2005). In accordance with a consumer's motivation, subjective norm performs a behavior constructed to incorporate expectations of the important peoples in his/her life (e.g. Family, friends, and significant others) (Eagly & Chaiken, 1993).Subjective norm has a significant effect on behavioral intention in the context of behavior related to skin management (Hillhouse et al., 2000).

2.2 Perceived Behavioral Control

Perceived behavioral control can determine as "an individual's perceived ease or difficulty of performing the particular behavior (Ajzen, 1988), is the consumer perceptions of whether a behavioral act is within their control (Ajzen, 1991)"

Other research supports for the role of perceived behavioral control on behavioral intention. Mathieson (1991) shows that behavioral control influences intention to use an information system. In the study of Terry and O'Leary (1995) for predicting regular exercise, structural equation modelling confirmed the two-factor structure of perceived behavioral control. Research studied the two-factor structure of perceived behavior control has yielded a significantly better fit when self-efficacy and controllability are included in the TPB model as separate latent variables rather than as the combined indicators of perceived behavior control (Ryu et al., 2003).

2.3 Controllability

Controllability refers to perceptions of control over the environmental constraints on behavior (Conner & Armitage, 1998; Terry & O'Leary, 1995). In an investigation of reducing red meat consumption (Sparks, et.al, 1997), a principal components factor analysis, followed by orthogonal rotation of the first two factors, helped to create separate measures of self-efficacy and controllability.

2.4 Self-efficacy

Perceived self-efficacy refers to "people's beliefs about their capabilities to exercise control over their own level of functioning and over events that affect their lives" (Bandura, 1991). Self-efficacy includes how the easy or difficult of a person believes engaging in an activity will be (Sheeran, Orbell's 1999). According to Bandura (1991), individuals with high levels of perceived self-efficacy approach tasks with efficacious outlooks, producing high levels of commitment, while individuals with low levels of self-efficacy will avoid from controversial activities.

2.5 Attitude

According to Fishbein's theory of reasoned action (TRA), behavior is determined by intentions (Ajzen and Fishbein, 1980). Attitude toward behavior refers the views of a person's positive or negative status, is the personal evaluations being favourable or unfavourable to perform the behavior. Attitudes are tendencies to respond in a particular way signalling their relationship to consumer behavior. According to Davis (1989)'s research, attitude is customers' recognition and evaluation of telecommunication services after using them. Purchase attitudes are mainly determined by the behavioral beliefs and evaluations (Trafimow, 2000). It means attitude formation is the effective process in consumers' decision making.

2.6 Evaluations

Many researchers have found that consumer's evaluation of product's multiple attributes would direct or indirect affect purchase intention (Holak, Lehmann, 1990). Evaluations refer to all classes of evaluative responding, whether overt or covert, or cognitive, affective, or behavioral (Eagly, Chaiken 1993).

2.7 Behavioral Beliefs

Behavioral beliefs refer to a probability behavior leads to certain outcomes. Behavioral beliefs (and evaluations) are presumed to determine attitudes (Fazio, 1990).

2.8 Country-of-Origin (COO) & Brand Image

Country-of-origin (COO) image is an important extrinsic product select cue, and also has been a major influence on consumer tendencies and evaluations of the product purchased (Thakor et al, 1997; Knight et al., 2007). Consumers' perceptions of country images differ substantially in terms of the number, strength, and valence of the associations they make (Shimp et al., 1993). In many cases, consumers take strongly associations with their memory when thinking about the countries substantially products standards. For example, Germany is high-quality and stables, Japan is high-technology and China are cheap. These strong memories have a relationship with Country-of-Origin (COO) and get influences to the consumer when they informed that the given product has been manufactured by a given county (Leila, Dwigh, 2006). Brand image can define as the consumers identify with the product attributes or the substance of their understanding of the product. Several previous studies approved the brand image have affection with the customer's evaluation on the product. Park and Srinivasan (1994) develop customer-based brand equity conceptualized as depending on the subjective perceptions that consumers associate with brands. When brand origin and COO have a different image, it could create possible the positive or negative affecting. The effect of country image with brand image is moderated by both brand and country's reputation (Hui and Zhou, 2003). The brand image of a famous brand of a given product produced in a famous country, for that product is likely to be affected differently from the brand image of a famous brand but produced in an unknown country, and vice-versa (Yamen Koubaa, 2008).

2.9 Beliefs in a Product Attribute

Beliefs in product attribute are a part of the factor "behavioral belief". The study of Siu and Wong (2002) investigated price, packaging, promotion, salesperson, and store distribution of cosmetic product attributes in Hong Kong, founds the product attribute can affect the purchase attitude. Anderson and HE (1998) found quality, price, brand, packaging, advertising, and salesperson as influential attributes when Chinese consumers considered using cosmetics in China. Additionally, Johri and Sahasakmontri (1998) revealed that consumers' attitudes toward "green" products evaluate a product based on its attribute. Consequently, there is a need to investigate how those attributes influence the attitudes of Thai consumer toward buy electric cooking appliance products.

2.10 Demographic

Many studies provided demographic characters are the potential factor which will influence an individual customer's purchase intention, the influence of gender, age, marital status, education background and income level on the likelihood to purchase products (Laroche et al., 2001; Syed, 2003).

The different character of gender is quite fits to examine as a sub-cultural category (Schiffman, Kanuk, 1997), gender's segmentation has been applied in marketing for a long time (Kotler and Keller, 2006). Age affected the demand of a certain product and services (Protor, 1996). Consumers with different age level had a very different need and want. People have different values and cultural experience, they do tend to share which they carry throughout life (Natalie Perkins, 1993). The substantially varying education levels among regions of a nation and affect considerably on need and wants of each region (Proctor, 1996). But Lii and Hung (2003) provide education variable does not have any influence in brands' intention. Thus the education factor is still ambiguous, needs to research. Income level is a major factor in a people's ability to buy a product or use a service (Wulf et al, 2005). Economic circumstances such as spendable income are greatly affecting the product choosing (Philip Kotler, et al. 1994).

2.11 Purchase Intention

Purchase intention can be understood readily as the likelihood that a consumer intends to purchase a product (Melissa D. Dodd, and Dustin; 2011). Purchase intention is a prediction about consumers' attitudes. It can affect the buying decision of customers in the future activity (Elbeck, 2008; Warshaw, 1980; Bagozzi, 1983). Thus, purchase intention can help to predict the purchase behavior of customers and to understand the market's situation. Furthermore, it considered as forecasting instrumentation market research (Lipman, 1988). Purchase intention and customer attitude affected by many factors. The company's product sales could determine on the market survey that based on customers' purchase intention.

In this study, the dependent variable is purchase intention; the independent variable consisted of attitude, subjective norm and perceived behavioral control have influenced the purchase intention; the independent variable attitude divided into three components as demographic, country-of origin & brand image and beliefs in product attribute; the independent variable perceived behavioral control divided into two components as controllability and self-efficacy.

2.12 Hypotheses

The following hypothesis are developed to analyse the dependency of purchase intention on demographic, attitude, subjective norm, perceived control, the dependency of attitude on Brand image, country of origin and beliefs in product attribute.

Hypothesis 1
Purchase intention is dependent on the demographic factors as gender, marital status, age, education level and income of the consumer.
Hypothesis 2
The subjective norm has a positive relationship on purchase intention
Hypothesis 3
The perceived behavioural control has positive relationship with purchase intention.
Hypothesis 4
The Country of origin has positive relationship with purchase attitude.
Hypothesis 5
The brand image has positive relationship with purchase attitude.
Hypothesis 6
The beliefs in product attribute have positive relationship with purchase attitude.
Hypothesis 7
The purchase attitude has positive relationship with purchase intention.

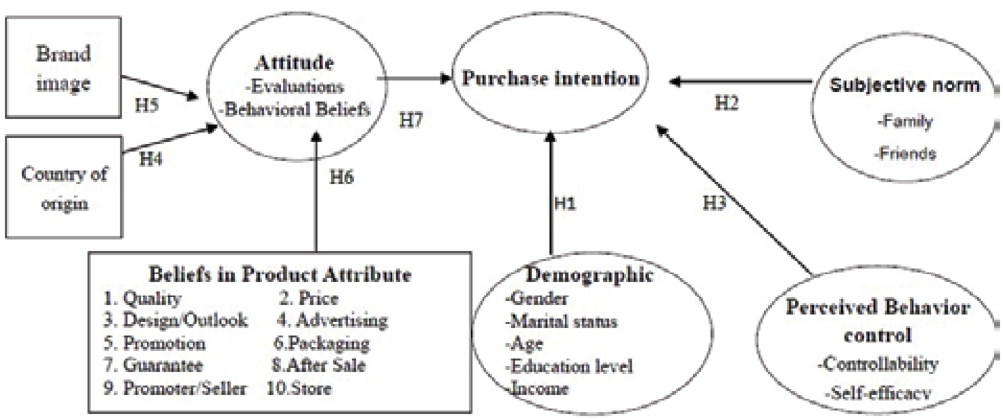

Figure 1 Conceptual Framework of the Research

3. Objectives and Benefits of the Research

The objectives of the research is to identify which factors influencing the Thai consumer's purchase intention when purchasing the electric cooking appliance. Secondary is to study the Thai consumer's purchase attitude about the product's country of origin and brand image.Third is to study the relationship between demography factors and purchase intention. The last is to identify the most important factors of beliefs in product attribute among purchase attitude.

The benefits of this research can be : To help the relative company or distributor to determine the factors influencing the purchase intention of the electric cooking appliance in Thailand, and making the follow marketing and promoting strategy; to serve as the valuable information about the local consumer's attitude and purchase intention to the relative electric manufacturer, that can help to choose the correct product line; also can use as an information resource for future relative studies or researches in Thailand.

4. Methodology

This research tends to describe the characteristics of a purchase intention between Thai customers and electric cooking appliance, and also imposes hypotheses to identify the influence of the extrinsic and intrinsic attributes of attitude towards purchasing intention.

This research uses the quantitative research methods, the information sources are collected by primary data according questionnaire survey. This research uses self-administered questionnaire containing closed-ended and scales to matrix question. The survey research step focuses on the collection of primary data via questionnaires. The collection of primary data will focus on attitude, subjective norm, perceived behavioral control, country of origin, brand image and beliefs in product attribute.

4.1 Population and sample

In this research, the consumers from two cities (Bangkok, Chiang Mai) were selected as target respondents. Areas to distributed questionnaires were being: BIG C supermarket of Bangkok and Chiang Mai, Tesco Lotus supermarket of Bangkok and Chiang Mai; the questionnaires were distributed in different supermarkets' branches. In addition, the internet collecting questionnaire method is adopted. To make sure the respondents can understand of all questionnaire items, all English questions were translated into Thai-language. When the questionnaire was distributed, all questions were explained to the participant if they have any confuse. According to the population's proportion of Bangkok and Chiang Mai, the survey sampled was set of 4:1 (Bangkok: Chiang Mai). At the end of the questionnaire collections, 282 questionnaires were collected at Bangkok, 66 internet questionnaires were responding from Bangkok's company staffs, and 85 questionnaires were collected from Chiang Mai. With filtered out some incomplete questionnaires, the total 400 questionnaires are retained.

5. Research Instrument

This research uses the quantitative research methods, the information sources are collected by primary data according questionnaire survey. All questions of the questionnaire were designed in English and Thai-language. This research aims to identify purchase intention of electric cooking appliance in Thailand, the questionnaire scales have used as the research instrument to measure the purchase intention, includes demographic, attitude, subjective norm, perceived behavioral control, country of origin and brand image influence, beliefs in a product attribute and purchase intention. The questionnaire designed was referenced from the related literature. In the result of pretest of the questionnaire according Cronbach's Alpha test, all the variables get the standardized definition higher than 0.70.

The reliability analysis and descriptive statistics are used to examine the data credibility and level of the agreement of each factor. The T-test is used to examine the demographic factors gender and marital status. The One-way ANOVA is used to analyse the demographic factors age, education level and income level; last the multiple regression is used to examine the relationship between dependent variable purchase intention and the independent variables as attitudes, subjective norm, perceived behavioral control, brand image, country of origin and belief in product attribute.

6. Data Analysis

After collecting and inputting data, the reliability analysis and descriptive statistics are used to examine the data credibility and level of the agreement of each factor. The T-test was used to examine the demographic factors gender and marital status; One-way ANOVA was used to analyse the demographic factors age, education level and income level; multiple regression was used to examine the relationship between dependent variable purchase intention and the independent variables as attitudes, subjective norm, perceived behavioral control, brand image, country of origin and belief in product attribute.

7. Result

7.1 Demographic Profile

The result can For the 400 respondents sampled collected in the study, gender male consists of 48.5% (n=194) and female consisted of 51.5%; respondents majority are at the age between twenty-six and thirty-five (44.0%); 64.0% are single which 36.0% (n=134) are married; most respondents at the education level are under junior college (40.0%), the most respondents have the income level between 20001-50000 THB (58.3%).

In the H1anaysis result, the gender, marital status and education level are dependent on purchase intention ($p<0.05$), the age and income level are independent on purchase intention ($p>0.05$).

Table1 Analysis of Influence between Demographic Characteristic and Customer's Purchase Intention by ANOVA and T-Test.

Demographic		**N**	**Mean**	**Level of agreement**	**p/ Sig. (2-tailed)**	**Relationship**
Gender	Male	194	3.34	Neutral	**0.000**	**Dependent**
	Female	206	4.17	Agree		
Age	Less than 25	60	3.97	Agree	0.45	Independent
	26-35	176	3.63	Agree		
	36-45	115	3.85	Agree		
	46 above	49	3.89	Agree		
Marital status	Single	256	3.71	Agree	**0.007**	**Dependent**
	Married	144	3.90	Agree		
Education level	Below junior college	160	3.52	Agree	**0.037**	**Dependent**
	Junior college	133	3.80	Agree		
	Bachelor degree	91	4.20	Agree		
	Master degree or higher	16	3.67	Agree		
Income	Less than 20000	131	3.61	Agree	0.059	Independent
	20001-50000	233	3.81	Agree		

	50001-100000	26	4.10	Agree		
	More than 100000	10	4.33	Strongly agree		

7.2 Regression Analysis

The agreement level of respondents on the attitude, perceived behavioral control, subject norm, country of origin, brand image, beliefs in product attribute and purchase intension are shown in the table 2. Sort from the hypothesis of respondent's level of agreement, all of the variables were described as agree.

Table2 Analysis of Influence Between Attitude, Perceived Behavioral Control, Subject Norm, Country of Origin, Brand Image, Beliefs in Product Attribute and the Customer's Purchase Intention by Regression Analysis.

	Mean	Standard deviation	Level of agreement	Sig.
Attitude	**3.90**	**0.646**	**Agree**	**.000**
-Behavioral Belief	3.85	0.598	Agree	**.000**
-Evaluation	3.96	0.582	Agree	**.002**
Subject Norm	**3.95**	**0.625**	**Agree**	**0.00**
-Family	3.99	0.679	Agree	**.005**
-Friends	3.92	0.647	Agree	**.025**
Perceived Behavioral Control	**3.71**	**0.610**	**Agree**	**.000**
-Self-Efficacy	3.76	0.664	Agree	**.000**
-Controllability	3.66	0.775	Agree	**.000**
Country of Origin	**3.68**	**0.781**	**Agree**	**.004**
Brand image	**3.84**	**0.676**	**Agree**	**.000**
Beliefs in Product Attribute	**3.78**	**0.537**	**Agree**	**.000**
-Quality	4.43	0.637	Strongly Agree	**.000**
-Price	4.08	0.739	Agree	**.037**
-Design/Outlook	3.78	0.906	Agree	**.021**
-Advertising	3.68	0.871	Agree	.996
-Promotion	3.89	0.881	Agree	.481
-Packing outlook	3.28	0.985	Neutral	.850
-Guarantee	4.06	0.862	Agree	.191
-After Sale Service	3.86	0.961	Agree	.509
-Promoter/Seller	3.18	0.970	Neutral	**.000**
-Place selling	3.61	0.910	Agree	.211
Purchase Intention	**3.77**	**0.678**	**Agree**	**-**

H2. For Subjective norm and purchase intention, According to the table 3, considered with R Square is 0.125. It means that the independent variable (evaluation and behavioral belief) can explain 12.5% of the change of the dependent variable (purchase intention). The two attributes as friend and family are having the strong significance level (Friend p=0.025, Family p=0. 05). Compare with these two attribute's B value, the Beta value of family is 0.219 when friend B value is 0.165. That means when family increases by 1 unit, the purchase intention value will increase by 0.219 units.

The same as the friends, when friend increases by 1 unit, the purchase intention value will increase by 0.165 units. For the Beta value, the family (β=0.209) is higher than friends (β=0.166), that means the compliance with family is more impact than the compliance with friends on purchase intention.

Table 3 Coefficient of Subjective Norm

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.257	.204		11.050	0.000
	Family	.219	.077	.209	2.827	.005
	Friends	.165	.074	.166	2.242	.025
significant level at .05, R Square=.125						

H3. For the perceived behavioral control, the result indicates the R Square value is 0.282. It means that the independent variable (self-efficacy and controllability) can explain 28.2% of the change of the dependent variable (purchase intention). Factor self-efficacy(P=0.00) and controllability(P=0.00) have the significance level which can stimulate positive consumers' purchase intentions. The value B of self-efficacy is 0.298, it means when self-efficacy increases by 1 unit, the purchase intention value will increase by 0.298 units. The value B of controllability is 0.292, when controllability increases by 1 unit, the purchase intention value will increase by 0.292 units. Furthers, the Controllability (β=0.344) is more impact than the Self-efficacy (β=0.292) on purchase intention.

Table 4 Coefficients of Perceived Behavioral Control

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.583	.181		8.744	.000
	PBCse	.298	.048	.292	6.191	.000
	PBCcon	.292	.041	.334	7.069	.000
significant level at .05, R Square=.282						

H4. The variable country of origin (β=0.143, P=0.04) have a significant relationship with the attitude. The R Square value is 0.020. It means that the independent variable (COO) can explain 2.0% of the change of the dependent variable (attitude). The value B of COO is 0.094, it means when COO increases by 1 unit, the attitude value will increase by 0.094 units.

H5. Brand image (β=0.237, P=0.00) have a significant relationship with the attitude. R Square value is 0.056. It means the independent variable (BI) can explain 5.6% of the change of the dependent variable (attitude). The value B of BI is 0.180, it means when BOI increases by 1 unit, the purchase intention value will increase by 0.180 units. The result of the study shows when compared to the factor country of origin (β=0. 143, P=0. 04), the brand image (β=0.237, P=0.00) has a stronger effect on the attitude.

Table 5 Coefficients of Country of Origin and Brand Image

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.558	.123		28.928	.000
	COO	.094	.033	.143	2.882	.004
significant level at .05, R Square=.020						
2	(Constant)	3.212	.144		22.260	.000
	BI	.180	.037	.237	4.872	.000
significant level at .05, R Square=.056						

H6. For the beliefs in product attribute, the R Square value is 0.210, means the independent variable (Beliefs in Product Attribute) can explain 28.2% of the change of the dependent variable (attitude). The result of study also points out the beliefs in product attribute (P=0.00) have a significant relationship with the attitude. In the factors of beliefs in product attribute, the quality (p=0.000), price (p=0.037), design (p=0.021) and promoter (p=0.000) have the significance relationship to the attitude. The value B of quality is 0.226, it means when quality increases by 1 unit, the attitude value will increase by 0.226 units. There are same as the other factors. The factor quality (β=0.280) is the most importance affecting factor while compare to other significance factors. And the other factor shows a low or limited relationship with the attitude.

Table 6 Coefficients of Beliefs in Product Attribute

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.562	.206		12.443	.000
	Quality	.226	.045	.280	5.070	.000
	Price	-.086	.041	-.124	-2.088	.037
	Design	.075	.033	.133	2.312	.021
	Advertising	.000	.039	.000	.006	.996
	Promotion	.029	.041	.049	.706	.481
	Packing	-.006	.033	-.012	-.190	.850
	Guarantee	-.052	.040	-.088	-1.310	.191
	After Sale	-.021	.031	-.039	-.662	.509
	Promoter	.148	.032	.279	4.658	.000
	Place	.039	.031	.068	1.252	.211
significant level at .05, R Square=.210						

H7. For the attitude, the R Square value is 0.134, means that the independent variable of attitude (behavioral belief and evaluation) can explain 13.4% of the change of the dependent variable (purchase intention). The study also found that the attribute evaluation (P=0.00) have a positive relationship to the purchase intention. The value B of behavioral beliefs is 0.278, it means when behavioral beliefs increases by 1 unit, the purchase intention value will increase by 0.278 units. The value B of evaluation is 0.202, when evaluation increases by 1 unit, the purchase intention value will increase by 0.202 units.The study also found the behavioral belief (β=0.245, P=0.000) has has a stronger effect than evaluations (β=0.173, P=0.002) to the purchase intention.

Table 7 Coefficients of Attitude

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.906	.243		7.848	.000
	ABB	.278	.062	.245	4.492	.000
	AE	.202	.064	.173	3.179	.002
significant level at .05, R Square=.134						

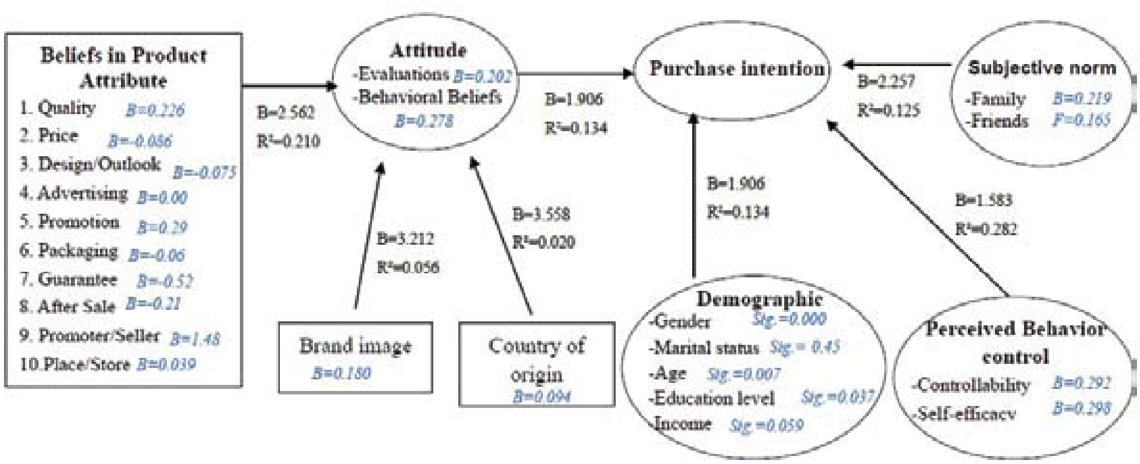

Figure 2 Final Model

8. Discussion

Although there are no former researches directly focus on the factors affecting purchase intention of electric cooking appliances in Thailand, this study still shows a same result with the former research which based on the TRA, TPB or relational variables research. The statistical results show that the demographic factors, it has a certain role in purchase intention on electronic cooking appliance in Thailand; the dependent variable purchase intention has the significant relationship with independent variables as attitudes, subjective norm, perceived behavioral control, while variable attitudes have the significant relationship with the brand image, country of origin and belief in product attribute.

For gender factors, females are more sensitive than male about the health effect produced when making purchasing decisions (Murat, 2011); the marital status has a significant effect to customer perceptions on purchase food products (Wen-Chi Huang, 2012); people living in urban areas and with a higher education are more concerned about healthy living products (Pollard, 2001). Subjective norm has a direct effect on actual online purchasing intention (Nordin, 2011), and has a significant effect on behavioral intention in the health products (Hillhouse et al., 2000); in the research, the family is more relational and more impact than the friend on purchase intention. For the perceived behavioral control, it can direct influence on intention (Humor Kang et al. 2006), and in the predicting test, structural equation modelling had confirmed the self-efficacy and controllability of perceived behavioral control (Terry and O'Leary, 1995). The product's country of origin plays a significant role in consumers' perceptions (Bilkey and Nes, 1982), and it is the important variable in understanding consumer and industrial buying behavior (Haakanson and Wootz 1975; Cattin et al 1982). For the brand image, the perceptions that consumers associate with brands are influence the attitude of the given product (Park and Srinivasan 1994), consumers may directly value specific types of brand image, benefiting brands that develop an association with such imagery (Sullivan 1998). The beliefs in product attribute have direct effect on the attitude of customers (Nuntasaree and Barry, 2008), consumers' attitudes of evaluating a product were based on its product attribute (Johri and Sahasakmontri, 1998). Finally, consumers' purchase intention is formed by their evaluation of products or attitude towards a brand combined with external stimulating factors, the purchase intention is determined by behavioral beliefs and evaluations (Trafimow, 2000)

9. Conclusion

This research investigated the relationship between between purchase intention and the demographic, perceived behavior the electric cooking appliance, and also to investigate the determinants as brand image, country of origin and beliefs in product attribute on their attitude. The quantitative research was adopted by using questionnaires distributing, data collecting from consumers in Big C and Tesco Lotus supermarket branches' electronic department area in Bangkok and Chiang Mai, and internet questionnaire collected. In the data collection, total of 433 questionnaires was collected but only 400 were considered for the study. According to the model of the study demographic factors, the factors gender, marital status and education level have the significant affecting on the purchase intention, and the factors age and income level are shown insignificant on the purchase intention. According to the regression analysis, the respondent's purchase intention of electronic cooking appliance is affected by the customer's attitude, subjective norm, perceived behavioural control. Furthermore, the attitude is affected by product's country of origin, brand image and beliefs of product attribute, which the brand image has the stronger affecting on the attitude when compare with country of origin; in the product attribute part, the customer believes the factors quality, price, design and promoter can significant affect their purchase attitude.

10. Summary for overall implication for business

As for recommendation, the research found independent variables such as gender, marital status, education levels, attitude, subjective norm and perceived behavioral have a significant effect to the purchase intention of the electronic cooking appliance, and factors country of origin, brand image and beliefs in product attribute are affected to attitude. When the appliance manufacturers to sell to focus on female consumers, married consumers and consumers received a Bachelor of Education level, they have a relatively high willingness to buy. When dealer promote the electronic cooking appliance, the concept of the product should be positioned as an easy-to-use, high-tech and high culinary experience. Thai produced products need to improve their brand image; if it is well-known foreign brands are need to make sure the brand image match of the consumers' aesthetic values. If is the foreign unknown brand are needed to emphasize to promote its country of origin or do the local branding promote. Product's quality, price, appearance and product sales staff can have a positive impact on consumer evaluation of products, if the dealer wants to strengthen their market competitiveness, need to make full consideration of the above factors.

In conclusion, when selling electric cooking appliance in Thailand, the main market target customers should be female, married people or consumers received higher education. The manufacturers should positioning the product concept as easy to use, high-tech and high cooking experience, and uses some celebrity whose good family image for advertising to raising the customer's attitude. The product should at a reasonably priced and easy functions, that to improve consumers' self-efficacy, and can enhance the consumer's willingness to buy and determination. Establish a brand image in line with the aesthetic values of the local consumer, are more effective than the establishment of a global standard brand image to enhance the consumer attitude of the product. Product's quality, price, appearance and product sales staff can have a positive impact on consumer evaluation of products, needed to be attention.

11. Future research implications

In the research also have many limitations, such as the research area, budget and researching duration. The data collection only focuses on Bangkok and Chiang Mai. The sampling groups only cover the common consumers. In the future research should cover other provinces in Thailand, to design more variations to measures such as the world of mouth, purchase behavioral, supplier choice, economic and politic environment or other related variables; also should take the depth interview to the manufacturer, distributor and consumer that can help to understand every parts of the Thailand market.

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Appendices

Questionnaire

Dear participants,

I am a student of the University of the Thai Chamber of Commerce, and researching a study on purchase intention of electronic cooking appliance in Thailand. It is an anonymous survey. This questionnaire consists seven parts with 42 statements, I hope you can participate the research. Please indicate your agreement level by marking a tick in the appropriate boxes. Your answers are very important to us and we sincerely appreciate of your support.
Please tick □ or √ in the box for the question below

Part 1 Demographic
1. Please indicate your gender
□ Male □ Female
2. Please indicate your age
□ Less than25 □ 26-35 □ 36-45 □ 46 and above
3. Please indicate your marital status
□ Single □ Married
4. Please indicate your highest level of education
□ Below College □ College Degree
□ Bachelor Degree □ Master Degree or above
5. Please indicate the your family average level income (per month)
□ Less than 20,000 Baht □ 20,001-50,000 Baht
□ 50,001-100,000 Baht □ More than 100,000 Baht

Part 2
How attitude influence your purchase of electronic cooking appliance
Behavioral beliefs (5 4 3 2 1)
6. If I buy an electronic cooking appliance, I feel I have been doing something positive for my family. □ □ □ □ □
7. If I buy an electronic cooking appliance, I feel I will more convenient in cooking.
□ □ □ □ □
8. If I buy an electronic cooking appliance, I feel I will cook better than before.
□ □ □ □ □
9. If I use the electronic cooking appliance, I feel my live be more modern.
□ □ □ □ □

Evaluation (5 4 3 2 1)
10. Doing something positive for my family is desirable to me. □ □ □ □ □
11. Get more convenience in cooking is desirable to me. □ □ □ □ □
12. Can cook better is desirable to me. □ □ □ □ □
13. Living modern is desirable to me. □ □ □ □ □

Part 3 How subjective norm influence your purchase electronic cooking appliance
Normative beliefs/Motivation to comply (5 4 3 2 1)
14. Most people who are important to me probably consider I purchase/use the electronic cooking appliance □ □ □ □ □
15. My family probably considers I purchase/use the electronic cooking appliance
□ □ □ □ □
16. Most people who are important to me probably using the electronic cooking appliance
□ □ □ □ □
17. Doing what my family hopes to do is important to me.
□ □ □ □ □

Part 4 How Perceived behavioral control influence your purchase electronic cooking appliance
Self-efficacy/ Controllability (5 4 3 2 1)
18. For me to use the electronic cooking appliance is very easy.
□ □ □ □ □
19. I have enough budgets to buy some electronic cooking appliance easily.
□ □ □ □ □
20. It is mostly up to me whether or not I purchase electronic cooking appliance.
□ □ □ □ □
21. I believe that I have full control of purchasing electronic cooking appliance.
□ □ □ □ □

Part 5 How County of Origin and brand image influence your purchase intention (5 4 3 2 1)
22. I find out a product's country of origin to determine the quality of the product.
□ □ □ □ □
23. When I am buying a new product, the country of origin is the first piece of information that I consider. □ □ □ □ □
24. I feel that it is important to look for a country of origin information when deciding which product to buy. □ □ □ □ □
25. I refuse to purchase a product without knowing its country of origin.
□ □ □ □ □
26. I find out a product's brand determine the quality of the product.
□ □ □ □ □
27. When I am buying a new product, the Brand is the first piece of information that I consider.
□ □ □ □ □
28. I feel that it is important to look for a famous brand when deciding which product to buy.
□ □ □ □ □
29. I refuse to purchase a product without knowing its Brand.
□ □ □ □ □

Part 6 How Beliefs in product attribute influence your purchase intention (5 4 3 2 1)
30. Product's quality □ □ □ □ □
31. Product's price □ □ □ □ □
32. Products' external design/Outlook □ □ □ □ □

33. Product’s advertising □ □ □ □ □
34. Product’s promotion □ □ □ □ □
35. Product’s packing outlook □ □ □ □ □
36. Product’s guarantee □ □ □ □ □
37. Product’s after sale service □ □ □ □ □
38. Promoter/Seller □ □ □ □ □
39. Product’s retail store/Place selling □ □ □ □ □

Part 7 Purchase intention (5 4 3 2 1)

40. I think electronic cooking appliances are worth to purchase
□ □ □ □ □

41. I consider purchasing the electronic cooking appliance because they are useful
□ □ □ □ □

42. I am willing to recommend my friend to purchase electronic cooking appliance
□ □ □ □ □

Thank you for your participation

The Economic Value of Money Market Funds in and around the Financial Crisis of 2008

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Abstract

MMFs have been a popular vehicle for both investors and borrowers. However, during the 2008 financial crisis, the Reserve Primary Money Fund was forced to drop their NAV below a dollar. The MMF business was highly stressed with many investors rushing to withdraw their investments. The situation stabilized when the U.S. Treasury stepped in and provided a guarantee to all investors in MMFs that the government would not allow the NAVs to fall below one dollar.

After the incident, there has been a wide ranging discussion within the investment community and its government regulators over the appropriate regulation of MMFs. During the recent debate, one topic that has not been extensively discussed is the economic value of the MMF business to the investors and borrowers in the industry. In this research, we estimate the demand for MMF funds by borrowers and the supply of MMFs funds by investors. Using concepts similar to the concept of consumers and producers surplus, we estimate the investors' and borrowers' surplus from the existence of the MMF business.

In the empirical section of the paper, we estimate the supply and demand curves in the MMF business. These estimates then allow us to estimate the investors' and borrowers' surplus. Some commentators have suggested that recent regulatory changes have resulted in an increased spread between borrowing and lending rates in the MMF business of 0.1 percent. Our model allows us to estimate the economic loss from 0.1 percent to 1 percent from the regulation. While the fact that the

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regulation causes economic loss does not mean that it should not be implemented, it is important for regulators to determine if the benefits of the increased regulatory burden and worth the costs incurred.

Keywords: money market funds, economic value, regulation, financial Crisis

1. Introduction to Money Market Mutual Funds

Money market mutual funds (MMFs) are also known as money funds or money market funds. MMFs are regulated by the Securities and Exchange Commission (SEC) in the United States, under Rule 2a-7. [3] Regulations adapted from the Investment Company Act Protection of 1940 allow MMFs to offer deposit like instruments that are traded at a fixed one dollar net asset value (NAV). The stable price per share is attractive to investors, and can be perceived as a cash equivalent or as an alternative to a bank's deposit accounts including checking accounts, saving accounts, money market deposit accounts and time deposit accounts, even though the MMFs are not insured by The Federal Deposit Insurance Corporation (FDIC). MMFs are required to restrict their asset holdings to short duration fixed income instruments with high credit quality. (Seligman 1983; Koppenhaver and Sapp 2005; Investment Company Institute 2009, 17).

The amount invested in MMFs[4] increases rapidly during the financial crisis of 2008 comparing to the total investment in all commercial banks in the United States[5]. By restricting assets to instruments of short duration and high credit quality, the MMFs typically offer a very high probability of not "breaking the buck." This feature is especially difference to investments in equities and long term bonds where losses can exceed 10 percent in a single day. MMFs also offer advantages to borrowers since they provide a broad and deep source of funds during periods in which bank lending may be limited.

Since MMFs operate as an intermediary between investors and borrowers, those funds are very useful especially to small investors and mid-size borrowers, who have limitations on how to invest in multiple markets and in large quantities. The models used in this study are based on the literature of the demand and supply for MMFs and an actual model of the investors' and borrowers' surplus in the MMFs market.

The study illustrates that the supply curves are considered "elastic" or changes in the yields of MMFs have a relatively large effect on the quantity of the assets that the investors want to invest. Whereas the demand curves are considered "inelastic" or change in the yields of MMFs have a relatively small effect on the quantity of the assets that borrowers demanded. With same change in yield, the

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[3] Corresponding to references in the bibliography. Swirsky (2008) and The University of Cincinnati College of Law (n.d.) provide an excellent information about Rule 2a-7.

[4] Total assets investments in MMFs are total share class investments in billions of dollars. Data is from Crane, Money Fund Intelligence.

[5] Total investments at all commercial banks are collected from data For further information of, please refer to the Board of Federal Reserve System's H.8 release, http://research.stlouisfed.org/ fred2/series/INVEST?cid=99.

change in asset demand is less than the change in assets supplied. It can also be hypothesized that the borrower has less power in driving the yields of the MMFs, since they have options only related to funds, and are restricted more so than investors.

2. The Mechanism of Money Market Mutual Funds

Not only MMFs are the instruments that attract lenders who are after liquidity, and a safe source of income, but also they are the instruments that attract borrowers who need short-term cash by selling securities or borrow funds. In this sense, MMFs are described as a repository for short-term funds.

In order to find the value of the MMFs for both borrowers and investors, the calculation of the equilibrium value for demand and supply curve for MMFs is required. The demand and supply curves are identified from tracing factors that shift one curve without manipulating the other.

Lam et al. (1989), Dow and Elmendorf (1998), Farinella and Koch (1999) and Ball (2001, 2002) suggested that the amount of MMFs that lenders supply is negatively related to the yield of saving deposits and the yield of government debts such as three month United States Treasury bills. Therefore, the supply function can be simply described as a function of the difference between the yield of the MMFs and the yield of three month United States Treasury bills. An increase in the yield of the three-month Treasury bills would cause investors to pull their money out of the money market mutual fund, and place their money into an alternative investment such as the Treasury bills. This would result in a smaller quantity of funds and a higher yield. In order to enumerate the higher yield, one would have to determine the slope of the supply curve.

MMFs allow borrowers including private companies, governments, government agencies, depository institutions, and banks to acquire temporary cash by issuing short-term debts with the maturity less than a year including commercial paper, Treasury bills, certificates of deposit, and repurchase agreements. According to Copeland and Rappaport (2009), today MMFs are riskier with the higher yields than that in the previous MMFs. Municipalities who have issued debt instruments have relatively higher risk to those securities they hold. However, borrowing through MMFs is still considered cheaper than issuing similar debt with bank guarantees. The interest rates that banks charge can be in the range of 0.1 percent to more than 2 percent, or they can even be higher than the overall debt offering.

The yield of AAA bonds was chosen as the relative interest rate used in the demand function in this study. The demand function can therefore be explained as a difference between the yield of the money market mutual fund and the yield of AAA bonds. If we were to see an increase in bond rates, this would stimulate the borrowers to issue their owned bonds, commercial paper, or any short term instrument as their source of funds, hence the increase in demand for MMFs. This in turn would cause an increase in yield, as well as an increase in quantity. In order to enumerate the higher yield, one would have to determine the slope of the demand curve.

In determining the simple model for money market demand and supply curves, one can think of the event that an investor supplies his money to trade in the MMFs as the event that he expects to gain the interest from the borrowers such as sophisticated hedge funds and banks as in a standard matching model. In order to identify the demand and supply curves, some shift factors for demand should influence demand without influencing supply, and some shift factors for supply should influence supply without influencing demand. Since there are many shift factors that influence the demand and supply curves, the objective of this study is not to obtain the best fit. It is complicated to predict the numerical value of assets being invested in MMFs because of a large number of factors that collectively affect these assets. However, these other factors may be difficult to predict or identify independently. In addition, there are a number of possible errors involved in gathering and computing these shift factors. The contribution of this study is to estimate the main value of the MMFs. Therefore, after reviewing the previous research, we assume that money market mutual fund investors allocate their money into a three-month United States Treasury bills as an alternative method of investment, which directly influences the supply of MMFs. In addition, the borrowers are assumed to issue AAA bonds as an alternative source of funds, which directly influences the demand for MMFs.

The exponential regression model or the log-linear model is used in supply function and demand function to measure elasticity of the total amount of assets invested in MMFs with respect to the yield different between MMFs and three-month Treasury bills in supply function and the yield differential between AAA bonds and MMFs in demand function, respectively. The elasticity is the percentage change in the total amount of assets invested in money market mutual fund for a small percentage change in these independent variables in supply function and demand function, respectively.

2.1 Supply Function:

$$Q^s = K_s \exp^{(\beta_0 + \beta_1 (MMF_s - TB3))} \qquad (1)$$

where,

Q^s represents the total amount of assets invested in MMFs in supply function,
q_s represents the natural log of the total amount of assets invested in MMFs in supply function,
K_s represents the net worth of investors. It is a constant term in supply function,
$\beta_1 > 0$ and represents the constant of the supply function,
β_1 represents the coefficient of the supply function,
MMF_s represents the annualized 7-day yields of Crane 100 Index of MMF,
TB3 represents three-month Treasury bills.

From equation (1), we take the natural logarithm of both sides of the equation, as well as denoting the entire equation by the symbol q_s, giving us

$$\ln(Q^s) = q_s = (\ln(K_s) + \beta_0) + \beta_1(MMF_s - TB3)$$

Since $\ln(K_s)$ is a constant, we can rewrite that

$$\ln(Q^s) = q_s = \beta_{0k} + \beta_1(MMF_s - TB3) \qquad (2)$$

where,

$$\beta_{0k} = \ln(K_s) + \beta_0$$

2.2 Demand Function:

$$Q^d = K_d \exp^{(\gamma_0 + \gamma_1 (MMF_d - AAA))} \tag{3}$$

As we can see from Figure 6.2 that γ_1 is less than zero, we want to get the positive γ_1 for simple calculation. Therefore, we can rewrite the equation (3) as;

$$Q^d = K_d \exp^{(\gamma_0 + \gamma_1 (AAA - MMF_d))} \tag{4}$$

where,

Q^d represents the total amount of assets invested in MMFs in demand function,
q_d represents the natural log of the total amount of assets invested in MMFs in demand function,
K_d represents the net worth of the borrowers. It is a constant term in demand function,
$\gamma_1 > 0$ and represents the constant of the demand function,
γ_1 represents the coefficient of the demand function,
MMF_d represents the annualized 7-day yields of Crane 100 Index of MMFs,
AAA represents three-month Moody's Seasoned Aaa Corporate Bond Yield.

From equation (4), we take the natural logarithm of both sides, as well as denoting the entire equation to be represented by a single variable q_d, giving us

$$\ln(Q^d) = q_d = (\ln(k_d) + \gamma_0) + \gamma_1 (AAA - MMF_d)$$

Since $\ln(K_d)$ is a constant, we can rewrite that

$$\ln(Q^d) = q_d = \gamma_{0k} + \gamma_1 (AAA - MMF_d) \tag{5}$$

where,

$$\gamma_{0k} = \ln(K_d) + \gamma_0$$

In equation (1) and (2), there are two unknowns; β_{0k} and β_1 . Moreover, there are two unknowns; γ_{0k} and γ_1 in equation (4) and (5).

The equilibrium value of MMFs occurs when investors are willing to put their assets into MMFs, which is equal to a monetary value that money borrowers are required to have at a certain yield. This yield is called the equilibrium yield. It will tend not to change unless demand or supply of the MMFs change. When the yield is above the equilibrium point there is a surplus of supply as supply exceeds demand. In other words, the demand and supply are imbalanced resulting in disequilibrium and generating oversupply. Therefore, the equilibrium function can be written as;

2.3 Equilibrium function:

In terms of quantity invested in the MMFs,

$$\ln(Q^{s}) = q_{s} = \ln(Q^{d}) = q_{d} = \ln(Q^{*}) = q^{*} \qquad (6)$$

In terms of yields,

$$MMF_{s}=MMF_{d}=MMF^{*} \qquad (7)$$

where,

Q^s and Q^d represent the total amount of assets invested in MMFs in supply function and demand function respectively,
q_s and q_d represent the natural log of the total amount of assets invested in MMFs in supply function and demand function respectively,
Q^* represents the total amount of assets invested in MMFs in the equilibrium function,
q^* represents the natural log of the total amount of assets invested in MMFs in the equilibrium function,
MMF_s and MMF_d represent the yield of MMFs in supply function and demand function respectively,
MMF* represents the yield of MMFs in the equilibrium function.

Whereas the yield is below the equilibrium point there is a shortage in supply as demand exceeds supply. In other words, there are out of balance between demand and supply, which also cause the disequilibrium and generate over demand or shortages supply. When there is disequilibrium in the market, the yield and the amount of assets invested in MMFs will be adjusted back to the equilibrium value so that both investors and borrowers agree. The area under the horizontal line of the equilibrium yield and above the supply curve is called supply surplus as illustrated in Figure 1. Supply surplus is the difference between what investors actually receive at the certain interest rate or yield that they invest in the MMFs and what they are willing to invest in these funds.

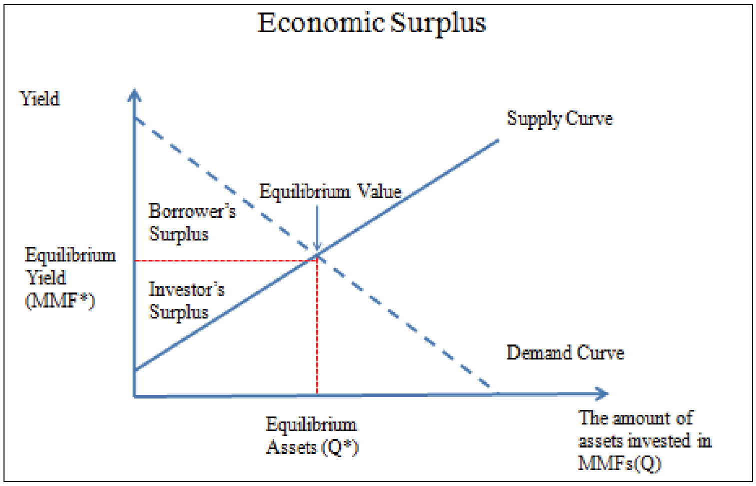

Figure 1 Economic Surplus

3. The Economic Equilibrium Model of MMFs

As mentioned above, shift factors for both demand and supply are used to identify the supply and demand curves. The demand shift factors should influence demand without influencing supply and the supply shift factors influence supply without influencing demand. We assume that MMFs investors will allocate their money into a three-month United States Treasury bills as an alternative method of investment, and that AAA bonds directly influence the demand of MMFs as an alternative source of funds.

Taking the first two functions into account, one can then use this to determine when the equilibrium in the market place occurs. This occurs when the supply is equal to the demand, and in equating the three equations (equation (2); $q_s = \beta_{0k} + \beta_1(MMF_s - TB3)$, equation (4); $q_d = \gamma_{0k} + \gamma_1(AAA - MMF_d)$ and equation (6); $q_s = q_d$), we can derive the equation as follows:

$$\beta_{0k} + \beta_1(MMF^* - TB3) = \gamma_{0k} + \gamma_1(AAA - MMF^*) \qquad (8)$$

The next step is to rearrange MMF* to be on the same side then we have;

$$MMF^* = \frac{\gamma_{0k} - \beta_{0k}}{\beta_1 + \gamma_1} + \frac{\beta_1}{\beta_1 + \gamma_1} TB3 + \frac{\gamma_1}{\beta_1 + \gamma_1} AAA \qquad (9)$$

The equilibrium function (8) shows us that both the Treasury bills and the AAA bonds affect the yield of the MMFs. From the equilibrium function, if the supply curve is infinitely elastic $(\beta_1 \to \infty)$, then the equilibrium yield will be equal to the three month Treasury bill rate, and if the demand curve is infinitely elastic $(\gamma_1 \rightarrow \infty)$, then the equilibrium yield will be equal to the AAA bond yield. The quantities of assets in the MMFs would then be determined by the demand and supply curve respectively. In addition, the sum of the coefficients of the explanatory variables in equilibrium function equal one.

Since the sum of the two coefficients equal one,

$$\frac{\beta_1}{\beta_1+\gamma_1}+\frac{\gamma_1}{\beta_1+\gamma_1}=1 \tag{10}$$

Therefore,

$\frac{\beta_1}{\beta_1+\gamma_1}TB3+\frac{\gamma_1}{\beta_1+\gamma_1}AAA$ can be rearranged as;

$$\frac{\gamma_1}{\beta_1+\gamma_1}(AAA-TB3)+TB3 \tag{11}$$

Replace (10) in equation (8), we have the equilibrium function in term of the yield of the MMFs as;

$$MMF^*-TB3=\frac{\gamma_{0k}-\beta_{0k}}{\beta_1+\gamma_1}+\frac{\gamma_1}{\beta_1+\gamma_1}(AAA-TB3) \tag{12}$$

To identify the equilibrium function in term of the amount of assets invested in the MMFs, we employ equation (6); $MMF_s = MMF_d = MMF^*$

From equation (2); $\ln(Q^s)=\beta_{0k}+\beta_1(MMF_s-TB3)$, we can rearrange the equation in term of MMFs that;

$$MMF_s=\left(\frac{\ln(Q^s)-\beta_{0k}}{\beta_1}\right)+TB3 \tag{13}$$

And from equation (5); $\ln(Q^d)=\gamma_{0k}+\gamma_1(AAA-MMF_d)$, we can rearrange the equation in term of MMFs that;

$$MMF_d=-\left(\frac{\ln(Q^d)-\gamma_{0k}}{\gamma_1}\right)+AAA \tag{14}$$

Since we know that MMF_s=MMF_d=MMF*, therefore;

$$\left(\frac{\ln(Q^*) - \beta_{0k}}{\beta_1}\right) + TB3 = -\left(\frac{\ln(Q^*) - \gamma_{0k}}{\gamma_1}\right) + AAA \tag{15}$$

From equation (15), we can rearrange $\ln(Q^*)$ or q^* in one side, then we have

$$\ln(Q^*) = q^* = \frac{\beta_1\gamma_{0k} + \beta_{0k}\gamma_1}{\beta_1 + \gamma_1} + \frac{\beta_1\gamma_1}{\beta_1 + \gamma_1}(AAA - TB3) \tag{16}$$

From the equation (16)[6], the total amount of assets invested in MMFs at equilibrium depends upon the different between the yield of AAA bonds and the yield of three-month Treasury bills. If there is an increase in the yield of AAA bonds, the borrowers assume to shift their cost of funds to issue money market products. Similarity, if there is a decrease in the yield of three-month Treasury bills, investors assume to shift their funds to invest in MMFs.

4. Data

The following analysis is based on monthly historical data over the crisis period from April 2006 to December 2010[7], containing fifty seven monthly observations, in order for us to investigate the equilibrium condition. The MMF yield is represented by the Crane 100 money fund index yield, which are the average returns for 100 largest taxable MMFs including both retail and institutional funds.[8] TB3 and AAA yields are taken from the Fred database distributed by the Federal Reserve Bank of St. Louis, which are defined as TB3MS or Three-Month Treasury Bill: Secondary Market Rate and AAA or Moody's Seasoned Aaa Corporate Bond Yield, respectively.[9] The fifty seven monthly observations are illustrated in Figure 2.

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[6] From equation (16), we can get the total amount of assets invested in MMFs at equilibrium by taking exponential of the logarithmic function.
Therefore,
$$Q^* = \exp(q^*) = \exp\left[\frac{\beta_1\gamma_{0k} + \beta_{0k}\gamma_1}{\beta_1 + \gamma_1} + \frac{\beta_1\gamma_1}{\beta_1 + \gamma_1}(AAA - TB3)\right]$$

[7] Crane Data started to collect MMF data since April 2006.

[8] See Appendix B: Crane 100 Money Fund Index for more information.

[9] Data are available at Federal Reserve Economic Data (FRED) from Federal Reserve Bank of St. Louis.
http://research.stlouisfed.org/fred2/categories/22

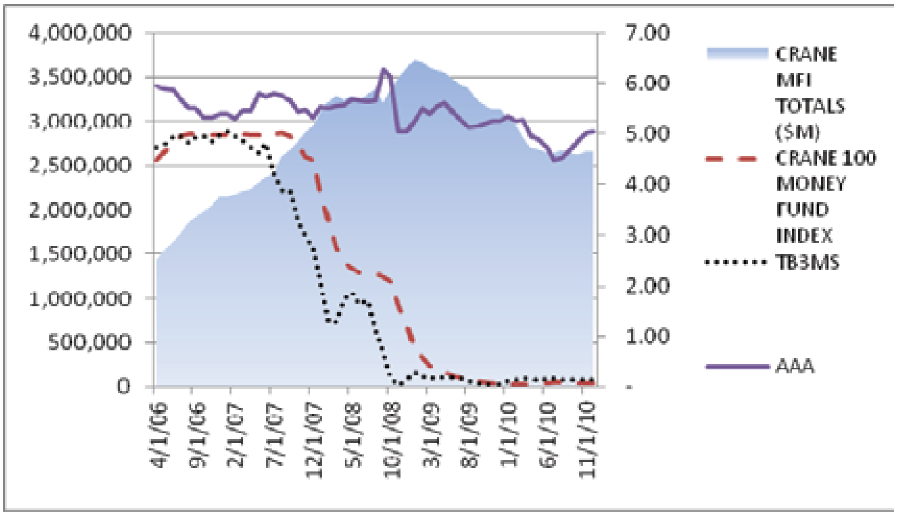

Figure 2 Observation Periods

Source: Crane Database and Federal Reserve Economic Data (FRED)

5. Regression Analysis

To find the MMF yield at equilibrium or MMF* from equation (12);

$$MMF^* - TB3 = \frac{\gamma_{0k} - \beta_{0k}}{\beta_1 + \gamma_1} + \frac{\gamma_1}{\beta_1 + \gamma_1}(AAA - TB3)$$

Let

$$MMF^* - TB3 = \delta_0 + \delta_1 (AAA - TB3) \qquad (17)$$

where,

$$\delta_0 = \frac{\gamma_{0k} - \beta_{0k}}{\beta_1 + \gamma_1}, \text{ and } \delta_1 = \frac{\gamma_1}{\beta_1 + \gamma_1}$$

A regression was run on equation (17) from April 2006 to December 2010. The result is shown below.

$$MMF^* - TB3 = 0.3119 + 0.0321 * (AAA - TB3) \qquad (18)$$

t-statistics (1.7581) (0.7105)

where,

Standard Error = 0.6441, r^2 = 0.0091.

From equation (18), we can rewrite the model after moving TB3 to the right side as following;

MMF* = 0.3119+0.9679TB3 + 0.0321AAA (19)

The results exhibit that MMF yields are influenced by both supply and demand. In particular, an increase in AAA bond yields will encourage borrowers to switch their short term demand for funds into money market instruments; this will cause the yield on MMF's to rise over the yield on Treasury bills. The coefficient of TB3 is higher than that of AAA. This can be explained that investors are more interest rate sensitive than the borrowers or that Treasury bills are a closer substitute than long term AAA bonds.

The high coefficient close to one of three-month Treasury bills represents the close substitute of MMFs to three-month Treasury bills. When the yields of the three-month Treasury bills increase in value, the corresponding yields of the MMFs also increase in value. Therefore, this allows for more money to be situated within MMFs. In contrast however, when the yields of AAA-bonds increase, the yields of MMFs increase only slightly, which thereby indicates that MMFs are within an investors market. In essence, the borrower has much less power in driving the yields of the MMFs.

Equation (17) contain 4 unknown parameters. In order to find the value in the supply function and demand function, we need to find the value of β_{0k} , β_1, γ_{0k} , and γ_1. With the fixed coefficient (β_1 and γ_1), the constant terms (β_{0k} and γ_{0k}) in supply function and demand function are allowed to change through time. This technique is to let the constant term consist of the error term. An equation is needed. From equation (16); $\ln(Q^*) = q^* = \frac{\beta_1\gamma_{0k} + \beta_{0k}\gamma_1}{\beta_1 + \gamma_1} + \frac{\beta_1\gamma_1}{\beta_1 + \gamma_1}(AAA - TB3)$

Let

$$\ln(Q^*) = \phi_0 + \phi_1(AAA - TB3) \tag{20}$$

Where,

$$\phi_0 = \frac{\beta_1\gamma_0 + \beta_0\gamma_1}{\beta_1 + \gamma_1}, \text{ and } \phi_1 = \frac{\beta_1\gamma_1}{\beta_1 + \gamma_1}$$

A regression was run using the same data. The result is shown below.

$$\ln(Q^*) = 14.4661 + 0.1023 * (AAA - TB3) \tag{21}$$

(0.0370) (0.0094)

[390.9922] [10.8631]

where,

Standard Error = 0.1343, r^2 = 0.6821.

The result of the regression is significant. The r-square, together with the t-statistics of both constant and the coefficient, is significantly high.

With 4 equations; derived from equations (18), and (21), 4 unknowns can be solved.

First, plug in $\delta_1 = \frac{\gamma_1}{\beta_1 + \gamma_1} = 0.0321$ from equation (19) into equation (21).

$$\phi_1 = \frac{\beta_1 \gamma_1}{\beta_1 + \gamma_1} = \beta_1 \delta_1 = \beta_1 * 0.0321 = 0.1023$$

Therefore $\beta_1 = \frac{0.1023}{0.0321} = 3.1883$

Since $\delta_1 = \frac{\gamma_1}{\beta_1 + \gamma_1} = 0.0321$, then $\gamma_1 = (\beta_1 + \gamma_1) * 0.0321$,

Move γ_1 to the left and plug in β_1, then we have

$$\gamma_1 = \frac{\beta_1 * 0.0321}{0.9679} = \frac{3.1883 * 0.0321}{0.9679} = 0.1057$$

With the fixed coefficient, the constant terms, which consist of the error term in supply function and demand function, are allowed to change through time. The next step is to solve for β_{0k} and γ_{0k} in each period across time. From equation (2); $\ln(Q^s) = q_s = \beta_{0k} + \beta_1(MMF - TB3)$, plug in all data in each period, we can solve for β_{0k} across time that;

$$\beta_{0k\,t} = q_{s_t} - \beta_1(MMF_t - TB3_t) \qquad (22)$$

And from equation (4); $\ln(Q^d) = q_d = \gamma_{0k} + \gamma_1(AAA - MMF)$, plug in all data in each period, we can solve for γ_{0k} across time that;

$$\gamma_{0k_t} = q_{d_t} - \gamma_1(AAA_t - MMF_t) \qquad (23)$$

The average MMF yield at equilibrium or MMF* through the period from April 2006 to December 2010 is equal to 2.37 percent and the average assets invested in MMFs at equilibrium or Q* is equal to \$2,796,891 million dollars. The demand curve and supply curve using the value of $\beta_1 = 3.1883$, and $\gamma_1 = 0.1057$, and the average of $\beta_{0k_t} = 13.4716$, $\gamma_{0k_t} = 14.4991$ are illustrated in Figure 3.

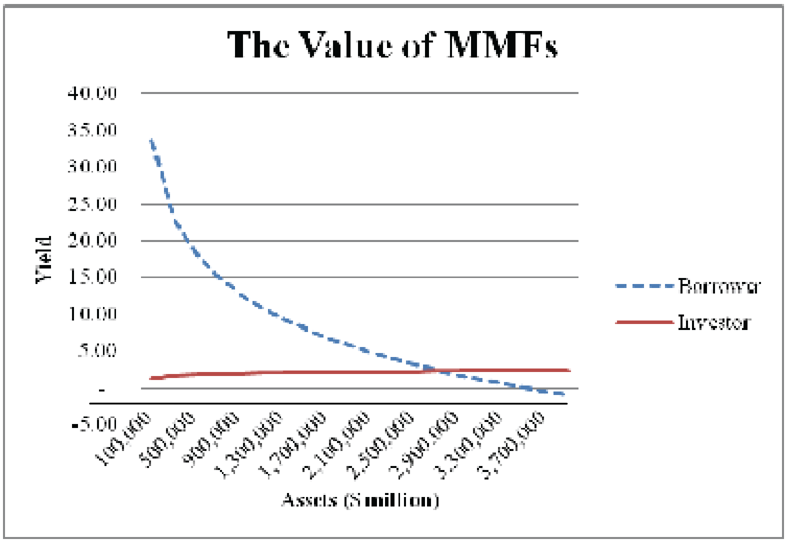

Figure 3 The Equilibrium in the MMFs

Source: Crane Database and Federal Reserve Economic Data (FRED)

The above figure shows that the demand curve is steeper or less elastic than the supply curve. In other word, with the same change in yield, the change in assets demanded when TB3 is constant is less than the change in assets supplied, when AAA is constant. Generally the demand for goods and services for which no substitutes exist are inelastic. This can therefore be explained by that fact that borrowers have options pertaining to their source of funds, and are more restricted than that of their investors.

During the financial crisis between the dates of July 2007 until December 2008 it was evident that there was an unusual increasing gap in yield between MMF and TB3. (See Figure 4.). The increase in these spreads raised the cost of borrowing and initiated the Temporary Guarantee Program regulated by Federal Reserve. At the same time, the spread between the corporate AAA bonds and the TB3 was increasing tremendously through time. Issuing AAA bonds is considered very expensive compared to issuing short-term instruments, because investors demand higher interest rates to compensate for the higher default risks. At the same time, the financial crisis caused a number of investors to shift their assets to safe and liquid products. As a result the assets in MMFs increased by \$800 billion from the end of July 2007 through August 2008.

Taylor et al. (2008) explained that the yield difference that increased counterparty risk between banks contributed to the rise in spreads and found no empirical evidence that the new term auction facility (TAF) had reduced spreads.

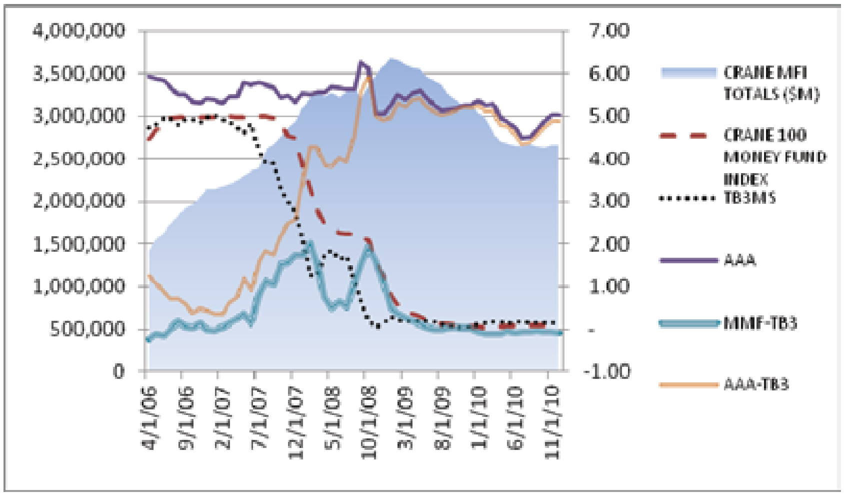

Figure 4 Yield Difference

Source: Crane Database and Federal Reserve Economic Data (FRED)

6. Economics of Surplus

6.1 Investor Surplus

Investor surplus is the difference between the yield that investors, both retail investors and institutional investors, are willing to accept to invest in the MMFs. It is the yield that investor are willing to receives, which is the equilibrium market yield for each dollar invested.

From the supply function in equation (2); $\ln(Q^s) = \beta_{0k} + \beta_1(MMF - TB3)$ and then rearrange function in equation (13); $MMF^S = \left(\frac{\ln(Q^S) - \beta_{0k}}{\beta_1}\right) + TB3$. We integrate the supply function from Q0 to Q* on both sides as,

$$\int_{Q0}^{Q*} MMF^s = \int_{Q0}^{Q*}\left(\frac{\ln(Q^S) - \beta_{0k}}{\beta_1}\right) + \int_{Q0}^{Q*} TB3 \tag{24}$$

And solve for the equation (See Appendix A)

$$\int_{Q0}^{Q*} MMF^s = \frac{1}{\beta_1}\left[Q\ln Q - Q\right]_{Q0}^{Q*} - \frac{\beta_0}{\beta_1} Q\Big|_{Q0}^{Q*} + TB3 * Q\Big|_{Q0}^{Q*} \tag{25}$$

Therefore, the supply surplus = $MMF^*(Q^* - Q^0) - \int_{Q0}^{Q*} MMF^S$ (26)

6.2 Borrower Surplus

Borrower surplus is the difference between the yield that borrowers such as governments, banks, conduits, and corporations are willing to pay for the source of funds.
It is the yield that borrowers are willing to pay, which is the market yield or the yield at the equilibrium for each dollar.

From the demand function in equation (4); $\ln(Q^d) = \gamma_{0k} + \gamma_1(AAA - MMF)$

And then rearrange function in equation (14); $MMF^D = -\left(\frac{\ln(Q^D) - \gamma_{0k}}{\gamma_1}\right) + AAA$,

Then we integrate the demand function from Q0 to Q* on both sides as,

$$\int_{Q0}^{Q*} MMF^D = -\int_{Q0}^{Q*}\left(\frac{\ln(Q^D) - \gamma_{0k}}{\gamma_1}\right) + \int_{Q0}^{Q*} AAA \quad (27)$$

And solve for the equation

$$\int_{Q0}^{Q*} MMF^D = -\frac{1}{\gamma_1}\left[Q\ln Q - Q\right]\Big|_{Q0}^{Q*} + \frac{\gamma_{0k}}{\gamma_1} Q\Big|_{Q0}^{Q*} + AAA * Q\Big|_{Q0}^{Q*} \quad (28)$$

Therefore, the borrower surplus = $\int_{Q0}^{Q*} MMF^D - MMF^*(Q^* - Q^0)$ (29)

6.3 The Numerical Value of MMF's Surplus

If there is no government intervention, borrowers and investors can match their requirement at the market equilibrium. Both borrowers and investors gain benefit from free trade. In each trade, borrowers receive demand surplus, and investors receive supply surplus. The value of the MMFs can be estimated based upon the total value of the surplus of the borrower's demand and the surplus of the investor's supply.

In this study, we calculate the average numerical value of MMFs and the average parameters from investors' supply function in equation (2); $\ln(Q_t^s) = q_{st} = \beta_{0kt} + \beta_{1t}(MMF_{st} - TB3_t)$ and borrowers' demand function in equation (5); $\ln(Q_t^d) = q_{d\,t} = \gamma_{0k\,t} + \gamma_{1_t}(AAA_t - MMF_{d\,t})$. The results from the calculations are shown in Table 1.

Table 1 The Average Value of Assets Invested in Mmfs and Annualized Yields at Equilibrium in Each Period

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
Q* (million dollars)	2,796,891	1,809,657	2,472,670	3,304,044	3,421,163	2,730,110
MMF* (%)	2.37	4.87	4.89	2.38	0.28	0.07
TB3 (%)	1.95	4.88	4.17	1.15	0.14	0.14
AAA (%)	5.39	5.60	5.55	5.61	5.33	4.93
MMF-TB3 (%)	0.42	-0.01	0.72	1.23	0.13	-0.07
AAA-MMF (%)	3.02	0.74	0.66	3.23	5.06	4.85

Source: Crane Database and Federal Reserve Economic Data (FRED)

In Table 1, the average assets invested in the MMFs at equilibrium are close to three trillion dollars at 2.37 percent average yields at equilibrium between April 2006 and December 2010. The average spread between the yields of MMFs and those of three-month Treasury bills is at 0.42 percent. The average spread between the yields of AAA bonds and those of MMFs is 3.02 percent. During the market crash including the meltdown of Reserve Primary Fund in 2008, the average amount of assets invested in the MMFs at equilibrium rose up to over three trillion dollars. As the governments restrict the short-term interest rates during the crisis, the spread between the yields of the MMFs and the three-month Treasury bills became wider. The average spread between the MMFs and three-month Treasury bills increased dramatically from -0.01 percent in 2006 to 1.23 percent in 2008. However, the spread reduces to -0.07 percent after the crisis in 2010. In addition, the average spread between the yields of AAA bonds and those of the MMFs increased from 0.74 percent in 2006 to 3.23 percent during the crisis in 2008. The then spread continued to rise to 5.06 percent and 4.85 percent in 2009 and 2010 respectively.

The average amount of assets in the MMFs at equilibrium increased during the 2008-2009 crisis when the yields at equilibrium reduced from 4.89 percent in 2007 to 2.38 percent and 0.28 percent in 2008 and 2009, respectively. However, when we take a closer look to the amount of assets in the MMFs at equilibrium in 2009, the equilibrium amount of assets invested in MMFs at the beginning of the year is approximately $3.7 trillion dollars while those assets at the end of the year is only $3.1 trillion dollars. This can be explained that investors withdrew about $553 billion dollars out of money market mutual fund in 2009 because of the low interest rates that are close to zero.

In Table 2, the average value of the constant terms β_{0k} and γ_{0k} from the supply function in equation (2); $\ln(Q^s) = \beta_{0k} + \beta_1(MMF - TB3)$ and the demand function in equation (5); $\ln(Q^d) = \gamma_{0k} + \gamma_1(AAA - MMF)$ are presented.

Table 2 The Average Value of the Constant Terms in Supply Function and Demand Function, When the Slope β_1 is Fixed at 1.2448 and the Slope γ_1 is Fixed at 0.1304

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
β_{0k}	13.47	14.44	12.41	11.08	14.62	15.05
γ_{0k}	14.50	14.32	14.65	14.67	14.51	14.31

In Table 3, the borrower surplus, investor surplus and the value of MMFs are determined in terms of million dollars. Before the crisis in 2006 and 2007, the borrower surplus, are approximately $171 billion dollars and $233 billion dollars, respectively. The investor surplus are approximately $5.6 billion dollars and 7.8 billion dollars in 2006 and 2007, respectively As the government restriction policy on short-term interest rates during the crisis led to a wide spread as shown in Table 1, the value of borrower surplus and investor surplus increased dramatically. In 2008, the borrower surplus and investor surplus increase to $312 billion dollars and $10.4 billion dollars, respectively. Consequently, the borrower surplus, are approximately $324 billion dollars during 2009. The surplus value of the MMFs increases to $10.7 billion dollars during 2009.

In 2010, the borrower surplus decreased to approximately $258 billion dollars and the investor surplus decreased to $8.6 billion dollars. The results confirm with the result in Table 1 that the yields of MMFs and the spread between those yields and the three-month Treasury bills had dropped dramatically right after the crisis, while the spread between the AAA-bonds and those yields increased dramatically due to financial panic and the borrowers' ability to restore the flow of credit. There was a fear in investors where they felt that corporate borrowers would have to declare bankruptcy due to an inability to roll over the commercial paper that they had placed their money into their MMFs.

Table 3 Borrower Surplus, Investor Surplus and the Value of MMFs (Million Dollars)

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
Borrower Surplus	264,504	171,140	233,842	312,465	323,541	258,188
Investor Surplus	8,772	5,676	7,755	10,363	10,730	8,563
Value of the MMFs	273,276	176,816	241,597	322,829	334,272	266,751

6.4 The Yield Elasticity of Investors and Borrowers

In order to explain the sensitivity of the amount of MMFs assets holding to change in its yield, one can compare the yield elasticity of investors and borrowers in each period. In other words, the elasticity of Q with respect to MMF is the change in Q when MMF increases by one percent (Wooldridge 2006).

The yield elasticity model for investors, which depends on the value of MMF, is

$$The\ Elasticity\ of\ Investors = \frac{dQ/Q}{dMMF/MMF} = \frac{MMF}{Q} * \frac{dQ}{dMMF}$$

We take derivative of Q with respect to MMF from equation (1), we have $\frac{dQ}{dMMF} = \beta_1 Q$

Therefore, $\mathit{The\ Elasticity\ of\ Investors} = \frac{MMF}{Q} * \beta_1 Q = MMF\beta_1$

Also the yield elasticity model for borrowers, which depends on the value of MMF, is

$$\mathit{The\ Elasticity\ of\ borrowers} = \frac{dQ/Q}{dMMF/MMF} = \frac{MMF}{Q} * \frac{dQ}{dMMF}$$

We take derivative of Q with respect to MMF from equation (4), we have $\frac{dQ}{dMMF} = -\gamma_1 Q$

Therefore, $\mathit{The\ Elasticity\ of\ Borrowers} = \frac{MMF}{Q} * -\gamma_1 Q = -MMF\gamma_1$

The results are presented in Table 4.

Table 4 The Elasticity of Investors and Borrowers

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
Investors	7.56	15.52	15.59	7.58	0.88	0.23
Borrowers	-0.25	-0.51	-0.52	-0.25	-0.03	-0.01

From Table 4, one can see that investors are considered “elastic” or changes in the yields of MMFs have a relatively large effect on the quantity of the assets that the investors want to invest. The result confirmed with Gordon and Pennacchi (1992) that the elasticity of investors’ supply increases than that before 1961. Whereas borrowers are considered “inelastic” or changes in the yields of MMFs have a relatively small effect on the quantity of the assets that borrowers demanded. During 2006 and 2007, investors’ elasticity is high. This can be explained that investors are sensitive to the interest rate. They prefer to invest in a fund that offers higher interest rates. One can also see the diminishing trend of the elasticity of investors and borrowers through time. In the post-crisis, the elasticity is very low for both investors and borrowers. The elasticity of borrowers is close to zero in 2010.

The main reason for the dramatic decrease in the yield of the MMFs after the crisis initial was due to the monetary intervention by the U.S. Federal Reserve, which reduced the value of the fed funds target rate, thereby affecting all the related rates. One can see that the regulations affected the borrowers’ demand surplus more than the investors’ supply surplus. The reason that demand surplus reduced more than supply surplus can be explained by the fact that the borrowers have more restricted access to source of funds, such as issuing bonds or obtaining short-term financing.

7. The Effect of the New Money Market Mutual Funds Policy by Sec

As mentioned earlier that the SEC released a memorandum on January of 2010, which stated that MMFs would have a requirement whereby they would need to have a minimum of ten percent of their assets in extremely liquid securities on a daily basis. In addition, they would also need thirty percent of their assets to be in an extremely liquid security on a weekly basis, as well as the requirement that they also shorten the maturity life of their holdings on average. This in essence, would cause a fund to shift and restrict their maximum weighted average of their fund's portfolio, causing an average drop of fund portfolio maturation to move from 90 days to 60 days.

Peter Crane (2010), the president of Crane Data, opposed the memorandum on January of 2010. He estimated that the change will most likely result in a reduction in the total yield of MMFs by approximately 0.1 percentage points. What he mentioned has been proved in Table 1, as one can see that the average yield of MMFs is reduced from 0.28 percent in 2009 to 0.07 percent in 2010. In addition, he expected that more people would pull their money out of MMFs because of the already low rates. There had been an evidence where there was over seven hundred billion dollars pulled out of the various MMFs from 2009 to 2010.

To see the impact of the new regulation to the MMFs proposed by SEC, the effect of a 0.1 percent tax on MMFs is illustrated in Figure 5[10]

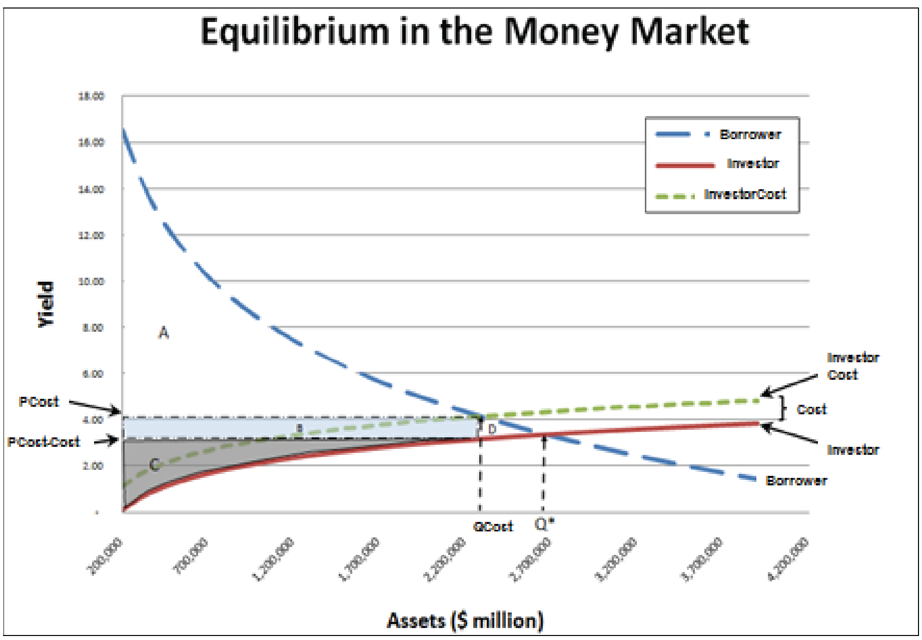

Figure 5 The Effect of an Increase in 0.1 Percent Cost

Source: Crane Database and Federal Reserve Economic Data (FRED)

The regulatory change causes a reduction of both investors and borrowers surplus. This is a cost for investors and borrowers who have left the market, since they face lower yields on investments and higher costs for borrowing in the alternative markets. If the government were to tighten the policy that increases the cost and reduces the yield by 0.1 percent from the investors within a closed equilibrium system, this will cause a shift in the supply curve from supply to InvesterCost and increase yield to

[10] The chart is not to scale and is only displayed to illustrate the surplus and loss.

PCost and decrease the assets to QCost (as shown in Figure 5). If investors are concerned with a reduction in yields, then they are willing to invest in the MMFs at the same amount of their assets only if they can receive the higher yields equal to the regulation imposed.

In Table 5 during April 2006 to December 2010, the implicit cost by the SEC rule shifts the supply curve up ranging by 0.1 percent to 1 percent. At 0.1 percent increase in cost, the equilibrium assets from April 2006 to December 2010 decrease from $2,796,891 million dollars to $2,768,411 million dollars. At 1 percent increase in cost, the equilibrium assets decrease to $2,524,799 million dollars during the same period. At 0.1 percent increase in cost, investors in MMFs perceive yields after tax imposed decrease from 2.47 percent to 2.37 percent during the same period. On the other hand, borrowers perceive their borrowing cost increase from 2.37 percent to 2.47 percent during the same period. One can see that during 2009 and 2010 the actual yields investors perceived are close to zero.

Table 5 The Average Value of Assets Invested in MMFs and Annualized Yields at Equilibrium in each Period

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
Q* (million dollars)	2,796,891	1,809,657	2,472,670	3,304,044	3,421,163	2,730,110
0.1% Increase						
Qcost (million dollars)	2,768,411	1,791,230	2,447,492	3,270,401	3,386,327	2,702,311
Actual Yields Borrowers Perceived (%)	2.47	4.97	4.99	2.47	0.37	0.17
Actual Yields Investors Perceived (%)	2.37	4.87	4.89	2.37	0.27	0.07
0.2% Increase						
Qcost (million dollars)	2,740,222	1,772,991	2,422,571	3,237,100	3,351,846	2,674,795
Actual Yields Borrowers Perceived (%)	2.57	5.06	5.08	2.57	0.47	0.27
Actual Yields Investors Perceived (%)	2.37	4.86	4.88	2.37	0.27	0.07
0.3% Increase						
Qcost (million dollars)	2,712,320	1,754,937	2,397,903	3,204,139	3,317,716	2,647,559
Actual Yields Borrowers Perceived (%)	2.66	5.16	5.18	2.67	0.57	0.36
Actual Yields Investors Perceived (%)	2.36	4.86	4.88	2.37	0.27	0.06
0.4% Increase						
Qcost (million dollars)	2,684,702	1,737,068	2,373,486	3,171,513	3,283,933	2,620,600
Actual Yields Borrowers Perceived (%)	2.76	5.26	5.28	2.77	0.66	0.46
Actual Yields Investors Perceived (%)	2.36	4.86	4.88	2.37	0.26	0.06
0.5% Increase						
Qcost (million dollars)	2,657,365	1,719,380	2,349,318	3,139,219	3,250,494	2,593,916
Actual Yields Borrowers Perceived (%)	2.86	5.35	5.38	2.86	0.76	0.56
Actual Yields Investors Perceived (%)	2.36	4.85	4.88	2.36	0.26	0.06

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
0.6% Increase						
Qcost (million dollars)	2,630,306	1,701,873	2,325,396	3,107,254	3,217,396	2,567,503
Actual Yields Borrowers Perceived (%)	2.95	5.45	5.47	2.96	0.86	0.65
Actual Yields Investors Perceived (%)	2.35	4.85	4.87	2.36	0.26	0.05
0.7% Increase						
Qcost (million dollars)	2,603,523	1,684,543	2,301,718	3,075,614	3,184,635	2,541,360
Actual Yields Borrowers Perceived (%)	3.05	5.55	5.57	3.06	0.95	0.75
Actual Yields Investors Perceived (%)	2.35	4.85	4.87	2.36	0.25	0.05
0.8% Increase						
Qcost (million dollars)	2,577,013	1,667,390	2,278,281	3,044,297	3,152,208	2,515,483
Actual Yields Borrowers Perceived (%)	3.15	5.64	5.67	3.15	1.05	0.85
Actual Yields Investors Perceived (%)	2.35	4.84	4.87	2.35	0.25	0.05
0.9% Increase						
Qcost (million dollars)	2,550,772	1,650,412	2,255,082	3,013,298	3,120,111	2,489,869
Actual Yields Borrowers Perceived (%)	3.24	5.74	5.76	3.25	1.15	0.94
Actual Yields Investors Perceived (%)	2.26	4.76	4.78	2.27	0.17	-0.04
1% Increase						
Qcost (million dollars)	2,524,799	1,633,607	2,232,120	2,982,615	3,088,340	2,464,516
Actual Yields Borrowers Perceived (%)	3.34	5.84	5.86	3.35	1.24	1.04
Actual Yields Investors Perceived (%)	2.34	4.84	4.86	2.35	0.24	0.04

After the SEC enforced a new requirement that causes an increase in cost, the demand surplus drops to A as illustrated in Figure 5. Also the supply surplus drops to C. Unlike tax imposed regulation, this regulation creates an extra cost by reducing the yields to the investors and has no benefit to government revenue. Therefore, the total loss occurred is B+D. The numerical results are shown in Table 6

Table 6 The Average Value of the MMFs after an Increase in Cost (Million Dollars)

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
0.1% Increase						
Demand Surplus (A)	261,810	169,398	231,461	309,284	320,247	255,559
Supply Surplus (C)	8,683	5,618	7,677	10,258	10,621	8,476
Value of the MMFs (A+C)	270,493	175,016	239,137	319,541	330,868	264,035
Loss (B+D)	2,783	1,800	2,460	3,287	3,404	2,716
0.2% Increase						
Demand Surplus (A)	259,144	167,673	229,104	306,135	316,986	252,957

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
Supply Surplus (C)	8,595	5,561	7,598	10,153	10,513	8,389
Value of the MMFs (A+C)	267,739	173,234	236,702	316,288	327,499	261,346
Loss (B+D)	5,537	3,583	4,895	6,541	6,773	5,405
0.3% Increase						
Demand Surplus (A)	256,506	165,965	226,771	303,017	313,758	250,381
Supply Surplus (C)	8,507	5,504	7,521	10,050	10,406	8,304
Value of the MMFs (A+C)	265,013	171,470	234,292	313,067	324,164	258,685
Loss (B+D)	8,263	5,346	7,305	9,762	10,108	8,066
0.4% Increase						
Demand Surplus (A)	253,894	164,276	224,462	299,932	310,564	247,832
Supply Surplus (C)	8,421	5,448	7,444	9,947	10,300	8,219
Value of the MMFs (A+C)	262,314	169,724	231,906	309,879	320,864	256,051
Loss (B+D)	10,962	7,092	9,691	12,949	13,408	10,700
0.5% Increase						
Demand Surplus (A)	251,309	162,603	222,176	296,878	307,401	245,308
Supply Surplus (C)	8,335	5,393	7,369	9,846	10,195	8,136
Value of the MMFs (A+C)	259,643	167,996	229,545	306,724	317,596	253,444
Loss (B+D)	13,633	8,821	12,052	16,105	16,676	13,307
0.6% Increase						
Demand Surplus (A)	248,750	160,947	219,914	293,855	304,271	242,810
Supply Surplus (C)	8,250	5,338	7,294	9,746	10,091	8,053
Value of the MMFs (A+C)	257,000	166,285	227,208	303,601	314,362	250,863
Loss (B+D)	16,276	10,531	14,390	19,228	19,909	15,888
0.7% Increase						
Demand Surplus (A)	246,217	159,308	217,675	290,863	301,173	240,338
Supply Surplus (C)	8,166	5,284	7,219	9,647	9,989	7,971
Value of the MMFs (A+C)	254,383	164,592	224,894	300,509	311,161	248,309
Loss (B+D)	18,893	12,224	16,703	22,319	23,110	18,442
0.8% Increase						
Demand Surplus (A)	243,710	157,686	215,458	287,901	298,106	237,891
Supply Surplus (C)	8,083	5,230	7,146	9,548	9,887	7,890
Value of the MMFs (A+C)	251,792	162,916	222,604	297,449	307,993	245,780
Loss (B+D)	21,484	13,900	18,993	25,379	26,279	20,971
0.9% Increase						
Demand Surplus (A)	241,228	156,080	213,264	284,969	295,071	235,468
Supply Surplus (C)	8,000	5,176	7,073	9,451	9,786	7,809
Value of the MMFs (A+C)	249,229	161,257	220,338	294,421	304,857	243,278
Loss (B+D)	24,047	15,559	21,260	28,408	29,415	23,473
1% Increase						
Demand Surplus (A)	238,772	154,491	211,093	282,068	292,066	233,071

Period	4/2006 - 12/2010	2006	2007	2008	2009	2010
Supply Surplus (C)	7,919	5,124	7,001	9,355	9,687	7,730
Value of the MMFs (A+C)	246,691	159,615	218,094	291,423	301,753	240,801
Loss (B+D)	26,585	17,201	23,503	31,406	32,519	25,950

From Table 6, at 0.1 percent increase in cost, one can see that the new policy reduced the value of the MMFs. The loss from the inefficiency of the market is approximately 2.72 billion dollars in 2010, which takes 1.02 percent of the value of the MMFs before the regulation was imposed. If the new policy caused 1 percent increase in cost to the MMFs, the loss from the inefficiency of the market can be up to approximately 26 billion dollars in 2010.

The regulation imposed is mainly effected on the intra-marginal borrowers and investors who have few alternatives available for them. For the large investors in MMFs, they can respond to the regulation by shifting funds out of money funds and investing in similar alternative yields such as direct investments in short-term securities or deposits in offshore Eurodollar accounts. For any investors and borrowers who have limited choice of investments, even though they have to pay higher cost for the regulation policy, the MMFs are still a considerable and favorable choice for them.

8. Conclusions

This paper attempts to estimate the value of the MMFs for both money borrowers and investors through the calculation of the equilibrium value for demand function and supply function of the funds. The demand function and supply function are identified from tracing factors that shift one curve without manipulating the other. We assume that MMF investors will allocate their money into a three-month United States Treasury bills as an alternative method of investment. We also assume that AAA bonds directly influence the demand of MMFs as an alternative source of funds. Investors who place their money into MMFs do not consider AAA bonds as an alternative investment due to their different characteristics such as their ability to maintain a stable price per share. In addition, the borrowers who obtain short-term financing through MMFs do not consider three-month Treasury bills as substitute investment.

The exponential regression model or the log-linear model is used in supply function and demand function to measure elasticity of the total amount of assets invested in MMFs with respect to the yield difference between MMFs and three-month Treasury bills (MMF-TB3) in the supply function and the yield difference between AAA bonds and MMFs (AAA-MMF) in the demand function, respectively.

Without any restrictions, the value of the MMFs can be estimated based upon the total value of the surplus of the borrower's demand and the surplus of the investor's supply. This research also attempt to estimate the economic costs of restrictions on the MMFs, such as a new requirement to hold assets that were of a greater liquidity as well as greater quality, as well as letting all potential investors know the true value of their assets per share on a more frequent basis applied to the MMFs.

Since January 27, 2010, the U.S. Securities and Exchange Commission announced new regulations placed upon MMFs. The financial reform was intended to increase the flexibility of MMFs during economic suffering, reducing the risks of the existing funds to break the buck, facilitating the orderly liquidation of a money market mutual fund that breaks or is about to break the buck to meet redemption requests, and provide SEC detailed and timely information about the performance of the funds.

This regulation is estimated to create an extra cost by reducing the total yields of MMFs to the investors and has no benefit to business and government revenue. The result is that the new policy would most likely cause a loss of economic efficiency and trigger institutional investors to move their funds in alternative investments that offer higher interest rates. Investors who seek the returns and businesses, which borrow from the money market, are primarily hurt by the policy because they cannot take advantage of these alternatives.

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Ambush Marketing in Sports

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Abstract

Sports event organizers sell exclusive marketing rights for their events to official sponsors, who, in return, acquire exclusive options to utilize the event for their own advertising purposes. Ambush marketing is the practice by companies of using their own marketing, particularly marketing communications activities, to create an impression of an association with the event to the event audience, although the companies in question have no legal or only underprivileged or non-exclusive marketing rights for this event sponsored by third parties. So, the objective of ambush marketing is to benefit from the success of sports sponsorship without having the duties of an official sponsor.

The paper describes and structures the phenomenon of ambush marketing. It is fine line between creative marketing communication and infringing on sponsorship rights. From the perspective of the event organizers and sports sponsors it represents an understandable threat, while from the perspective of the ambushers it offers the opportunity to reach the target audience in an attractive environment and at affordable cost. In this paper ambush marketing is evaluated from a neutral perspective. Spectacular cases of ambush marketing are discussed and the opportunities and threats of ambush marketing in the sports context are summarized.

Keywords: Ambush Marketing, Sports Sponsorship, Event Marketing, Sporting Events, Soccer World Cup, Olympics

1. Introduction

For many companies, it is major international sporting events in particular, e.g. the Soccer World Cup or the Olympics, that constitute the ideal platform for the integration of their target group-specific communications into an attractive sports environment. Sports event organizers therefore sell exclusive marketing rights for their events to official sponsors, who, in return, acquire exclusive options to utilize the event for their own advertising purposes. Ambush marketing is defined as the method used by companies that do not actually hold marketing rights to an event, but still use their marketing activities in diverse ways to establish a connection to it.

2. The Principles of Ambush Marketing

The philosophy of ambush marketing consists of achieving conventional marketing objectives with unconventional methods. The general intention is that a relatively small investment generates the greatest possible impact.

2.1. The Definition of Ambush Marketing

In popular sources, ambush marketing is frequently used synonymously with terms such as "coattail marketing", "parasitic marketing" and "freerider marketing". Official sponsors define these ambushes on high-priced advertising rights as "theft" and emphasize the illegal aspects of ambush marketing (Payne, 1998; Townley, Harrington & Couchman, 1998). However, there are also representatives of the opposite standpoint. They see ambush marketing as a "legitimate power" that facilitates more efficiency in the sponsorship market. "All this talk about unethical ambushing is … intellectual rubbish and postured by people who are sloppy marketers" (Welsh, 2002).

For the following observations, this definition shall be applied: Ambush marketing is the practice by companies of using their own marketing, particularly marketing communications activities, to create an impression of an association with the event to the event audience, although the companies in question have no legal or only underprivileged or non-exclusive marketing rights for this event sponsored by third parties. Thus, ambushers want to promote and sell products via an association with the event as official sponsors are allowed to do (Nufer, 2013; 2010).

2.2. The Objectives of Ambush Marketing

The idea of ambush marketing is to capitalize on the success of sports sponsorship without taking on the intrinsic obligations of an official sponsor. The objectives of ambush marketers are therefore largely identical to those of the sponsors, but are to be attained with reduced financial expenditure (Pechtl, 2007). The objectives of ambush marketing can thus be deduced from the objectives of sponsorship. Their primary function is the achievement of psychological and/or communicative aims (see Figure 1).

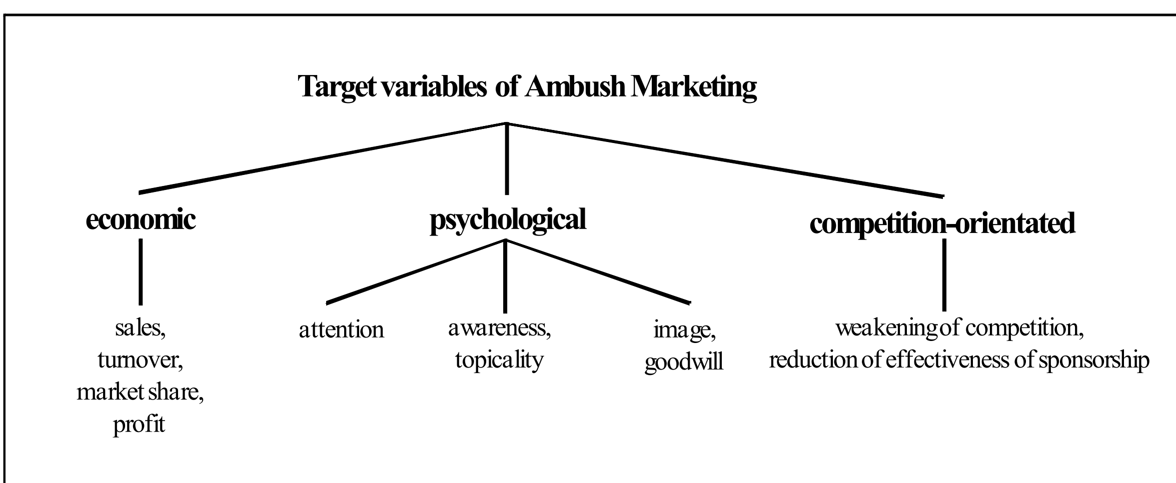

Figure 1 Objectives of Ambush Marketing

3. Structuring the Manifestations of Ambush Marketing

In the following an approach to structuring the various manifestations of ambush marketing is presented. This classifies the latter into different categories, case groups and cases.

3.1. Differentiating the fundamental Categories of Ambush Marketing

In the first step, three basic categories of ambush marketing are differentiated.

To begin with, it can be differentiated between direct ("blatant") and indirect ("subtle") ambush marketing (Du Toit, 2006; Pechtl, 2007; Wittneben & Soldner, 2006). It is characteristic of direct ambush marketing for actions to target the marketing rights of the event organizer or the event sponsors without deviation. Indirect ambush marketers, on the other hand, use the sports event as the motive for their own marketing activities, which is why indirect ambush marketing is prevalent primarily in the area of communications. In literature this fundamental differentiation has been established. The aforementioned dichotomy is complemented by a third category that can best be designated as dominant destructive-aggressive ambush marketing: The essential objective of actions in this category is to diminish the effectiveness of official sponsorships with predatory methods. The obstruction of sponsors' measures is generally an attack on a direct competitor of the ambusher: in effect weakening the competition.

3.2. Differentiating Ambush Marketing Case Groups per Category

In a second step, these three categories are further broken down into case groups, in which similar cases are grouped together.

Within the scope of direct ("blatant") ambush marketing, direct ambushing approaches that are motivated primarily by product policy and predominantly pursue (mainly short term) economic objectives are distinct from direct ambushing activities whose motivation and implementation are focused primarily in the realm of communications policy and which therefore prioritize (mainly medium term) psychological objectives. Within the scope of the first case group, event-associated products are created and marketed in an unauthorized manner. The second case group involves communicative pretense to a sponsorship that, in reality, does not exist (Nufer & Geiger, 2011).

Initially, indirect ("subtle") ambush marketing is subdivided into ambush marketing by intrusion and ambush marketing by association. Whereas under ambush marketing by intrusion all ambush activities that can be characterized as "capitalizing on the opportunity" are subsumed within the scope of a sports event, ambush marketing by association can be further differentiated: "Agenda setting" encompasses all ambush marketing measures that can be subsumed under "positioning by topicality" and focus on the event as a communications platform (Pechtl, 2007). "Fun ambushing" (Nufer, 2005) and "philanthropic ambushing" (Nufer & Geiger, 2011) constitute two separate special cases of ambush marketing by association.

The category "dominant destructive-aggressive ambush marketing" is not differentiated into any distinguishable case groups.

3.3. Typology of the Manifestations of Ambush Marketing

Finally, in the third step, a total of 21 cases of ambush marketing subsumed in the individual categories and case groups are distinguished from one another. Figure 2 summarizes the observations with regard to structuring and systematizating the manifestations of ambush marketing.

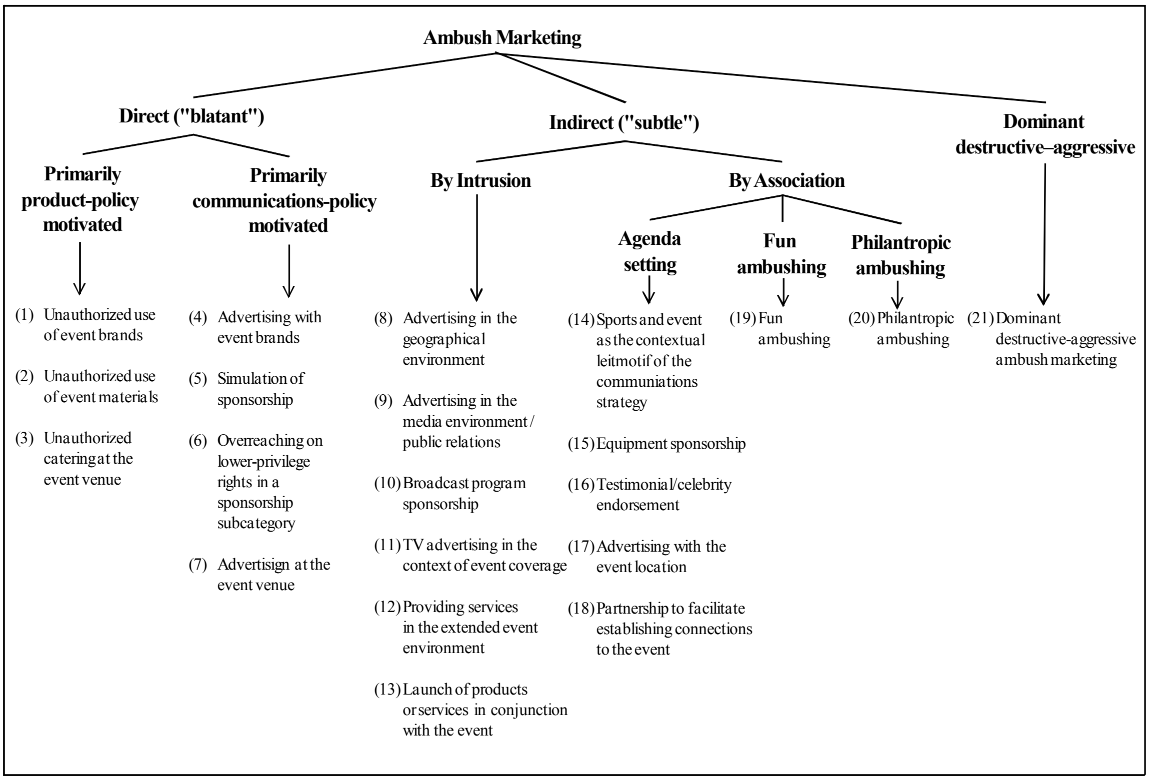

Figure 2 Systematization of the Manifestations of Ambush Marketing

A clear cut differentiation is not always possible, but that overlaps do occur (Nufer, 2011). What this means is that some ambush activities have multiple characters and could (or even should) be ascribed to two (or possibly more) parallel cases. Neither does the systematization claim to be complete. Based on the highly innovative content of ambush marketing, with its constantly new creative activities, this is rather a snapshot of the current situation. The applied structure is therefore not rigid, but flexible and open in order to allow for new cases to be subsequently included and integrated.

4. Case Studies

Soccer World Cup championships cumulatively reach well over 30 billion television viewers worldwide, thus being the most popular sports event by far. Thus, Soccer World Cups provide a welcome opportunity for companies to align their advertising activities with the event. The following presents two particularly striking examples of ambushing activities that were observed in the context of the 2006 and 2010 Soccer World Cups (Nufer, 2013).

Before and during the 2006 Soccer World Cup in Germany, Bavaria, a beer brand owned by the Dutch Heineken group, distributed about 250,000 samples of imitation lederhosen in the Dutch national colour orange, bearing the advertising imprint "Bavaria" (see Figure 3).

Figure 3 Ambush marketing by Bavaria 2006

Source: http://blog.karotte.org (accessed 2 August 2006)

The intention was to have the Dutch fans wear these lederhosen during their World Cup stay in what was supposedly the "lederhosen country" of Germany and especially to display these prominently during their stadium attendances. This strategy was initially successful, as thousands of Dutch fans showed up wearing the bib-pants at the Netherlands vs. Ivory Coast group stage game in Stuttgart to – consciously or subconsciously – act as disseminators transporting unauthorized advertising into the stadiums. In order to protect the official sponsors, a rapid decision by the organizers was called for. FIFA invoked Rule 10 of the tickets' terms and conditions, which stated that "advertising, commercial, political or religious articles of all types, including banners, symbols and flyers … are inadmissible and … may not be brought into the stadium if the organization committee has grounds to assume that these will be displayed in the stadium." Therefore, the FIFA Rights Protection Team saw to it that all unauthorized Bavaria advertising items remained outside the stadium gates, i.e. over 1,000 Dutch fans had to remove their lederhosen, otherwise FIFA would have barred them from entering the stadium. Although ultimately a repelled ambush attempt, the operation produced a tremendous amount of attention for Bavaria. The fact that over 1,000 persons followed a World Cup game in the stadium in their underpants was picked up with great interest by the media.

During the 2010 Soccer World Cup in South Africa Bavaria also relied on ambush marketing and again attained a high level of media attention – this time with the so-called "beer babes". The spectators at the preliminary round game Netherlands against Denmark in Johannesburg included 36 young women who showed up in the orange-coloured mini-dresses of the brewery. This time the Bavaria brand name was only evident on a small label on the seam (see Figure 4).

Figure 4 Ambush marketing by Bavaria 2010

Source: http://www.zeit.de (accessed 14 August 2010)

Once again, FIFA was rigorous in dealing with this action, had the blondes removed from the stadium and even briefly had their alleged ringleaders arrested. Then the situation exploded. The World Soccer Association filed suit in court against the planned promotion. The Dutch embassy assured the women of legal support. While Bavaria’s advertising intent in 2006 with the clearly visible logo on the bib-pants was obvious, the brewery’s calculation in 2006 was infinitely more subtle. In the opinion of the author, this is literally cool, calculated ambush marketing straight from the drawing board. On site, i.e. in front of and in the stadium the action was initially not recognized as ambush marketing. Thus, the "beer babes" – other than four years earlier the fans dressed in orange Bavaria-bib pants – were easily able to make their way into the stadium. Who pays attention to a few orange-clad girls (with a barely visible Bavaria logo) in a stadium, when thousands of orange-clad Dutch fans are already there? Again, it was only with the intervention of FIFA that the ambush marketing activity was exposed as such and became public knowledge. Only this way did an initially totally harmless incident, in terms of advertising effectiveness, make it into the media reports and achieve such an immense PR impact – and that is precisely what Bavaria wanted to achieve.

5. A Critical Evaluation of Ambush Marketing

Ambush marketing is situated at the intersection of two opposing spheres of interest waging a distribution battle for the marketing potential of a sports event. On one side are the organizers and the official sponsors; on the other, the ambushers. From the perspective of the organizers and sponsors ambush marketing represents a threat; from the perspective of the ambushers it creates an opportunity (Bruhn & Ahlers, 2003, Pechtl, 2007). The following arguments can be made for and against ambush marketing.

5.1. The Risks and Limits of Ambush Marketing

In return for their sponsorship and licensing fees, the official sponsors want to have the exclusive capacity to fully exploit the marketing potential of the sports event. This also serves the interests of the organizers as they can command higher revenues from the sponsorship and licensing business. From this perspective it is therefore legitimate to take advantage of the available legal options to protect this common interest with exclusivity. The infringement of intellectual property rights of official sponsors, in particular, is subject to legal action. Based on the general sense of justice it can be argued that only companies who have made a financial contribution to the implementation of the sports event can reap its economic rewards (Wittneben & Soldner, 2006).

Moreover, ambushers infringe on the bylaws of diverse company and agency organizations, whose aim it is to promote fair and ethical marketing (e.g. the "Standards of Practice" of the American Marketing Association of Advertising Agencies and the "Code of Ethics" of the Business Marketing Association). In this regard ambush marketing constitutes deception of consumers (Bruhn & Ahlers, 2003; Wittneben & Soldner, 2006). A negative image transfer from the ambushing actions to the initiating company is also possible and is a particular threat if the target group sought compares the positive promotional ideas of the official sponsors with the possibly even destructive-aggressive practices of the ambushers – something that can climax in a reaction by the targeted consumers.

Opponents of ambush marketing condemn ambushing as illegal theft of high-priced advertising rights. A statement made by former IOC marketing director Michael Payne sums up the opinion of many critics: "Ambush marketing is not a game. It is a deadly serious business and has the potential to destroy sponsorship. If ambush or 'parasite' marketing is left unchecked, then the fundamental revenue base of sports will be undermined. […] ambush marketers are thieves knowingly stealing something that does not belong to them" (Payne, cited in Sportlink, 2003). These arguments can be further consolidated as follows: what would happen if all companies were to prefer ambushing to their commitments as official sports sponsors?

5.2. The Opportunities and Application Options for Ambush Marketing

Due to the high cost of official sponsorship and the assurance of industry exclusivity by the organizers, a dwindling number of companies are able to participate as official sponsors at mega sports events. Ambush marketing conforms to the competitive notion of not letting profit and sales opportunities go untapped. The lack of a company's own performance in support of a sports event and the aim of still taking advantage of its marketing potential is not unethical per se. A sports event should not be conducted as a "private function" by the organizers and the participating sponsors.

In recent years an increasing tendency to "monopolize" large scale sporting events has also been observed. This is sometimes manifested in "regulation frenzies" that are, if anything, exaggerated and perpetrated by the organizers with regard to the usage of their event-related hallmarks. This is not always discernible to a broader public and occasionally even generates certain sympathies for ambushers. At the same time, a rigid approach to dealing with ambushing also endangers having a modicum of advertising freedom (Pechtl, 2007; Wittneben & Soldner, 2006).

Jerry Welsh is considered to be one of the most active champions of ambush marketing: "When you own and license Kermit you have only given the rights you own to one specific frog, and maybe not even to all green ones. […] ambush marketing, correctly understood and rightly practiced, is an important, ethically correct, competitive tool in a non-sponsoring company's arsenal of business- and image-building-weapons. To think otherwise is either not to understand – or willfully to misrepresent – the meaning of ambush marketing and its significance for good – and winning – marketing practice" (Welsh , 2002). The proponents of ambush marketing define ambushing as a legitimate, creative power that helps the sponsorship market by providing greater efficiency. They believe that ambush marketing is only possible if the sponsors do not sufficiently protect their activities or do not completely exploit their potential (Portmann, 2008; Welsh, 2002). Ambush marketing could thus be considered a new and innovative instrument in the marketing mix.

6. Managerial Implications and Discussion

It is obvious that ambush marketing operates in a "grey area" somewhere between permissible and prohibited actions and between fair and unfair competition (Bruhn & Ahlers, 2003; Wittneben & Soldner, 2006). Therefore, an evaluation of ambush marketing must necessarily apply legal as well as ethical-moral standards. In the following, the insights derived from the above examination are revisited and combined with the results of a legal and ethical-moral evaluation (see Table 1).

Table 1 Results of a nuanced Contemplation of Ambush Marketing

Legal evaluation Ethical-moral evaluation	**Legally preventable**	**Legally unpreventable or virtually unpreventable**
Morally objectionable	***Containable:***	***Controversial:***
	Direct Ambush Marketing	Indirect Ambush Marketing by intrusion, dominant-aggressive Ambush Marketing
Morally unobjectionable or virtually unobjectionable	***Tolerated:***	***Innovative:***
	Local Ambush Marketing by smaller businesses	Indirect Ambush Marketing by association

The four fields of the matrix can be characterized as follows:

6.1 *"Containable" Ambush Marketing:*

This group consists of ambushing actions against which the organizers are not defenseless in terms of legal repercussions and, above and beyond this, are also morally objectionable. On the one hand, the organizers can counter the infringement of their rights with legal action. On the other hand, such cases of ambushing can be averted or at least greatly constrained with the use of appropriate preventive measures. This category is primarily characterized by direct ambush marketing.

6.2 *"Controversial" Ambush Marketing:*

This group encompasses measures that, while fundamentally legitimate or legally unpreventable or virtually unpreventable, must nonetheless be subject to critical assessment in terms of ethical-moral aspects. At this point dominant-aggressive ambush marketing must be mentioned. However, cases of indirect ambush marketing by intrusion can also be subsumed under this category. Organizers frequently have no ex ante legal recourse to inhibit these forms of ambush marketing or to counter with ex post intervention.

6.3 *"Tolerated" Ambush Marketing:*

Practices that are basically open to legal challenges by the organizers, but at the same time appear relatively harmless in ethical terms can be placed in this area of the matrix. These are cases that can be interpreted as unauthorized ambush actions but generally do not incur legal action by the organizers, i.e. they are tolerated because they do not result in a weakening of official sponsorship. Such actions are often initiated by smaller, local operations, e.g. a baker offers "World Cup rolls".

6.4 *"Innovative" Ambush Marketing:*

This area refers to ambush marketing that is neither legally nor ethically-morally objectionable and is open to all creative ambushers. The prime example for this group is indirect ambush marketing by association. As long as the rights of organizers and official sponsors are not infringed upon, there are no objections to agenda setting and even less so to fun ambushing. These creative and frequently amusing approaches may even be rated as innovative communications policies that enrich advertising practice.

7. Conclusions

Ambush marketing remains controversial and will continue to be the subject of contentious discussions. From the perspective of the event organizers and sports sponsors it represents an understandable threat, while from the perspective of the ambushers it offers the opportunity to reach the target audience in an attractive environment and at affordable cost. However, ambush marketing may by no means be relegated to the status of a "dirty word" of sports marketing per se on the basis of its controversial nature. Instead, ambush marketing should be classified as a competitive tool in conjunction with a sporting event. The fact that ambush marketing is often a "race between the tortoise and the hare" in which the organizers take on the role of the hare should therefore be viewed as a sign of functioning competition in which all the participating players deploy their specific "weapons": official sponsorship versus creativity (Pechtl, 2007; Nufer, 2010).

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Entrepreneurial Orientation and SME Performance in Thailand

by

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Abstract

Entrepreneurship orientation (EO) is broadly seen as an essential tool for competitiveness, particularly in the rapid changes in global economy. This study develops a mediating model in which entrepreneurial orientation (EO) affects various aspects of firm performance through process innovation. In a sample of 177 Thai manufacturing firms operating in a wide variety of industries, EO is found to be positively associated to process innovation, which in turn, influences firm performance in terms of innovation, market and financial outcomes. EO has a significant indirect effect on company performance through the mediation of process innovation. The theoretical and managerial implications for entrepreneurship theory and practice are discussed.

Keywords: Entrepreneurship Orientation, Process Innovation, Business Performance, SMEs

1. Introduction

The economic integration of ASEAN countries is scheduled to form the ASEAN Economic Community or AEC in 2015 as a single market and production base. It covers the trade liberalization and facilitation of capital movement, labor movement, the harmonization of customs regulations, standards for goods, and economic policies among ASEAN countries (Kanitpong, 2010). Therefore, the AEC will not only make greater opportunities for Thai businesses to expand elsewhere in ASEAN with a huge market of 600 million consumers, but also will confront greater challenges as a result of intensified competition with the level playing field. In Thailand, small and medium sized enterprises (SMEs) are the heart of Thai business since they comprise 99.7% of total companies in the country (BOI, 2012). Thai companies, particularly SMEs must improve its competitiveness if an integrated ASEAN community has been success. An important move is for Thai SMEs to differentiate their products from the abundance of low- end goods from China, against which they could not compete on cost basis. To sustain their growth, they must depend on their ability to compete on innovation and value-adding rather than on cost. Entrepreneurship is viewed as an effective means for firms to revitalize, reconfigure resources and transform into innovative-oriented firms that are ready to compete in the global economy (Bierly and Daly, 2007; Wiklund and Shepherd, 2003; Yiu and Lau, 2008).

According to the changes in areas such as globalization, economic landscape and industry boundaries, a firm must have the competitive capacity to innovate faster than its competitors in order to be successful. Specifically, this kind of competitive capability consists of identifying new ways of doing business, developing new technologies and products, entering new markets in new organizational forms (Covin and Slevin, 1991; Morris et al., 2008). In other words, the firm can benefit from trying to maintain their entrepreneurial posture throughout the business development. Therefore, understanding the role of entrepreneurship represents a key objective for business interests, in their efforts to face the new situation, local governments and institutions as well as to promote business development in the region. In response, this paper provides empirical evidence regarding the suitability of strategic orientation in a context of non-western society and, specifically, the relationship among entrepreneurial orientation, process innovation and business performance.

An important question for those firms is how best to implement entrepreneurial practices in order to improve their process, to upgrade competitive capability, and thus to sustain long-term organizational success. Early studies have focused on either entrepreneurship or innovation as independent process, resulting in limiting their application and utility (Baum et al., 2001; Chesbrough, 2003). Therefore, there has been very little argument in the literature on the relationships between entrepreneurship and innovation (McFadzean et al., 2005). The aim of this paper, therefore, is to explore the relationship between entrepreneurial orientation and process innovation and the mediating effect of process innovation on the relation of entrepreneurial orientation and business performance.

The remainder of the paper is organized as follows. Firstly, a literature review on entrepreneurial orientation, process innovation and business performance provides an overview of the key issues. This is followed by hypotheses development. Then, the research design, data collection and measurement validation procedures are discussed. Finally, the results and discussion are presented followed by the conclusion of the study and its potential implications for managers and academics.

2. Theoretical Background and Hypotheses

2.1 EO and Process Innovation

Entrepreneurship has become increasingly accepted as a firm-level phenomenon deserving scholarly attention (Dess et al., 2003; Sebora et al., 2010). Entrepreneurship refers to the ability of the firm to continually renew, innovate, beat competitors' actions and calculatedly take risks in its markets and areas of operation (Naman and Slevin, 1993; Morris et al., 2008). Entrepreneurial orientation is viewed as a critical organizational process that contributes to organization survival and performance (Barringer and Bluedorn, 1999; Ireland et al., 2006). Moreover, it can be involved aspects of new entry, particularly how new entry is undertaken (Lumpkin and Dess, 1996), and combining resources in new ways to develop and commercialize new products, move into new market, and/or service new customers (Hitt et al., 2001; Burns, 2008).

However, there has been ongoing debate whether entrepreneurial orientation is most appropriately considered as unique combinations of entrepreneurial orientation attributes, comprising risk-taking, innovation, and proactiveness as originally proposed by Miller (1983), or whether it is a multidimensional construct, adding autonomy and competitive aggressiveness to the entrepreneurial orientation construct as later proposed by Lumpkin and Dess (1996). The core debate is the matter of whether the "sub-dimensions" of entrepreneurial orientation such as risk-taking, innovation, and proactiveness may co-vary with each other or vary independently of one another.

In support of Miller's (1983) view, empirical findings suggest that "unique combinations of entrepreneurial orientation provide more precise explanations of entrepreneurship as a firm-level phenomenon as well as greater insights into the relationship of entrepreneurial orientation and performance" (Kollmann and Stockmann 2008, p. 17). In contrast, Lumpkin and Dess (1996) suggest that the components of entrepreneurial orientation may vary independently of one another in many situations and one in which a firm must be high only on some dimensions, but not necessarily high on any particular dimension. Furthermore, Dess and Lumpkin (2005, p. 148) suggest that "exploring the linkages among individual dimensions of entrepreneurial orientation to firm performance is superior to considering entrepreneurial orientation as a summated unidimentional construct". Subsequently, based on Lumpkin and Dess's (1996) work, various researchers have supported the multidimensionality of entrepreneurial orientation and the independence of the dimensions encompassing it (e.g. Dess & Lumpkin 2005; Fitzsimmons et al. 2005; Lumpkin & Dess 2001; Wang & Li-Hua 2006; Yang et al, 2007). In this respect, Covin et al, (2006) argue that existing studies cannot resolve the dimensionality debate due to different sort of construct. The authors consider entrepreneurship as a formative construct that cannot be decomposed into its constituent elements. Furthermore, they claim that its elements tend to exhibit moderate to high correlations.

In line with the above arguments, this study interprets entrepreneurship as a composite, unidimensional orientation. That is the concept of entrepreneurship consists of innovativeness, risk-taking, and proactiveness. *Innovativeness* refers to the seeking of creative, unusual or novel solutions to problems and needs. Commonly, these solutions take the form of new processes as well as new products and/or services. *Risk-taking* involves the willingness to commit significant resources to opportunities having a reasonable chance of failure as well as success. *Proactiveness* is concerned with anticipating and then acting in light of a recognized entrepreneurial opportunity. Employees are encouraged to persevere in their efforts to exploit opportunities that can be the source of innovation, competitive advantage, and first-mover benefits in marketplace (Ireland et al., 2006). However, this study acknowledges that the separate consideration of each component could provide additional insights into the role of entrepreneurship on firm strategic orientation and performance.

Moreover, the phenomenon of an entrepreneurial orientation and activities as a prerequisite for innovation has become a central focus of entrepreneurship literature. Innovation is not related to products and processes, but is also related to marketing and organization (Gunday et al., 2011; Laforet, 2010). Process innovation is a focus of this study. According to Damanpour (1991), process innovation refers to *"the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software."* Process innovation represents changes in the way organizations produce finished products or services (Cooper, 1998, Utterback, 1994). Process innovation includes quality functions and business process reengineering (Cumming, 1998), and provides the methods for improving quality and/or saving costs (Johne, 1999). For example, Wal-Mart has become the most successful retail company through their focus on process innovation and operational excellence. They have the same products as many other discounters but their process innovations allow them to lower costs and capture the market. The same story is true for Honda and Toyota. Their dominance is driven by their relentlessness in process improvement. Honda and Toyota continue to dominate the automobile market by focusing on reliability and quality. Improved quality of process leads to improved quality of service as well improved quality of the product. By applying innovation process management across the entire organization, firms can transform it into one which is innovation driven. And that is a positive way to keep well ahead of the competition. Thus, it appears that success can be based on a process innovation.

Furthermore, competitiveness of manufacturing firms depends directly on the quantity and quality of their outputs as well as the efficiency or effectiveness of the way the organization operates. In other words, the success of organizations today, especially manufacturing firms, depends on the continuous improvement of their operations. Process innovation has improved the efficiency or effectiveness of the way the organization operates. EO is viewed as an important path firms can take to make it possible to engage in entrepreneurial behaviours for continuous and successful innovation (Ireland et al., 2006). Research shows that entrepreneurial activities in terms of innovation, risk-taking and proactiveness are viewed as an incremental process within the firm through which process innovation results (Morris et al., 2008). Therefore, entrepreneurial behavior of a firm is likely to influence process innovation. The following hypothesis is put forward:

Hypothesis 1: EO is positively related to process innovation.

2.2 The Mediating Role of Process Innovation in the Relationship of EO and Firm Performance

A *mediation* model is one that seeks to identify and explicate the mechanism or process that underlies an observed relationship between EO and firm performance via the inclusion of process innovation, known as a mediator variable. Rather than hypothesizing a direct causal relationship between EO and firm performance, a mediation model hypothesizes that the EO influences process innovation, which in turn influences various aspects of firm performance, such as innovation, market and financial outcomes as shown in Figure 1. Thus, the mediator variable, namely process innovation serves to clarify the nature of the relationship between EO and firm performance. In other words, mediating relationships occur when a third variable plays an important role in governing the relationship between the other two variables. A mediation model is now focusing on better understanding known findings.

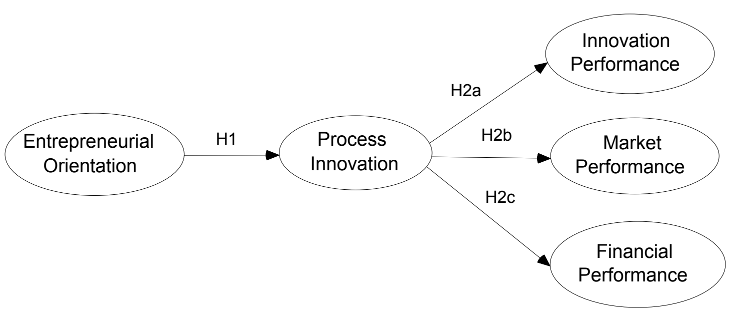

Figure 1 Research Framework and Hypotheses

Tough global competition forces companies to evaluate and to apply their innovation strategies and entrepreneurial abilities with an aim of gaining competitive advantage (Hult et al., 2003; Peace and Robinson, 2009). EO is viewed as a critical organizational process that contributes to firm survival and growth (Covin and Slevin, 1991; Kickul et al., 2011; Morris et al., 2008). A large number of studies focusing on entrepreneurship–performance relationship provides a positive consideration of higher level of entrepreneurship resulting in increased corporate performance (Antoncic & Hisrich, 2004; Moreno and Casillas, 2008; Fitzsimmons et al., 2005; Wiklund and Shepherd, 2005; Zhang and Li, 2007). But these studies are generally conceptual in nature and/or focus only on financial outcomes as a result from entrepreneurial actions within a firm. Growth and profitability are the most common financial performance examined. However, not all entrepreneurship efforts lead to improved company performance. Covin and Slevin (1991) argued that entrepreneurial activity is a resource-consuming strategic orientation requiring extensive investments by firms. In the short run, initiated investments and internal resource usages may cause possible losses. However, entrepreneurial ventures stimulate long-term growth that compensates for the decrease in short-term profitability returns.

Zahra (1993) argued that financial and non-financial criteria can be useful in evaluating the performance of firm-level entrepreneurship at different points in time. Therefore, the impacts of entrepreneurial activity are related to the non-financial criteria of corporate performance in the early years of an entrepreneurial project, such as increased customer satisfaction, process improvement or product quality and speed, which will lead to higher financial returns later on (Carton and Hofer, 2006). Thus, the financial and non-financial outcomes of entrepreneurship should be recognized in entrepreneurship study. Organizations engaging in entrepreneurial activities are expected to achieve higher level of financial outcomes as well as non-financial aspects than organizations that are lower entrepreneurship engagement.

This study proposes that the indirect effects of entrepreneurial activities can be expected to lead to innovation and market performance as well as financial outcomes through the mediation of process innovation. In this respect, process innovation plays a role of an affective hub that carries the positive impact on entrepreneurial activities to the several criteria of firm performance. Process innovation is aimed to decrease unit costs of production or delivery, to increase quality, or to produce or deliver new or significant improved products (OECD, 2005). Laforet (2010) suggests that the positive end results of process innovation are improved efficiency, easy way of working, cost-benefit, and process simplification. These improvements and achievements are seen as the sources of profitability since effectiveness and efficiency in production are likely to lead to profitability (Chenhall, 1997; Laforet, 2010). Therefore, process innovation not only provides a positive consideration of higher innovativeness, but also produces an improved market position and financial returns resulting in increased competitive advantage and superior performance (Gunday et al., 2011). Fagerberg et al. (2004) emphasize that the effect of process innovation on the growth of income and employment is likely to be unclear since process innovation is cost-cutting in nature. Therefore, process innovation is likely to influence relationship between EO and performance. The following hypothesis is put forward:

Hypothesis 2: the positive relationship between EO and business performance is mediated by process innovation
H2a: EO is positively related to market performance through process innovation.
H2b: EO innovation is positively related to innovation performance through process innovation.
H2c: EO innovation is positively related to financial performance through process innovation.

3. Research Methods

3.1. Sample and Procedures

Firms to be contacted were selected randomly from the database of the Thai Chamber of Commerce. The sample consists of small and medium sized manufacturing firms drawn from seven main manufacturing sectors in Bangkok and the Metropolitan areas where the centre for economic development of Thailand is. These industries including textile, chemical, metal products, machinery, electronics, food and agriculture products, and automotive industries are aimed be the key strategic driver of an emerging country's economic growth such as Thailand (BOI, 2010; Panthong 2005).

Data were collected from senior managers using questionnaire-based surveys. The questionnaire survey was originally developed in English then translated into Thai by a professional translator and then back-translated into English by another professional translator. The questionnaire was pre-tested with ten companies' executives in order to ensure that the wording, format and sequencing of questions were appropriate. Of the 1,000 survey packages distributed, 177 were returned and usable, representing a response rate of 17.7%.

The data was also controlled with t-test procedure for non-response bias and no significant difference ($p < 0.05$) was found in mail data sets' responses both in terms of the questionnaire items and constructs, i.e. entrepreneurial behavior and firm performance variables as well as in terms of control variables. Moreover, a common method bias may occur from common rater effect and same measurement time effect (Podsakoff et al., 2003). Harmon's Single Factor Test was employed to address this issue. According to Podsakoff et al. (2003), all variables used in the current study were entered into an unrotated factor analysis to determine the number of factors. If a single factor emerges from the factor analysis and a first factor explains most of the variance (Podsakoff and Organ, 1986), then a common method variance is assumed to exist. In this study, a single factor did not emerge and factor 1 did not explain the majority of the variance, common method bias is unlikely to be concerned in the data in this study.

All respondents completing the questionnaires were from the top (48%) or middle management (52%). There are more joint venture companies (52%) than pure Thai enterprises (48%). The firm age is determined by the year of production started and classified as young (37.9%) and moderate to old (62.1%). The firms surveyed are distributed among the sectors included as follows: textile (18%), chemical (15%), metal products (12%), machinery (13%), electronics (6%), food and agriculture products (16%), and automotive industries (20%).

3.2 Measurement

All measures were drawn from previous research and aligned with the conceptual aspects of each construct. This study used Ireland et al.'s (2006)12-item scale, which measures a firm's *entrepreneurial activities* on three dimensions: innovation, risk-taking and proactiveness. To measure *process innovation,* the scale of Gunday et al. (2011) and Nasution et al. (2011) was adopted. An 11-item scale was used because it enables innovation to be inherent part of organizations' operation. *Firm performance* uses three self-report perception measures derived from Goodale et al. (2011) and Gunday et al. (2011), namely financial performance, market performance and innovation performance. The respondents evaluated these aspects of corporate performance relative to their main industry competitors over the past three years. In order to account for any lagged effect, the last three years appears to be the proper choice (Carton and Hofer, 2006)). The subjective measures possible bring in manager bias, but they have been shown to be correlated to objective measures of performance (Dess et al., 1997). The reason behind using subjective measures is that firms are reluctant to disclose exact performance records and managers are less willing to share objective performance data (Carton and Hofer, 2006). The instrument consists of two items measuring financial performance, three items measuring market performance, and eleven items measuring innovation performance. These scales address both financial and non-financial aspects, providing a more holistic conceptualization of performance.

3.3 Controls

Firm size age and ownership were included as control variables, since these organizational variables may have possible affects both on entrepreneurial behavior and firm performance. Firm age was measured by the number of years that a company had been in operation. Firm ownership has two categories: Thai owned companies and joint venture companies. A dummy variable was used to measure company ownership (1 = Thai owned, 0 = foreign investments in the company).

4. Analysis and Results

Prior to testing the mediating effect of process innovation on EO – performance relationship, an exploratory factor analysis (EFA) was conducted to uncover key dimensions in the entrepreneurial activities, process innovation, and performance. The approach adopted sought to obtain the best representation of the latent factors while reducing the number of observed indicators to manageable level for robust estimates. A principal components factor analysis with varimax rotation was utilized. Only items with factor loadings of 0.40 or above were selected for any particular factor. Items that loaded significantly on more than one factor were dropped. Then, the reliability of each construct was evaluated by Cronbach's alpha. The reliability estimates for process innovation (0.92), innovation performance (0.95), market performance (0.86), and financial performance (0.87) reveal high level of internal consistency. On the other hand, the reliability of the entrepreneurial orientation construct was 0.64, which was lower than the recommended threshold value of 0.70. However it was greater than 0.60, which is an acceptable lower reliability coefficient (Hair et al., 2006).

Table 1 reports the results of an analysis of the relationships among the study variables. As indicated in the correlation analysis, all variables are significantly related to one another, supporting what had been found in previous research that revealed that entrepreneurial activities are related to process innovation (Antoncic and Zorn, 2004; Ireland et al., 2006). Among the respondents in this study, the entrepreneurship activities are significantly related to firm performance in terms of market, innovation as well as financial performance. This result supports what had been found in previous research that revealed that firm-level entrepreneurship leads to higher firm performance (Entrialgo et al., 2001; Fitzsimmons et al., 2005; Goodale et al., 2011; Kaya, 2006; Sebora et al., 2010).

Table 1 Means, Standard Deviations, Correlations and Reliabilities (N=177)

	Mean	SD	Alpha	1	2	3	4
1. EO	3.67	0.40	0.64				
2. Process innovation	4.03	0.67	0.92	0.50^{**}			
3. Innovation performance	3.72	0.74	0.95	0.41^{**}	0.68^{**}		
4. Market performance	3.79	0.77	0.86	0.36^{**}	0.56^{**}	0.65^{**}	
5. Financial performance	3.90	0.80	0.87	0.35^{**}	0.48^{**}	0.54^{**}	0.78^{**}

Note: ** $p < 0.01$ (2-tailed)

The hypotheses were tested using hierarchical multiple regression. According to Baron and Kenny (1986), there are three steps in establishing mediation. In step 1, the relationship between EO and the mediator, namely, process innovation was established. In step 2, the relationship between EO, and firm performance were established. In step 3, firm performance was treated as a dependent variable by adding the mediator to the equation with EO. In other words, the new equation includes not only EO but also the mediator. This step involves demonstrating that when the mediator and the EO are used simultaneously to predict firm performance. In step 3, according to the hypotheses, the mediator should be significant, while the previous significant effect of EO should be greatly reduced or become non-significant.

The regression results for step 1 are presented in table 2. Model 1 and 2 provide results for process innovation as the dependent variable. The control variables are contained in Model 1, and EO is contained in Model 2. The regression coefficient for EO was significant ($\beta = 0.48$, $p < 0.01$). To summarize, the overall results suggest that EO has a positive impact on process innovation. The positive results of the relationship between EO and process innovation can be explained in that the ability and willingness of the organizational members to take risk, to become proactive, and will possibly support the organization to introduce a new product/service or a new way of doing things will likely to promote the implementation of significantly improved production, delivery method and product quality.

Table 2 Hierarchical Regression Analysis for Process Innovation ($N = 177$)

Independent variables	Dependent variable	
	Process innovation	
	Model 1	Model 2
Firm age	0.34**	0.30**
Firm ownership	0.04	0.07
EO		0.48**
Model R^2	0.12	0.35
R^2 Change		0.23
Model *F*	11.75**	30.54*

Note: $^{**}p < 0.01$; $^{*}p < 0.05$ (2-tailed)

The results of step 2 and 3 are presented in table 3. Three aspects of EO were treated as a dependent variable. In model 1, the control variables were entered. In model 2, EO was added to the regression equation. Results from model 2 indicate that EO is positively related to innovation performance ($\beta = 0.38$, $p < 0.01$), market performance ($\beta = 0.34$, $p < 0.01$), and financial performance ($\beta = 0.33$, $p < 0.05$). Thus, it appears that, generally, the mangers of the firms who believe that their business needs to exploit new opportunities, to develop new products and/or services and market, are able to achieve their innovative capabilities as well as profit and sales goals. In model 3, process innovation was added as the mediator to the model 2 equation. The findings show that process innovation had a significant effect on firm performance in terms of innovation ($\beta = 0.62$, $p < 0.01$), market ($\beta = 0.48$, $p < 0.01$), and financial outcomes ($\beta = 0.36$, $p < 0.01$), while EO become non-significant. Regarding the evidence from step 1-3, the findings suggest that process innovation mediates the impact of EO on firm performance. Hypothesis 1 and 2 (a, b, c) are therefore supported. Hence, it reveals that entrepreneurial companies that are open to new ideas, technologies and processes are able to achieve their innovation, sales, and profit goals.

Table 3 Multiple Regression Analysis for Firm Performance ($N = 177$)

Independent variables	Dependent variables								
	Innovation performance			Market performance			Financial performance		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Firm age	0.29**	0.26**	0.07	0.29**	0.26**	0.12	0.26**	0.24*	0.13
Firm ownership	-0.12	-0.09	-0.14	-0.14	-0.12	-0.15	-0.04	-0.02	-0.04
EO		0.38**	0.09		0.34 **	0.11		0.33*	0.15*
Process			0.62**			0.48**			0.36**
Model R^2	0.09	0.24	0.49	0.10	0.21	0.36	0.07	0.17	0.26
R^2 Change		0.15	0.25		0.11	0.15		0.11	0.09
Model *F*	8.62**	17.86**	41.06**	9.15	15.14**	23.95**	6.39*	12.19	15.10**

Note: $^{**}p < 0.01$; $^{*}p < 0.05$ (2-tailed)

Regarding to the effect of EO on process innovation, EO is found to be positively associated to process innovation. This confirms the argument that EO is a prerequisite for not only product, marketing and organization innovations but also for process innovation (Burns, 2008; Gunday et al., 2011; Laforet, 2010). Many studies also demonstrate that entrepreneurial behavior is likely to enhance process improvement (e.g., Goodale et al., 2011; Nasution et al., 2011; Tageddini, 2010). Moreover, the findings expose that EO has indirect positive impact on innovation, market and innovation performance via process innovation, which is the main contributor to it. Process innovation is viewed as one of the most important sources of innovation performance as well as market and profit goal achievements because improved product quality and delivery appear to increase customer satisfaction, market share and sales growth and that may also directly contribute to financial outcomes (Atkinson et al., 1997; Gunday et al., 2011; Mair and Rata, 2004; Venkatraman and Prescott, 1990). Therefore, the study confirms that entrepreneurial behavior stimulates process innovation, which in turn, sustains innovation performance and market performance. This is consistent with the entrepreneurship literature that a process of wealth enhancement through innovation and exploitation of opportunities requires the entrepreneurial characteristics of risk-taking, innovation, and proactiveness (Nasution et al., 2010; Morris et al., 2008).

In addition, this study adds new insights that firms exhibiting entrepreneurial characteristics will likely to achieve market and financial returns when they focus on both short-term and long-term outcomes because the association between EO and company performance is complex and there is a strong need for the multidimensional nature of the performance construct when exploring the relationship between EO and performance (Kaya 2006; Kollmann and Stockmann 2008). Some entrepreneurial activities require extensive investments and so will take several years before they pay off. Moreover, short-term profitability may suffer from engaging in entrepreneurial activities (Kollmand and Stockmann, 2008; Wiklund and Shephard, 2005). Therefore, this study can acknowledge the existence of a resulting sustainable entrepreneurial behavior leading ultimately to higher financial and non-financial performance via process innovation.

5. Conclusion and Implications

The study contributes empirical evidence about the relationship among EO, process innovation and performance. Specifically, the study provides new insights into the present literature by examining the mediating role of process innovation on entrepreneurial orientation in relation to performance in Thai context. The results suggest that firms adopting entrepreneurial orientation can improve their performance in terms of short term and long-term scope via process innovation and improvement. The study supports the literature that entrepreneurial strategic orientation is an important path firms can take to make it possible achieve today’s and tomorrow’s competitive advantages, grounded in innovation.

The findings of this study offer several managerial implications. First, to improve company performance, entrepreneurial behavior should be encouraged by adopting entrepreneurial strategic posture. Entrepreneurship which is viewed as an innovative attitude that makes the firm ready assume calculated risk to achieve market leadership requires as understanding of the environment and quick response to market opportunities. Moreover, this study supports the fact that entrepreneurial behavior of a firm is an important major driver of process innovation, which in turn, improves business performance. Firms that are endowed with resources to improve their innovative capabilities and improvement processes could expect a more significant improvement of their innovation and market performance, if they encourage and implement entrepreneurship activities as an integral part of the business strategy. It is observed that increased financial performance occurs as the results of obtaining higher process improvement and innovation. Therefore, process innovation could play the most important role since it acts like a hub, where positive effects of entrepreneurial orientation is gathered and then leads to boost innovation, market and financial performance.

The study's results and associated implications should be viewed in light of the study's limitations. First, this study is limited to Thai manufacturing industry. Interpretation should be done with caution when generalizing to other industries and countries. Second, all data are collected in a cross-sectional manner; therefore, the study can conclude is that the role variable and their consequence are related at one point of in time. Third, the measurements involve single respondents within each firm, which can reinforce relationships between constructs.

Building from results of the study, there are some major priorities proposed for future research. First, it would be useful to replicate this study and repeat this model testing approach using a completely new sample. Second, more variables could be incorporated into the model. For example, to what extent do EO vary depending on strategic factors such as the nature of the external environment facing a company, the strategy of the company, the levels of competitive intensity and the internal structure of the company? Under what conditions that EO is the strongest contributor to firm performance? The linkage between EO and performance appears strong for companies that operate in turbulent environments (Wiklund and Shephard, 2005). Rapid rates of changes in the external environment may force firms to find way to be more entrepreneurial in order to survive and prosper. It is also necessary to use different information sources to measure different constructs, resulting in improve the reliability of the results. Furthermore, process innovation should be more investigated and the researcher should find the other cause variables which can explain the dependent variable (performance).

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Relationships among Real Effective Exchange Rate, Imports and Exports in Thailand

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Abstract

This paper attempts to investigate the relationships among real effective exchange rate, imports and exports in Thailand using monthly data over the period January 1995 – October 2012. Two structural breaks are identified to reflect the fact that since July 1997, the outset of the financial crisis, Thailand has adopted the floating exchange rate regime to replace its fixed exchange rate policy, and since June 2000 the managed floating and inflation targeting regime has been in place to maintain the national competitiveness.

The Granger causality tests are employed in this paper to study the relationship between the real effective exchange rate and imports or exports. It is found that the real effective exchange rate does Granger cause total imports and total exports, but the total imports or exports does not Granger cause the real effective exchange rate. The Engle-Granger cointegration test results indicate a long run relationship between imports and exports. The change of the exchange rate policy since July 1997 has a significant negative effect on total imports and a significant positive effect on total exports.

JEL classification: F1, F14, F3, F31

Keywords: Imports, Exports, Thailand

1. Introduction

A country's international trade balance and/or policy and the value of its currency have always been reported and commented in the economic news headline since the flexible exchange rate regime has been adopted by many countries. Devaluation of a country's currency has long been accepted and implemented by many governments to stimulate their exports to correct the trade deficit, which has also been criticized by their trading partners. However, the effectiveness of devaluation or depreciation on exports has not been clearly concluded by researchers (Bahmani-Oskooee and Ardalani, 2006).

Thailand had adopted the pegged exchange rate regime after the Second World War, and it changed to a flexible exchange rate system and the monetary targeting regime since the 1997 Asian financial crisis. The exchange rate changed from Baht 25 per USD under the fixed regime to Baht 40 in 2000 and Baht 31 recently. The depreciation of the Thai Baht benefited the exporters a lot and improved the country's trade balance. Exporters and government are reluctant to see the appreciation of the Thai Baht, therefore managed float and inflation targeting regime has been adopted to maintain the national competitiveness since June 2000.

Thus, the first objective of this paper is to study the relationships among real effective exchange rate of Thai Baht and Thailand's total exports and imports. The Granger causality tests are employed in this paper to study the relationships among the real effective exchange rate, imports and exports using monthly data over the period January 1995 – October 2012. The second objective of this paper is to investigate the long run relationship between imports and exports of Thailand. The Engle-Granger cointegration test is used to accomplish this objective.

The remainder of the paper is organized as follows. Section 2 reviews the literature on export, import and exchange rate. Section 3 introduces the methodology and data used in this study. Results are summarized in section 4 and conclusion is in section 5.

2. Literature Review

There are two main streams of study in the literature. One investigates the impact of exchange volatility on international trade flows, such as Klaassen (2004) and Rahmatsyah, Rajaguru and Siregar (2002). Another main stream explores the effect of exchange rate changes on the country's international trade flows. Examples are Bahmani-Oskooee and Ardalani (2006), Bahmani-Oskooee and Kara (2003), and Stucka (2003).

2.1 Exchange Rate Volatility and International Trade Flows

McKenzie (1999) surveyed the vast literature and concluded that the impact of exchange rate volatility on trade flows remained unresolved at both the theoretical and empirical level. Klaassen (2004) studied the monthly bilateral aggregate US exports to the six other G7 countries from January 1978 to November 1996. It was found that exports reacted slowly (after about one year) to changes in the real exchange rate. The expected real exchange rate level has the normal positive effect on exports, whereas real exchange rate volatility has no significant effect. Rahmatsyah et al. (2002) tested the impact of the exchange rate volatilities of Thai Baht against the Japanese yen and the US dollar on the performance of Thailand's bilateral trades with Japan and US over the period from 1970s to the second quarter of 1997 (just before the financial crisis). The results indicated that the rise in exchange rate volatility had adversely affected both imports and exports of Thailand with the Japanese market, and only the imports of Thailand from the US market. The impact on exports of Thailand to the US market was not conclusive. The paper also suggested that Thailand should not go back to the US$-pegged system.

2.2 Exchange Rate Change and Trade Flows

Regarding the impact of exchange rate change on imports and exports, most research papers study both long and short term effects. Bahmani-Oskooee and Kara (2003) estimated the import and export demand functions of nine industrial countries including Australia, Austria, Canada, Denmark, France, Germany, Italy, Japan and USA by employing the error-correction technique known as the autoregressive distributed lag (ARDL) approach. Quarterly data over the 1973-1998 period were studied and the results showed no universal conclusion. Trade flows of different countries reacted differently to the nominal exchange rate changes that the response time of trade flows to the change for some countries was shorter. It was also concluded that the long-run income elasticities or exchange rate elasticities in most cases were greater in the import demand function than in the export demand function. ARDL approach was also employed by Bahmani-Oskooee and Goswami (2004) to study Japan's bilateral trade flows over the period of 1973-1998. The results indicated that in the short run, the effect of currency depreciation on the trade balance could be either positive or negative, whereas in the long run exchange rate was not a major factor for Japan's exports to each of her trading partner's market. Jiranyakul (2012) used ARDL to study the relationship between Thai manufacturing exports and imports of capital goods over the period January 2000-July 2011. The paper concludes that there is a long run equilibrium relationship between exports and imports of capital goods in manufacturing sector.

Industry data rather than aggregated data of trade flows of US, monthly import and export data from 66 industries over the period of January 1991-August 2002, were investigated by Bahmani-Oskooee and Ardalani (2006). They pointed out that in the long run real depreciation of the US dollar would stimulate export earnings of many industries but it had no significant effect on most importing industries. Stucka (2003) studied the impact of exchange rate changes on the quarterly trade balance in Croatia over 1994-2002 using the reduced form model. It was found that on average, a 1% permanent depreciation improved the new trade balance equilibrium between 0.94% and 1.3%, and it would take approximately 2.5 years for this new equilibrium to be established.

The impact of changes in real effective exchange rate, domestic and foreign prices on trade flows of Korea, the Philippines, Singapore and Thailand was also investigated by Chua and Sharma (1998). Domestic and foreign prices were found to have a larger impact on the trade flows than the real effective exchange rate. The response time of import demand to shocks in prices and exchange rates were found to be similar, but the response time for export supply varied among countries. Bahmani-Oskooee and Harvey (2006) used quarterly import and export values to estimate the bilateral inpayments and outpayments models between Malaysia and her 14 trading partners over the period 1973-2003. The results indicated that while in most cases real depreciation of ringgit had short run impacts on inpayments and outpayments, these effects did not last in the long run. In the long run, while real depreciation of ringgit increased inpayments from China, France, Germany, Indonesia and the USA, it had no impact on outpayments. The quarterly bilateral trade balances of Malaysia and Thailand with the US and Japan from 1980 to 1996 were explored by Baharumshah (2001). The Johansen test revealed a stable long run relationship between trade and three factors such as exchange rate, domestic and foreign income. The real effective exchange rate was found to be an important factor for the trade balance and devaluation could improve the trade balances of both countries in the long run. Further, the results indicated that there was no causal run from exchange rate to trade balance and the real effects of devaluation were distributed over a period of eight to nine quarters.

2.3 Imports and Exports

Engle-Granger cointegration test is popular among researchers in this field. Afzal (2008) used it to investigate and compare the long run performance of imports and exports in 4 Asian countries: Pakistan, India, Korea and Thailand. It was found that there was an inherent tendency of imports and exports to move together in the long run. Erbaykal and Karaca (2008) employed Engle-Granger cointegration test to examine the relationship between Turkey's exports and imports and the results indicate a long period relationship between nominal or real exports and imports series from 1982:Q1 to 2005:Q4. Annan and Acquah (2011) tested the long run relationship between exports and imports in Ghana for the period 1948-2010, and the Engle-Granger cointegration results revealed that Ghana's imports and exports were cointegrated. Dumitriu, Nistor and Stefanescu (2008) analysed the

Romanian exports and imports relationship over the period January 2004-July 2008 using the Engle-cointegration test, and the result also confirmed a cointegration between exports and imports.

Rahman (2011) used both Engle-Granger and Johansen cointegrated tests to study the relationship of exports and imports in Indonesia and Malaysia over the period of 45 years. It was found that the imports and exports were not cointegrated in Indonesia, but were cointegrated in Malaysia. The cointegrations of imports and exports in 50 countries were investigated by Arize (2002) using Johansen test, and the evidence of cointegration could be found in 35 (including Thailand) out of 50 countries.

Furthermore, Cetinkaya and Erdogan (2010), using the Granger causality test, found the existence of two way causality relationship between Turkey's imports and exports over the period January 2002-March 2010. Similarly, Wong and Tang (2009), using the Granger non-causality approach, showed that the Malaysian exports and imports have a bidirectional causal relationship.

3. Methodology and Data

To investigate the relationship between imports and exports of Thailand, monthly total imports and total exports data over the period January 1995–October 2012 are collected from Bank of Thailand, thus there are 12×17+10 = 214 observations in total. The paper intends to study a longer period, however, the data before 1995 are not available. Since the volume data are not available, this paper will use the value data to investigate the relationship. Bahmani-Oskooee and Harvey (2006) argued that the impact of real depreciation on import and export values could be directly assessed by relating the value data to the real exchange rate. To explore the relationship between exchange rate and import or export, monthly real effective exchange rates, which is the index of weighted average of foreign currencies per Thai Baht and the base year is 2007, over the same period are also collected from Bank of Thailand. Two structural breaks are identified to reflect the fact that since July 1997, the outset of the financial crisis, Thailand has adopted the floating exchange rate regime to replace its fixed exchange rate policy, and since June 2000 the managed floating and inflation targeting regime has been in place to maintain the national competitiveness.

First, the Granger causality test is employed to study the causal relationships between the total imports and exports of Thailand, real effective exchange rate and import or export. It is expected that total imports and exports of Thailand would have the bilateral causal relationship as the results in Cetinkaya and Erdogan (2010) and Wong and Tang (2009). It is also expected that there is a causal relationship between the real effective exchange rate and total exports or imports, however, the direction might not be clear since the conclusions from previous researches are not universal (Bahmani-Oskooee and Goswami, 2004).

Second, following the study of Afzal (2008), Engle-Granger cointegration test is used to investigate the relationship between imports and exports. Before the regression, the Augmented Dickey-Fuller (ADF) test must be done first to ensure that the variables are stationary and integrated of the same order. The models are as follows:

$$Ln(Totalimports)_t = \square_0 + \square_0 Ln(Totalexports)_t + D_1 + D_2 + \square_t$$
$$Ln(Totalexports)_t = \square_1 + \square_1 Ln(Totalimports)_t + D_1 + D_2 + \square_t$$

where $Ln(Totalimports)_t$ and $Ln(Totalexports)_t$ stand for the natural logarithm of total imports and exports for month t, D_1 and D_2 are dummy variables capturing the 2 structure breaks of exchange rate regime: D_1 is equal to 1 for the observations between July 1997 and May 2000, and 0 otherwise; D_2 is equal to 1 for the observations between June 2000 and October 2012, and 0 otherwise.

These two models can be run by OLS, and the residual of each equation will then be tested to check whether they are stationary by using ADF tests. If the residuals are stationary, then the imports and exports are cointegrated indicating a long run relationship between the imports and exports series. It is expected that total imports and exports are cointegrated as in Arize (2002).

4. Analysis Results

4.1 Descriptive Statistics

Before conducting empirical tests of the relationship between Thailand's total exports and imports, descriptive statistics such as the magnitudes or the trends of the total exports and imports may provide some intuitive perceptions.

Table 1 lists Thailand's exports and imports for October 2012. Other than total imports and exports, the imports from and exports to the following five regions or countries are also presented: Japan, NAFTA, EU (27 countries), ASEAN and China. These five regions or countries are listed because they are the top five destinations of the Thai exports, which consists of 67 percents of Thailand's total exports in October 2012 whereas the exports to all other destinations in total count for only 33 percent.

The trade balance in this month is at a deficit of $2,469 million. It can be seen that Thailand exports the most to ASEAN which is about one-fourth of total exports and imports the most from Japan which is about 21 percent.

Figure 1 shows the trends of Thailand's total exports and imports and bilateral trade flows between Thailand and each main partner over the period from January 1995 to October 2012. Although the magnitudes of imports and exports and the gaps between them vary among trading partners, the long run trend is upward sloping in most cases. It seems that there is a strong tendency that imports and exports are moving in the same direction. The bigger gaps between import and export over the long run are found in the cases of NAFTA and EU whereas the smaller gaps can be seen in the cases of China and ASEAN.

Table 1 Thailand's Exports to And Imports from Different Countries or Regions in October 2012

	Exports to (million USD)	Percentage (%)	Imports from (million USD)	Percentage (%)	Trade balance (million USD)
ASEAN	4,865.25	24.92	3,767.82	17.13	1,097.43
China	2,122.67	10.87	3,285.41	14.94	-1,162.74
EU	1,854.06	9.50	1,739.1	7.91	114.96
Japan	2,067.31	10.59	4,621.3	21.01	-2,553.99
NAFTA	2,240.89	11.48	1,360.87	6.19	880.02
Others	6,374.14	32.65	7,219.08	32.82	-844.94
Total	19,524.32	100.00	21,993.58	100.00	-2,469.26

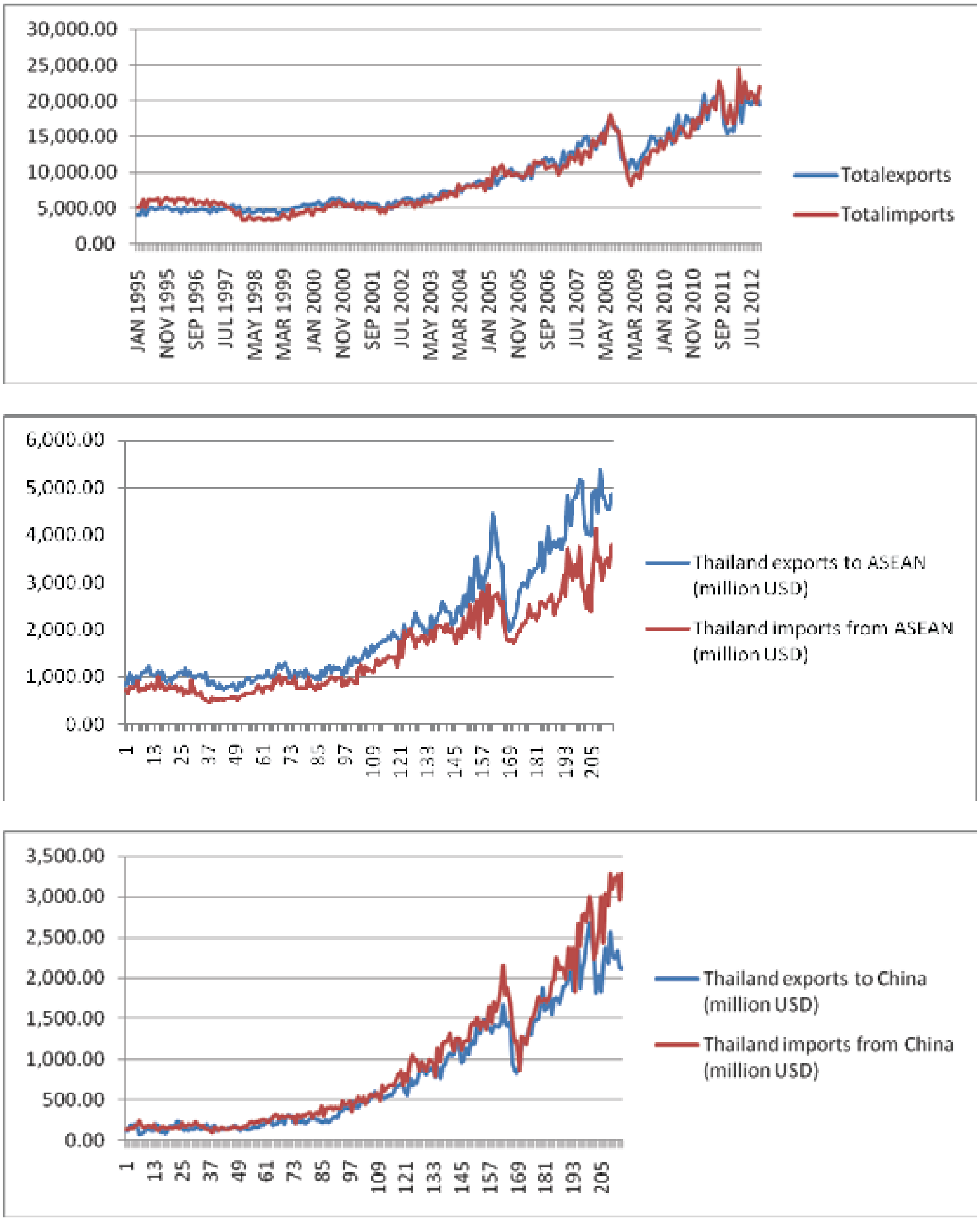

Figure 1 Trends of Imports and Exports of Thailand (Jan 1995-Oct 2012)

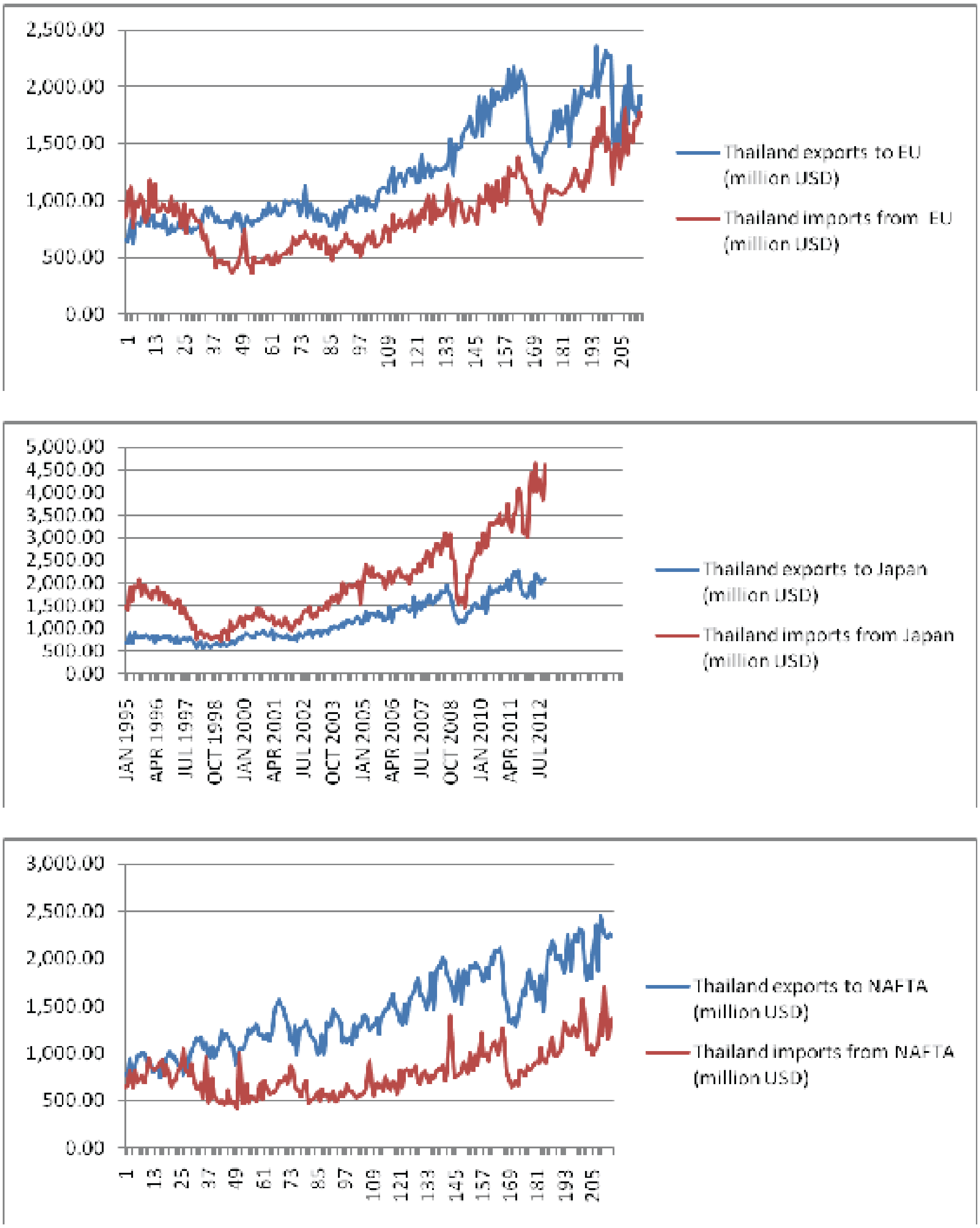

Figure 1 (continued) Trends of Imports and Exports of Thailand (Jan 1995-Oct 2012)

4.2 Empirical Results

The ADF test is conducted first for the real effective exchange rate and total imports and exports items. The results are shown in Table 2. It can be seen that all three variables, the natural logarithm of real effective exchange rate, total exports and total imports are not stationary on level but they become stationary after the first difference is taken, i.e. they are integrated at the same order I(1).

Table 2 Augmented Dickey-Fuller Test Statistic

		ADF-Statistic	Test type	Lag Length	Order of integration
Ln(Totalimports)	level	-2.81	constant and trend	4	I(1)
	1st difference	-7.80***	constant	2	
Ln(Totalexports)	level	-3.06	constant and trend	3	I(1)
	1st difference	-8.79***	constant	2	
Ln(Reer)	level	-2.45	constant and trend	1	I(1)
	1st difference	-11.91***	constant	0	

Note: "Ln" stands for the natural logarithm; "Reer" stands for real effective exchange rate; The lag length have been selected using AIC values. *** indicates significance level at 1%. The MacKinnon critical values are -4.00 for level test and -3.46 for first difference test at 1% significance level. The sample size is 214 monthly observations from January 1995 to October 2012;

Table 3 Pairwise Granger Causality Tests for Total Imports and Exports

Null Hypothesis:	F-Statistic	Probability
Ln(Totalexports) does not Granger Cause Ln(Reer)	0.96	0.44
Ln(Reer) does not Granger Cause Ln(Totalexports)	1.94*	0.09
Ln(Totalimports) does not Granger Cause Ln(Reer)	0.91	0.48
Ln(Reer) does not Granger Cause Ln(Totalimports)	4.55***	0.00
Ln(Totalimports) does not Granger Cause Ln(Totalexports)	4.40***	0.00
Ln(Totalexports) does not Granger Cause Ln(Totalimports)	5.02***	0.00

Note: The sample size is 214 monthly observations from January 1995 to October 2012; *** and * indicate significance levels at 1% and 10%, respectively.

The results of pairwise Granger causality tests are shown in Table 3, it shows that the real effective exchange rate (REER) Granger causes total imports and exports of Thailand but total imports or exports do not Granger cause REER. Total imports Granger cause total exports and vice versa or it can be concluded that there is two way causality between Thailand's total exports and imports. This result is consistent with Wong and Tong (2009) and Cetinkaya and Erdogan (2010).

The OLS results are in Table 4. It can be seen that the coefficients on imports and exports variables are significantly positive at 1% significance level, which suggests that imports and exports do have the tendency to move in the same direction, which is consistent with the result of Afzal (2008). The coefficients of dummy variables in Table 4 are significantly negatively related to imports and significantly positively related to exports, again at 1% significance level, which implies that the depreciation of Thai Baht increased the exports and decreased the imports. Further, the magnitude of the coefficients of the dummies indicate that the period July 1997-May 2000, monetary targeting regime, has a bigger impact on the exports and imports.

Table 5 shows the results of Engle-Granger cointegration tests. It is found that the residuals are stationary at the order I(0) at the 1% significance level. Thus, it can be concluded that there is a long run relationship between Thailand's monthly total exports and imports over the study period. This is also consistent with the result of Thailand from Arize (2002), and the results of other countries such as Romania from Dumitriu, Nistor and Stefanescu (2008), and Malaysia from Rahman (2011), etc.

Table 4 OLS Regression on Total Exports and Imports of Thailand

Dependent variable	Ln(Totalexports)	Ln(Totalimports)
Independent variables		
Constant	0.4633***	0.0661
	(0.00)	(0.63)
Ln(Totalexports)		1.0353***
		(0.00)
Ln(Totalimports)	0.9199***	
	(0.00)	
D_1	0.3768***	-0.4077***
	(0.00)	(0.00)
D_2	0.3052***	-0.2909***
	(0.00)	(0.00)
R-squared	0.9753	0.9735
Observations	214	214

Note: D_1 is a dummy variable which is equal to 1 for the period July 1997-May 2000, and 0 otherwise. D_2 is a dummy variable which is equal to 1 for the period June 2000-October 2012, and 0 otherwise. *** indicates significance level at 1%.

Table 5 Results of Engle-Granger Co Integration Tests

Cointegration equation	ADF test statistics of residual (without trend, lag=0)	MacKinnon critical value at 1% level
Ln(Totalexports) = f(Ln(Totalimports)	-9.78***	-3.46
Ln(Totalimports) = f(Ln(Totalexports)	-9.82***	-3.46

Note: *** indicates significance level at 1%.

5. Conclusion

Since the financial crisis in 1997, exchange rate of Thai Baht and the magnitude of Thai exports and trade balance have been sensitive issues discussed among academics, practitioners and policy makers. Hence, this paper explores the relationships among Thailand's total imports, total exports and real effective exchange rate using monthly data over the period January 1995 – October

2012. This study period covers three sub-periods with two cutoff points July 1997 and June 2000 indicating the three different exchange rate regimes in Thailand over time: fixed exchange rate regime, free floating regime and managed floating regime.

The Engle-Granger cointegration test results show a long run relationship between total imports and total exports over the period January 1995 – October 2012. The change of the exchange rate policy since 1997 has a significant negative effect on total imports and a significant positive impact on total exports. Whereas the results of Granger causality tests indicate that the total imports and exports do not Granger cause the real effective exchange rate, but on the other hand, the real effective exchange rate does Granger cause total imports and total exports during the study period. This new evidence could help the authorities to make future adjustment of exchange rate policies. With this result, importers and exporters could understand the relationship between exchange rate and trade flows better and form more reasonable expectations.

Further research can be conducted in different directions. For instance, instead of the total imports and exports, it can study several bilateral trade flows relationships between Thailand and its main trade partners such as Japan, ASEAN, NAFTA, EU and China. Also, it can include other macroeconomic factors including domestic income and trading partner's income to investigate their effects on imports and exports of Thailand.

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Executive Duality and Corporate Entrepreneurial Innovation of Nigerian Listed Corporations: An Impact Assessment

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Abstract

Various reforms in the corporate sector has necessitated consequent changes in the pattern of governance in its industries. One of such changes is the bifurcation of executive duality, which implies the power and centrality of the lead entrepreneur has been redefined in the light of corporate entrepreneurial innovation. The objective of this paper was premise in this context, to know whether executive duality significantly relates and impacts on corporate entrepreneurial innovation. Data were collected from 215 financial statements of the corporations that made the sample for the period under review. The one-sample t-test and the Hosmer and lemeshow test was used to test the hypothesis formulated for the study. Findings revealed a significant relationship exists between executive duality and corporate entrepreneurial innovation, as well as a significant impact. The study concludes, bifurcation of executive duality is indifferent to the corporate entrepreneurial innovation process. In this wise, sustaining legitimacy through innovations that translates into huge earnings should be pursued.

Keywords: Executive Duality, Corporate Entrepreneurial Innovation

1. Introduction

Extant literature has shown that, one of the most important factors in any corporation is the power and centrality of the lead entrepreneur. It is this distinguishing characteristic, effectiveness, principles and behavior of this specific person that brings to bear the control and influence of activities of the corporation at any point in time. This influence is precipitated by the energy of advancing innovation in changeable surroundings. Innovation is a series of action that combine worth and originality to the corporation's suppliers and customers through the development of new products, services and new ways of dealings in commercial activities. Amidst this series of action, the principal roles of the corporate entrepreneur are to dare bureaucracy, to determine new opportunities, to support and take advantage of corporate assets and to move the innovation process forward. However, the roles of the corporate entrepreneur were put to bear by the provision of the codes of corporate governance issued in 2003 by the Securities and Exchange Commission (SEC).

One of the provisions the code made imperative to comply with includes, that of executive duality. The provision requires that, the responsibilities of the head of the Board, that is the Chairman, should be clearly separated from that of the head of Management, i.e. MD/CEO, such that no one individual/related party has unfettered powers of decision making by occupying the two positions at the same time. From the forgoing, it is clear that the corporate entrepreneur has a bifurcated capacity, i.e power and centrality is divided. This implies daring bureaucracy and determining new opportunities, to support and take advantage of corporate assets and to move the innovation process forward is no longer in the power and centrality of one individual. This by implication can positively or negatively affect corporations as some studies in the united states demonstrated that non- market forces like government regulation can make or break innovation (Christensen , Anthony and Roth 2005). It is within this context that this study seeks to address the following questions; Has the bifurcation of executive duality significantly related and impacted on corporate entrepreneurial innovation of listed corporations in Nigeria?

Besides seeking to address these questions, there is an attempt by the study to contribute to bridging the existing gap on the relationship and impact of executive duality on corporate entrepreneurial innovation in Nigerian listed corporations. The remaining part of this paper is structured into five sections, section one is the introduction including this paragraph. Section two, presents the literature review highlighting; concepts, prior studies and theoretical review. Immediately after that is the methodology, presenting how the study defined and measured it variables. Afterwards, is the discussion of findings and based on the findings the paper concludes and highlights the study's implication in the last section of the paper.

2. Literature Review

2.1 Concepts

Corporate entrepreneurial Innovation (CEI): The need to comprehend innovation is of paramount importance to the understanding of CEI. Innovation is the response to environmental challenges or future opportunities (Hitt, Hoskisson, and Kim 1997 and Atuahene-Gima, 2001). An innovation may be determined by scientific research resulting in new technology, by individual entrepreneurship, or by a strategic decision and further development of the innovation throughout the entire company (Sundbo,1997). Hence entrepreneurial philosophy, which stimulates change, and the provision of a supportive environment, is most likely to foster innovation which invariably needs a purpose and therefore, the introduction and identification of a new consumer need or the development of additional technology within the market place usually initiates the process (Shaw, O'loughlin, and Mcfadzean, 2005). The initiated process, is more commonly identified as the push-pall process (Tidd, Bessant, and Pavitt, (2001)). Hence, the key precipitating environmental factors for the innovation process are uncertainty, risk, and change (Amit et al, 1993 and Braganza and Ward, 2001). In the same vein, Robert, (1988) emphasizes that, new technology also impacts innovation. According to Dosi, Freeman, Nelson, Silverberg and Soete (1988) technological development is core to innovation process. For Porter, (1998) new technology has the potential to alter industry structure thereby changing the market place and hence influencing consumer needs. This implies an entrepreneur organization that is proactive when it comes to innovation earns the potential of a competitive advantage (Miller, 1983).

Furthermore, Robert, 1988; Porter, 1998; Means and Fulkner, 2000 and Dooley and O'sullivan, 2001 observes that, recognition and exploitation of the competitive significance of technological change is important, as this can also change the rules and parameters under which organizations operate. Emphasizing further, (Shaw, O'loughlin, and Mcfadzean, 2005) argues entrepreneurial activity might not be deliberate, opportunity recognition is clearly determined by entrepreneurial alertness and intuition. More so, other prerequisites for opportunity recognition include a wide social network and prior knowledge of markets and consumer problems (Ardichvili and Cardozo, 2000). Similarly, Shane (2000) establish, while examining technology entrepreneurs exposed to an MIT invention, that major dimensions of prior knowledge were required and combined with technology knowledge to facilitate opportunity recognition. These include prior knowledge of ways to serve markets, prior knowledge of customer problems, and prior knowledge of markets. Prior knowledge of how to serve markets entails how technologies can be packaged to meet the needs of a particular market. Aldrich and Wiedenmayer (1993) showed that, the product or service lines entrepreneurs establish are related to the organizational units for which they previously worked. Buttressing this position, Shane (2000) revealed an entrepreneur who had experience in machine design would package the potentially profitable technology through a machine rather than a service.

From a different perspective there are a handful of studies that demonstrated that, specific type of knowledge and human capital had influence on opportunity recognition and venture creation, this have a way of enhancing the entrepreneurial process. Christensen and Peterson (1990) examined technology and market knowledge as prerequisites for recognizing opportunities. They presented opportunity recognition as a problem-solving process that calls on both kinds of knowledge. Their findings revealed that technology and market knowledge allows for individuals to identify both problems and potential opportunities to solve problems with technology. In the same vein Leonard & Sensiper, 1998; O'Connor & Veryzer, 2001 were emphatic on the role of specific and divergent knowledge types in recognizing and developing opportunities. Furthermore, Amabile (1999) posits that, combining market knowledge and technology knowledge is advantageous for developing new ideas, hence an individual's creativity is enhanced if his or her cognitive style facilitates the ability to link divergent knowledge types. This according to (Leonard & Sensiper, 1998; Leonard & Straus, 1997) is often referred to as creative abrasion, which is the group dynamics of different ideas coming together and undergoing constructive criticism to develop new products. This process is enhanced when individuals within the group provide different types of knowledge (Amabile, 1999; Leonard & Sensiper, 19989 ; O'Conner & Veryzer, 2001). The results of the innovation process, whether success, indirect or unintended consequences (O'Loughlin, 2001) or failure, should form the basis for further learning, leading to improved knowledge (McGrath, 1999; Schaffer and Paul-Chowdhury, 2002) and in some cases resulting in re-innovation (Rothwell and Gardiner, 1989). On the other hand there are a few studies like that of Marvel and Lumpkin (2007) that establish the effect of specific knowledge or human capital on innovation that is radical in nature as a product or service too far ahead of its time to gain initial sales and penetrate markets.

Corporate entrepreneurial innovation (CEI), could mean the effort of promoting innovation in an uncertain environment, innovation is the process that provides added value and novelty to the organizations and its suppliers and customers through the development of new procedures, solutions, products and services as well as new methods of commercialization (Shaw, O'loughlin, and Mcfadzean, 2005). Explaining further, they posit that, within the innovation process, the principal roles of the corporate entrepreneur are to challenge bureaucracy, to assess new opportunities, to align and exploit resources and to move the innovation process forward. The corporate entrepreneur's management of the innovation process will lead to greater benefits for the organizations. From another perspective, corporate entrepreneurialship innovation is an independent process (Cunnigham and Lischeron, 1991; Jin, 2000; Dooley and O'sullivan, 2001; Baun et al, 2001 and Chesbrough, 2003). The entrepreneurial function within this independent process lies with the executive function of management (Schumpeter,1934 Hagedoorn, 1996).

This only implies the lead entrepreneurs resides within the policy formulation segment and implementation segment of the organization, as Kent, Sexton and Vesper, (1982) posits that entrepreneurs act is core in the innovation process. In this wise, Hekker, Suursa, Negro, Kuhlmann, and Smits, (2007) were emphatic to reveal that, there is no such thing as an innovation system without entrepreneurs. Entrepreneurs are essential for a well-functioning innovation system. The role of the entrepreneur is to turn the potential of new knowledge, networks, and markets into concrete actions to generate–and take advantage of–new business opportunities. Entrepreneurs can be either new entrants that have the vision of business opportunities in new markets, or incumbent companies who diversify their business strategy to take advantage of new developments referred to as entrepreneurship within existing organizations (Kanter, 1983; Pinchot, 1985) or group entrepreneurship within existing organizations (Stewart, 1989). From the foregoing what has been made clear from these studies is that, the CEI process needs attributes like independence, being a function of the executive management, prior knowledge, specific knowledge or human capital through a dynamic group of teamwork that is capable of yielding an edge over other organizations in the same industry, in terms of new products, better services that enhances the value of the corporation.

2.2 Corporate Entrepreneurial Innovation in Nigerian Listed Corporations

A lot of innovation has been witnessed in the Nigerian corporations. These innovations are seen in the products and services they roll out to customers. For example, most of these corporations have been able to communicate the nature and importance of their products or services through billboards, social networks, print and mass media. For example on the service segment, decades ago, the opening of savings account requires cash deposit but nowadays it is on zero balance, i.e the customers are not required to open an account with immediate cash deposit. Also cheques can be paid into savings account not drawn. Still on services, technology has brought about easy cash withdrawals and transfers through e-banking, internet and mobile banking. On the product segment, especially in the consumer goods sector, almost all the corporations in the sector have been able to demonstrate their sense of innovative capabilities in the products they roll out to their customers. For example, house hold durables, non-alcoholic beverages and personal house hold products to mention but a few. It is important to note that, different organizations possess different levels of creativity and innovative ability (Gundry and Prather; 1994; Amabile and Mcfadzean, 1996; Hoegl, Gemuender and O'loughlin, 2001). This creative and innovative ability produces a large growth in turnover and profit for firms (Sundbo,1995).

Entrepreneurship is held to promote wealth creation through innovation (Drucker, 1985; Ireland et al., 2001), and manifests itself through the development of new markets for differentiated or improved products and new applications, value creation, growth and organizational renewal (Aldred and

Unsworth, 1999; Zahra, 1991). Renewal in this regard must be able to produce or add value to the organization (Wetlaufer, 1997) if otherwise, innovation falls short of expectations (McGrath, 1999; Rogers, 1995).

2.3 Prior Studies on Executive duality (ED) and Corporate Entrepreneurial Innovation

Studies conducted on executive duality and corporate entrepreneurship are few and having inconclusive findings some of these studies includes that of Daily and Dalton, 1993; Certo, Lester, Dalton, and Dalton, and Hung and Mondejer (2005) they had an objective of establishing the association between corporate governance and entrepreneurial innovation. They identified three attributes; risk taken, acceptance of changes and development of new initiatives. They found that chief executive officer and chairman duality was found to be positively related to preference for risk-taking and development of new initiatives of firms but not to the acceptance of changes in firms. However, they found share ownership of directors was related to risk-taking preference, but not to acceptance of changes and development of new initiatives of firms. Hung and Mondejer (2005) went further to establish that, directors being executive or non-executive had no impact on entrepreneurial innovation. Similarly, Zahra, et al, (2000) studied entrepreneurship and the effects of ownership and governance structure. Their sample consisted of 231 manufacturing firms in existence for at least eight years and having assets totaling twenty five million dollars to five hundred million dollars for the period 1991 to 1993. Their findings indicate that commitment to corporate entrepreneurship is high when the board chair and the chief executive officer are different individuals.

From a different angle, there are some studies that had proved that regulations can alter the direction of innovation. For example, Christensen , Scott, and Roth (2005) demonstrated that, Non-market forces, such as government regulations, can make or break innovation. Nonmarket forces can have a major impact on innovation. Government regulation or policy can push an industry toward or away from innovation. The 1996 Telecommunications Reform Act in the United States was intended to encourage competition through deregulation. However, market uncertainties, technical challenges and the popularity of the technology false confidence led to disorder in the telecommunications market and left policy makers confused and frustrated. It is important to note here that, making innovation legal does not make it happen. However, innovations can translates into huge turnover.

2.4 Theoretical Background

An attempt is made in this section to review the entrepreneurialship and innovation theory as well as the legitimacy theory in order to set the frame work in which the mathematical model of the study is deduced. The theory of entrepreneurialship and innovation simply proposes that, the health of any economy depends on the pursuit of opportunities by prospective entrepreneurs in which entrepreneurs preference to pursue the possibility of making profit is an individual difference (Schumpeter, 1934;Kirzner, 1973; and McMullen, and Shepherd, 2006). The fact that the theory is focused on individualism makes it handicapped as far as the objectives of this study is concerned. In this wise, the study uses Stolper (1994) modified Schumpeter's theory of entrepreneurialship and innovation as its framework. The theory proposes that, the role of entrepreneurial activities highlighted in the traditional theory are worthwhile in understanding the dynamics of innovation and are important features in considering the fact that, entrepreneurial activities ranges from single person economic agent to a collective entrepreneurial function in large companies. This implies, the creativity of collective entrepreneurialship function that reflect firm specific advantages that are created through innovative capabilities (Dosi and Teeci, Kogur and Zander 1993). In that context, collective entrepreneurialship is not a magic phenomenon or a deus ex machine but primarily an endogenous factor that combines the application of innovative capabilities based on tacit knowledge with well-developed internal search routines, firm specific skills and organizational learning (Hagedoorn, 1996). Innovation is a radical act which is the introduction of a new element or a new combination of old elements Schumpeter, 1934. This element produces a large growth in turnover and profit for the firm (Sundbo, 1997). The corporate entrepreneur's management of the innovation process will lead to greater benefits for the organizations. This position is in line with the organizational legitimacy theory. Legitimacy is important to organizations because of the access it provides to key resources (Parsons, 1960; Pfeffer & Salancik, 1978).

Suchman (1995) sees organizational legitimacy as the generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions. Stakeholders are more likely to associate with groups deemed proper and appropriate and to support organizations that embody prevailing social norms and values (Certo, Lester, Dalton, and Dalton, 2005). Legitimate organizations are viewed as inherently more trustworthy (Suchman, 1995); this trust can, in turn, be leveraged to facilitate increased access to resources (Pfeffer & Salancik, 1978). In contrast, even the threat of loss of legitimacy can disrupt the flow of necessary resources into the firm. As noted by Suchman (1995), the negative effects of firm failure are felt even more acutely when legitimacy is at stake. External constituents are likely to distance themselves from organizations suffering legitimacy losses to avoid the risk of negative contagion taking with them the financial, social, and intellectual capital that the damaged firm needs to recover and survive (Suchman, 1995; Deephouse and Carter (2005). Organizations that deviate from normal behaviour violate cultural or legal expectations and theories of organizing. They are subject to legitimacy challenges and may be deemed unacceptable by stakeholders. It is important to note here that, the reforms in the Nigerian corporate sector is a pointer to this position. The bifurcation of the responsibilities of the head of the Board, that is, the Chairman clearly separated from the head of Management, i.e. MD/CEO, such that no one individual/related party has unfettered powers of decision making by occupying the two positions at the same time. This is deemed a corrective measure promoting a normal behavior, in order not to violate cultural or legal expectations so as to be acceptable to a coalition of stakeholders. Furthermore, legitimacy serves as a medium for enhancing corporate entrepreneurial innovations. From the explanation so far, bifurcation of executive duality is expected to go in the same direction with the corporate entrepreneur's management of the innovation process that will lead to greater benefits for the organizations. This is the stem of the hypothesis of the study.

3. Methodology

Methodologies for investigating innovation are based both on information directly provided by firms themselves and on various other sources, such as assessment by experts or historical literature (Kleinknecht, 1993; Pavitt., Robson, Townsend, 1987). Some researchers are concerned about the fact that innovation is often measured on the basis of perceptual, self-reported data (Hoffman et al., 1998), even if multi-item scales are often used in questionnaires in order to have a higher reliability. In any case, the problem of ambiguity is difficult to eliminate even though the wordings of interviews and questionnaires are commonly adapted in order to be easily understandable by different interviewees.

Also face-to-face interviews are adopted to facilitate item interpretation. Rather than indicating the futility of self-reporting surveys, however, the conflicting results may be a function of conceptual, operational and measurement issues (Stewart and Roth, 2001). Furthermore, it is worth noting that self-reporting surveys have been the most commonly used methods for testing innovation issues (Sonfield, Lussier,, Corman, McKinney, 2001). While some authors report a strong correlation between perceptual and objective measures of innovation (Kahn and Manopichetwattana, 1989; Jennings and Young, 1990), others underline the possibility of over assessment of innovation activities when the interviewees are describing their own results (Flor and Oltra, 2004; Coombs and Tomlinson, 1998). Also in statistical and quantitative research, the difficulty of quantifying innovation performance remains a major hurdle (Romijn and Albaladejo, 2002).

It is clear from the foregoing that, primary sources of data are the tools used to collect the data used in measuring or investigating innovation. Furthermore, reliability of data have always been questioned. However, this study relies on secondary sources of data extracted from the income statement and value added statements in the financial reports and accounts of the corporations that made the sample of this study. These data are the framework of the financial ratios employed as proxies for corporate entrepreneurial innovation. A handful of studies demonstrated the importance of the value added disclosure in the statement as a tool for measuring performance. For example, Sinha (1983) submits that the statement of value added provides a useful measure to help in gauging performance and activity. The figure of value added can be a pointer to the net output of the firm; and by relating other key figures (for example, capital employed and employee costs) significant indicators of performance may be obtained. Cruns (1982) mention its occasional use in the context of the performance of British industry, in reforming company-wide profit-sharing schemes, and in facilitating financial performance analysis.

The objectives of this study is; to establish whether or not there is a relationship between bifurcation of executive duality and corporate entrepreneurial innovation. Secondly to determine whether executive duality impacts on corporate entrepreneurial innovation. To achieve these objectives, 43 corporations were studied for the period 2007-2011. The choice of this period is influenced by the fact that, it is in the era of post consolidation. The study specified two accounting ratios; Gross earnings margin (GEM) and Value added margin (VAM) as proxies for the independent variable, corporate entrepreneurial innovation (CEI). The choice of these proxies is based on the assertions that, CEI is not measurable directly but can be measured through what it achieves for an organizations, like innovative products and services brings in more customers, investors which in turn yields huge gross earnings. On the other hand value added is the wealth the reporting entity has been able to create by its own and its employees' efforts during a period (Morley, 1978; Sizer 1994; and Riahi-Belkaoui, 1999). This effort could be translated to mean the innovative capabilities of these corporations. For the dependent variable, Executive duality was identified and it was measured as a dichotomous variable. SPSS version 16 was used to aid the analysis of data collected.

3.1 Population and Sample of the Study

The population of the study is all the 218 corporations listed on the Nigerian stock exchange as at December 2012. The study adopted the following Yamane (1967) formula to determine the sample of the study.

$$\mathbf{n} = \frac{\mathbf{N}}{\mathbf{1+ N\ (e)^2}}$$

The choice of this sampling technique is based on the fact that, the population of the study is finite. In the formula: **n** is the sample, **N**(218) is the population and **e** is the level of precision or sample error. This was considered at 0.152%, as the data sought are sampled on a heterogeneous population. Arising from the above, substituting into the formula the sample is arrived at.

$$n = \frac{218}{1+218(0.152)^2}$$

$$n = \frac{218}{219(0.023)}$$

$$n = \frac{218}{5.037} = 43$$

The selection of the 43 corporations for the period of 5years, that made the sample of the study, was simply based on the availability of the financial reports and accounts for the period under review. These reports were gotten from the Nigerian stock exchange, Kaduna state branch and the website of African financials. Based on the number of corporations and period a total of 215 financial reports and accounts for the following corporations were used; Livestock feeds plc, Okomu oil palm plc, Presco plc, Cocoa processors plc,National salt company plc, Vita foam plc, 7up bottling company, Dn meyer plc, Flour mills of Nigeria plc, United African company plc, African paints plc, Sandtex Portland paints and products plc, Chellarams plc, Nestle plc, Cadbury Nigeria Plc, Uniliver Nigeria plc, First bank of Nigeria plc, Access bank plc, Sterling bank plc, First city monument bank, Zenith bank plc, Wema bank plc, Consolidated hall mark insurance plc, Lasaco assurance plc, Niger insurance plc, Nem insurance plc, Mutual benefits assurance plc, Standard alliance insurance plc, prestige assurance plc, American international insurance company plc, Regency alliance plc, Oando Nigeria plc, Total Nigeria plc, Mrs oil Nigeria plc, Mobil oil Nigeria plc, Eterna plc, Conoil Nigeria plc, Studio press Nigeria plc, Morrison industries plc, Pharma deko plc, Evans medical plc, Fidson health care plc, and Glaxo smithkline Nigeria plc.

3.2 Variable Specification

Based on the theoretical framework of this study, a hypothesis was formulated. The dependent variable proxy (executive duality) was treated as a dichotomous variable, i.e binary number 1 was assigned to the years within the period under review, were the directives in the code for executive duality bifurcation was observed, if other wise 0 was assigned.

For the independent variable; Gross Earnings margin (GEM) and Value added margin (VAM) are specified as proxies for corporate entrepreneurial innovation (CEI). GEM is calculated by dividing profit before tax by Earning or turnover, while VAM is arrived at by dividing value added arrived at with gross turnover, after deducting gross turnover from services brought in. The following mathematical model: $ED_{\square} = b_o + b_1 x_{i1} + b_2 x_{i2} + b_{GEM} x_{iGEM} + b_{VAM} x_{iVAM}$ was developed to test the following null hypothesis:

Ho1 executive duality do not significantly relate and impact on corporate entrepreneurial innovation (Gross earnings margin and value added margin) of listed corporations in Nigeria.

3.3 Techniques of Data analysis

Two techniques were employed Logistic regression was used to analyze the data. This due to the fact that, the dependent variable is measured as a dichotomous variable and the technique can reveal whether a relationship exist. Secondly, the one sample t-test was also employed. The technique was chosen because it can indicate whether there is a possible impact. In order to test for the impact, the study considered using VAM, this is influenced by the fact that, value added is the wealth the corporations under study have been able to create on their own and their employees' efforts during the period under review and this effort could be translated to mean the innovative capabilities of these corporations. The study considered whether the VAM of the 43 corporations that made the sample differs from the test value of 4.00. The test value is the average rate of the VAM across the industries.

4. Discussion of Findings

Hypothesis was formulated to achieve the objective of this study, which is to assess the relationship and impact of executive duality on corporate entrepreneurial innovation of listed corporations in Nigeria. Tables 1- 7 presents the findings.

Table 1 Classification Table

Observed			Predicted		
			Executive Duality (ED)		Percentage Correct
			0	ED	
Step 0	Executive Duality (ED)	0	0	5	.0
		ED	0	38	100.0
	Overall Percentage				88.4

spss output listing 2013

In table 1, the overall percentage is at 88.4% this is large indicating that the model from the perspective of the dependent variable ED is correct

Table 2 Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 0 Constant	2.028	.476	18.175	1	.000	7.600

spss output listing 2013

In table 2 , the wald is at 18.17 with a significant level of less than 5%. This implies the parameter is useful to the model.

Table 3 Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	1.822	2	.402
	Block	1.822	2	.402
	Model	1.822	2	.402
Step 2	Step	-.034	1	.854
	Block	1.788	1	.181
	Model	1.788	1	.181

spss output listng 2013

In the table 3 at step 1 the chi-square is at 1.822 with a significant value of 0.402. At step 2 the chi-square is -0.034 with a significant value of 0.854. The significant values at each step falls within the framework of data fit adequacy, since it is not less than 5%.

Table 4 Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	5.446	8	.709
2	5.534	8	.699

spss output listing 2013

In the table 4 at step 1 and 2, the chi-square value is at 5.446 and 5.534 with a significant level of 0.709 and 0.699. This further implies that the data adequately fits the model.

Table 5 Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	29.090	.041	.081
2	29.124	.041	.079

spss output listing 2013

In table 5, the 2 log likelihood is at 29.09 and 29.12 for step 1 and 2 respectively. R^2 for cox and snell is at 0.041 in both steps. This implies a significant relationship. For R^2 Nagelkerke, it is at 0.081 for step 1 and 0.079 for step 2. This further implies the adequacy of the model, as the values are not less than 5%.

Table 6 One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Value Added Margin (VAM)	43	26.9927	18.58545	2.83425

spss output listing 2013

The table 6 is the one sample statistics. The mean is at 26.99, the standard deviation is at 18.58 and the standard error mean is 2.83.

Table 7 One-Sample Test

	Test Value = 4					
					95% Confidence Interval of the Difference	
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Value Added Margin (VAM)	8.112	42	.000	22.99270	17.2729	28.7125

spss output listing 2013

The one-sample test is table 7 This table contains the information about the impact. The t -value is 8.11 and the p-value is 0.000. Since the p-value is less than 0.05, the difference between the mean (26.99) and the test value (4.00) is statistically significant. The 95% confidence interval of the difference is 17.27 to 28.71.

From the findings in table 4.3 and 4.5, the null hypothesis formulated for this study, which states:

Ho_1 executive duality do not significantly relate and impact on corporate entrepreneurial innovation (Gross earnings margin and value added margin) of listed corporations in Nigeria, is rejected.

5. Conclusions

The power and centrality of the lead entrepreneur lies in the distinguishing characteristic, effectiveness, principles and behavior that brings to bear the control and influence of activities of the corporation at any point in time. Amidst this series of activities, the principal roles of the corporate entrepreneur are to dare bureaucracy, to determine new opportunities, to support and take advantage of corporate assets and to move the innovation process forward. However requirement of the corporate governance code bifurcated executive duality. This is power and centrality is divided, implying daring bureaucracy and determining new opportunities, to support and take advantage of corporate assets and to move the innovation process forward is no longer in the power and centrality of one individual. This study set out to find out whether the bifurcation of executive duality significantly related and impacted on corporate entrepreneurial innovation of listed corporations in Nigeria? findings of this study revealed that; bifurcation of executive duality significantly relates to corporate entrepreneurial innovations of listed corporations in Nigeria. This finding is in line with Zahra, et al, (2000). Secondly, there is a significant impact of bifurcated executive duality on corporate entrepreneurial innovations of listed corporations in Nigeria.

The implication of these findings is that bifurcation of executive duality is indifferent to the corporate entrepreneurial innovation process i.e, separating the capacity of the board chair from executive management promoted the entrepreneurial innovation process of Nigerian listed corporations. But it is important to note that, this study being a multiple sector research may have prevented the recognition of specific sector effects and actual relationship and impact of executive duality on corporate entrepreneurial innovation of individual sector. This is a possible area for future research in Nigeria. Secondly, there is the need to carry out a similar research using both secondary and primary sources of data in order to achieve robust findings or results. Based on this conclusion, it is imperative to recommend that, sustaining legitimacy through innovations that translates into huge earnings should be pursued.

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Convergence with IFRSSin India: Prospects and Challenges.

by

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Abstract

The globalisation has brought a lot of changes in doing business across the world. The business of multinational companies are being extended and established in various countries with emerging economies .These companies in emerging economies are increasingly accessing the global markets to fulfil their capital needs by getting their securities listed on the stock exchanges outside the country. This results in making the Capital markets global in nature. The use of different accounting frameworks in different countries creates confusion for users of financial statements resulting into inefficiency in capital markets across the world. The increasing complexity of business transactions and globalization of capital markets call the regulators, multinational companies, auditing firm and investors to see the need for common standards in all areas of financial reporting. Thus, the case for a single set of globally accepted accounting standards has prompted many countries to pursue convergence of national accounting standards with IFRS.After the liberalisation and tremendous growth of Indian Economy, the Indian MNCs are also going global. These companies have been also raising capital from global capital market. Under these circumstances, it has become imperative for Indian corporate to adopt IFRS for their financial reporting. The Government of India had committed to convergence of Indian Accounting Standards with IFRS from April 1, 2011.This paper tries to examine the need and importance of IFRSs in India, the various phases of implementation of IFRSs in India. The paper also highlights on the challenges ahead in the implementation of IFRS in India and the possible ways to address the challenges.

Keywords: GAAP, IFRS, IAS, SIC

1. Introduction

The globalisation has brought a lot of changes in doing business across the world. The business of multinational companies are being extended and established in various countries with emerging economies .These companies in emerging economies are increasingly accessing the global markets to fulfil their capital needs by getting their securities listed on the stock exchanges outside the country. This results in making the Capital markets global in nature. The use of different accounting frameworks in different countries creates confusion for users of financial statements resulting into inefficiency in capital markets across the world. The increasing complexity of business transactions and globalization of capital markets call the regulators, multinational companies, auditing firm and investors to see the need for common standards in all areas of financial reporting.

Thus, the case for a single set of globally accepted accounting standards has prompted many countries to pursue convergence of national accounting standards with IFRS.

After the liberalisation and tremendous growth of Indian Economy, the Indian MNCs are also going global. These companies have been also raising capital from global capital market. Under these circumstances, it has become imperative for Indian corporate to adopt IFRS for their financial reporting. The Government of India had committed to convergence of Indian Accounting Standards with IFRS from April 1, 2011.

IFRSs are standards and interpretations adopted by the International Accounting Standards Board (IASB). This includes IFRSs, IAS, and Interpretations originated by the IFRIC or its predecessor the former Standing Interpretations Committee (SIC). IFRSs are increasingly being recognised as Global reporting standards of financial statements. .

This paper tries to examine the need and importance of IFRSs in India, the various phases of implementation of IFRSs in India. The paper also highlights on the challenges ahead in the implementation of IFRS in India and the possible ways to address the challenges.

The study is primarily based on the secondary data gathered from related literature published in the journals, newspaper, books, statements, reports. The nature of study is primarily qualitative, descriptive and analytical. There is no quantitative tool being used for the study.

2. Motivation of the Study

A number of study have been carried out in the Accounting literature in relation to transition from national accounting standards to IFRS mainly on developed economies like countries in Europe((Emenyonu&Gray, 1992, 1996; Herrmann & Thomas, 1995, 1996; Murphy, 2000; Van der Tas, 1988). Some studies have been also conducted in Asia and African countries. In addition to academic literature, there are also surveys conducted by the United Nations Conference on Trade and Development (UNCTAD) and by major accounting firms between 2000 to date on IFRS. Focus on these surveys was on the tendency of countries to adopt IFRS, the benefits of IFRS and the challenges ahead. All these surveys were mainly for large developed countries and developing countries (Boolaky). With the rapid liberalization process experienced in India over the past decade, there is now a huge presence of multinational enterprises in the country. Furthermore, Indian companies are also investing in foreign markets. This has generated an interest in Indian GAAP by all concerned. In this context, the role of Indian accounting standards, which are becoming closer to IFRS, has assumed a great significance from the point of view of global financial reporting (UNCTAD,2008). As compared to the need a very few study has been done in this issue in India. Looking at the issue that the previous studies fail to address the problems and challenges of IFRS in India, the author argues that the issue needs to be addressed in order to fill this gap.

3. A Brief Profile of India

India is the 7th largest country by geographical area and second most populous country of the World(UN database). India's diverse economy encompasses a wide spectrum of activity, ranging from high technology to subsistence agriculture. More than half of the work force is in agriculture, but services are the major source of economic growth, accounting for nearly two-thirds of India's output. The Indian Economy responded to globalisation by liberalising its economy in1991. This economic liberalization has been done through openness to financial and technology transfer, industrial deregulation, privatization of state-owned enterprises, and reduced controls on foreign trade and investment, resulting to accelerate the country's growth, which has averaged more than 7% per year since 1997. Following the slowdown induced by the global financial crisis in 2008-09, the Indian economy responded strongly to fiscal and monetary stimulus and achieved a growth rate of 8.6 per cent and 9.3 per cent respectively in 2009-10 and 2010-11(Economic Survey-2012). Still significant challenges are to be resolved, including addressing the fiscal deficit, high inflation rates and government debt, and improving infrastructure and agricultural productivity.

3.1 Some Economic Indicators of India

India's GDP grew by 6.2 per cent in 2012. India's GDP is USD US $4.684 trillion (PPP,**2012)** while its Gross Domestic Product per capita in India was last recorded at $3,829 (PPP 2012). Indian Foreign Exchange Reserve is US $ 295.29 billion (October 2012). During 2000–10, the country attracted $178 billion as FDI. India accounts for 1.44% of exports and 2.12% of imports for merchandise trade and 3.34% of exports and 3.31% of imports for commercial services trade worldwide. The moderation in growth is primarily attributable to weakness in industry (comprising the mining and quarrying, manufacturing, electricity, gas and water supply, and construction sectors),which registered a growth rate of only 3.5 per cent and 3.1 per cent in 2011-12 and 2012-13 respectively. In 2011 India's imports of goods valued at*US* $450,957million *e*xports of goods valued at*US* $ 296,556million.Top 5 destinations of export for the country are USA, UAE, China, Singapore and UK .India's major export commodities are Pharmaceuticals, Coffee/Tea/Spices, Readymade Garments, Iron & Steel &Machinery whereas major import commodities from the CIS region are Iron/Steel/Nickel, Fertilizers, Mineral Fuel, Cereals & Rubber.

4.1. Objectives of the Study

The objectives of the study are :

a) To examine impact of IFRSs in Indian Corporate Sector.

b) To know the various phases of implementation of IFRSs in India.

c) To examine benefits and the challenges ahead in the implementation of IFRS in India and d) To find out the possible ways to address the challenges.

4.2. Methodology of the Study

The study is primarily based on the secondary data gathered from related literature published in the journals, newspaper, books, statements, reports. The nature of study is primarily qualitative, descriptive and analytical. There is no quantitative tool being used for the study.

4.3 Literature Review:

In the late 1990s, a movement within the international business and accounting professional communities to standardize globally financial accounting reporting methods and practices was initiated. Since that time, both American and international governmental, professional accounting organizations, governing bodies, business leaders and regulatory administrators have written extensively concerning the benefits and disadvantages of the implementation of a single global accounting standard (Winney, Marshall, Bender &Swiger).

Barth et al. (2006) find that firms adopting IFRS have less earnings management, more timely loss recognition, and more value relevance of earnings, all of which they interpret as evidence of higher accounting quality. The accounting system is a complementary component of the country's overall institutional system (Ball, 2001) and is also determined by firms' incentives for financial reporting. La Porta et al. (1998) provide the first investigation of the legal system's effect on a country's financial system. They find that common law countries have better accounting systems and better protection of investors than code law countries (Soderstrom and Sun). Several papers attempted to determine the level of accounting harmonization by examining selected measurement practices used by companies in Europe (Emenyonu& Gray, 1992, 1996; Herrmann & Thomas, 1995, 1996; Murphy, 2000; Van der Tas, 1988). These studies analyzed the annual reports from companies headquartered in different countries to determine the level of compliance between various accounting practices and the impact of adopting international standards on accounting harmonization (Eva K. Jermakowicza, SylwiaGornik-Tomaszewski).

Several studies have addressed issues related to accounting harmonization in Europe and its impact on comparability and transparency of financial statements. A study conducted by Street and Shaughnessy(1998)reported that at the beginning of the 1990s, numerous differences existed between international standards and the accounting standards of the major Anglo-American countries. Another study highlighted the significance of the enforcement issue for the IASC as it was seeking an International Organization of Securities Commissions (IOSCO) endorsement (Street & Bryant, 2000).The research conducted by McLeay, Neal, and Tollington(1999)distinguishes harmonization from standardization and presents a method for measuring harmonization that allows for choice between alternative accounting treatments.

Cai& Wong (2010) in their study of global capital markets summarized that the capital markets of the countries that have adopted IFRS have higher degree of integration among them after their IFRS adoption as compared to the period before the adoption. The study carried out by Callao et al (2007) on financial data of Spanish firms revealed that local comparability is adversely affected if both IFRS and local Accounting Standards are applied in the same country at the same time. The study, therefore calls for an urgent convergence of local Accounting Standards with that of IFRS. Epstein (2009) in his article on Economic Effects of IFRS adoption emphasized on the fact that universal financial reporting standards will increase market liquidity, decrease transaction costs for investors, lower cost of capital and facilitate international capital formation and flows (Jain 2011).

4. 4 IFRSs – around the World:

The need for a global set of high-quality financial reporting standards has long been apparent. The process of international convergence towards a global set of standards started in 1973 when 16 professional accountancy bodies from Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and the United States agreed to form the International Accounting Standards Committee (IASC), which in 2001 was reorganized into the International Accounting Standards Board (IASB). The IASB develops global standards and related interpretations that are collectively known as International Financial Reporting Standards (IFRS).

The process gained speed when the International Organization of Securities Commissions (IOSCO) endorsed the IASC standards for international listings in May 2000. It was further facilitated by the Regulation approved by the European Commission in 2002 requiring the preparation of the consolidated (group) accounts of listed companies in the European Union in accordance with IFRS.2 Recently, many more countries have announced their transition to IFRS, in some instances extending the scope of application beyond group accounts to legal entities and incorporating IFRS into their national regulatory framework**.**

The globalisation of business and finance has brought various changes in the world. This changes also brought a tremendous changes in the pattern of financial reporting of business activities, which led to more than 12000 companies in more than hundred countries to require or permit IFRS reporting. This was started in 2005 when the European Union (EU) made it mandatory for publicly traded companies to present consolidated financial statements in conformity with International Financial Reporting Standards (IFRS) starting from Jan 1, 2005. Australia, Newzealand, Israel, Brazil, South Africa, Philippines, Singapore have essentially have adopted the IFRS. Malaysia, Pakistan and Thailand have adopted selected IFRSs quite closely. In Nov, 2008 SEC published for public comment proposed IFRSs roadmap. The roadmap outlines milestones that if achieved could lead to mandatory transition to IFRSs starting for fiscal year ending on or after 15 Dec, 2014. Canada which previously plans to require IFRS for publicly accountable entities after Jan, 2011. Japan is also planning to go for convergence after 2011.

4.5 International Financial Reporting Standards (IFRS) in India:

4.5.1 Background:

The Institute of Chartered Accountants of India (ICAI) set up the Accounting Standards Board (ASB) in 1977 to prepare accounting standards. In 1982, ICAI set up the Auditing and Assurance Standards Board (initially known as the Auditing Practice Committee) to prepare auditing standards. ICAI became one of the associate members of the International Accounting Standards Committee (IASC) in June 1973. The ICAI also became a member of the International Federation of Accountants (IFAC) since its inception in October 1977. While formulating accounting standards in India, the ASB considers International Financial Reporting Standards (IFRS) and tries to integrate them, to the extent possible, in the light of the laws, customs, practices and business environment prevailing in India.

The Accounting Standards Board has worked relentlessly to introduce an overall qualitative improvement in the financial reporting in the country by formulating accounting standards to be followed in the preparation and presentation of financial statements. So far, the Board has issued 32 Accounting Standards. Besides this, it has also issued various accounting standards interpretations and announcements, so as to ensure uniform application of accounting standards and to provide guidance on the issues concerning the implementation of accounting standards which may be of general relevance. (UNCTAD review,2006)

ICAI, being a full-fledged member of the International Federation of Accountants (IFAC), while formulating the Accounting Standards (ASs), the ASB gives due consideration to International Accounting Standards (IASs) issued by the International Accounting Standards Committee or International Financial Reporting Standards (IFRSs) issued by the IASB, as the case may be, and try to integrate them, to the extent possible. However, where departure from IFRS is warranted keeping in view the Indian conditions, the ASs have been modified to that extent. Further, the endeavor of the ICAI is not only to bridge the gap between ASs and IFRSs by issuance of new AS but also to ensure that the existing ASs are in line with the changes in international thinking on various accounting issues. The National Committee on Accounting Standards (NACAS) constituted by the Central Government for recommending accounting standards to the Government, while reviewing the AS issued by the ICAI, considers the deviations in the AS, if any, from the IFRSs and recommends to the ICAI to revise the AS wherever it considers that the deviations are not appropriate.(Concept paper of ICAI)

4.5.2 Regulatory Framework and Enforcement of Accounting Standards

The regulatory framework of financial reporting and enforcement of accounting standards are being discussed below:

4.5.3 Legal Recognition of Accounting Standards issued by ICAI under the Companies Act (1956)

The legal recognition to the Accounting Standards was accorded for the companies in the Companies Act, 1956, by introduction of section 211(3C) through the Companies (Amendment) Act, 1999, whereby it is required that the companies shall follow the Accounting Standards notified by the Central Government on a recommendation made by the National Advisory Committee on Accounting Standards (NACAS) constituted under section 210A of the said Act. The proviso to section 211(3C) provides that until the Accounting Standards are notified by the Central Government the Accounting Standards specified by the Institute of Chartered Accountants of India shall be followed by the companies. The Government of India, Ministry of Company Affairs (now Ministry of Corporate Affairs), issued Notification dated December 7, 2006, prescribing Accounting Standards 1 to 7 and 9 to 32 as recommended by the Institute of Chartered Accountants of India, which have come into effect in respect of the accounting periods commencing on or after the aforesaid date with the publication of these Accounting Standards in the Official Gazette. It may be mentioned that the Accounting Standards notified by the Government are virtually identical with the Accounting Standards, read with the Accounting Standards Interpretations, issued by the Institute of Chartered Accountants of India. (Concept paper of ICAI)

4.5.4 Legal Recognition of Accounting Standards by other Regulators:

Reserve Bank of India

The Banking Regulation Act (1949) empowers the RBI to regulate financial reporting of the financial sector, including banks and financial institutions. One of the Schedules to the Banking Regulation Act prescribes formats for general purpose financial statements (e.g. balance sheet, and profit and loss accounts) and other disclosure requirements. Banks are also required to comply with requirements of the Companies Act (1956), provided they are consistent with the Banking Regulation Act. The RBI has issued circulars requiring banks to comply with the accounting standards issued by ICAI.

Securities and Exchange Board of India

Listed companies in India are required to comply with the requirements prescribed by the SEBI in its Act of 1992 and the Securities Contracts (Regulation) Act of 1956, which provides for the regulation of securities transactions. To protect investor interests, SEBI has issued a listing agreement which specifies disclosures applicable to listed companies in addition to other applicable auditing and accounting requirements. In particular, it requires compliance with the accounting standards issued by ICAI.

The Insurance Regulatory and Development Authority (IRDA)

The Insurance Regulatory and Development Authority (IRDA) regulates the financial reporting practices of insurance companies under the Insurance Regulatory and Development Authority Act (1999). Insurance companies and their auditors are required to comply with the requirements of the IRDA regulations of 2002 titled "Preparation of Financial Statements and Auditor's Report of the Insurance Companies", in preparing and presenting their financial statements and the format and content of the audit report. IRDA regulations require compliance with the accounting standards issued by ICAI.

Road Map for Adoption of IFRS by Indian Corporate:

In line with the global trend the ICAI has proposed a roadmap for convergence with IFRS for certain defined entities(listed entities, banks and insurance entities, and certain other large sized entities) with effect from accounting period commencing on or after April 1, 2011. ICAI is under the process of issuing IFRS equivalent Accounting Standards.The Indian accounting standards body, the Institute of Chartered Accountants of India (ICAI), has set a time line of 2011 for compulsory switchover to the new standard. There will be two separate sets of Accounting Standards under Section 211(3C) of the Companies Act, 1956. The first set would comprise the Indian Accounting Standards, which are converged with the IFRS (IFRS converged standards) and which shall be applicable to the specified class of companies in a phased manner. The second set would comprise the existing Indian Accounting Standards (existing accounting standards) and would be applicable to other companies, including Small and Medium Companies (SMC). The Announcement states that a separate roadmap for banking and insurance companies will be prepared and submitted to the government for consideration after consultation with the concerned regulators. The Announcement lays down a phased approach to convergence. Convergence with IFRS is planned in three phases which are given in the annexure.

Full and immediate adoption of IFRSs would be a challenge in the Indian environment in view of the conflicting legal and regulatory requirements and the technical preparedness of Industry and accounting professionals. Accordingly as part of its convergence strategy the ICAI has classified IFRS into the following broad categories:

Category I - IFRSs which do not involve any legal or regulatory issues nor have any issues with regard to their suitability in the existing economic environment, preparedness of industry and any conceptual differences from the Indian Accounting Standards. This category has further been classified into two parts as follows:

Category I A - IFRSs which can be adopted immediately or in near future in view of no or minor differences.(for example Construction Contracts, Borrowing Costs, inventories);

Category II - IFRSs which may require some time to reach a level of technical preparedness by the industry and professionals keeping in view the existing economic environment and other factors. (for example Retirement Benefit Plans,Share based payments);

Category III - IFRSs which have conceptual differences with the corresponding Indian ccounting Standards and where further dialogue and discussions with IASB may be required(for example consolidation, associates, joint ventures, provision for contingent liabilities);

Category IV - IFRSs, the adoption of which would require changes in laws/regulations because compliance with such IFRSs is not possible until the regulations/laws are amended (for example accounting policies and error, property and equipment, first time adoption of IFRS);

Category V - IFRSs corresponding to which no Indian Accounting Standard is required for the time being. However, the relevant IFRSs, when adopted upon full convergence, can be used as the "fallback" option where needed.(for example Financial Reporting in Hyper-inflationary Economies).

The ICAI examined whether convergence with IFRSs can be achieved stage wise as below:

Stage I: Convergence with IFRSs falling in Category I immediately

Stage II: Convergence with IFRSs classified in Category II and Category III after a certain period of time, say, 2 years after various stakeholders have achieved the level of technical preparedness and after conceptual differences are resolved with the IASB.

Stage III: Convergence with IFRSs classified in Category IV only after necessary amendments are made in the relevant laws and regulations.

Stage IV: Convergence with IFRSs classified in Category V by way of adoption on full convergence.

5. Benefits of Adopting IFRSs in India:

The forces of globalisation prompt more and more countries to open their doors to foreign investment and as businesses expand across borders the need arises to recognise the benefits of having commonly accepted and understood financial reporting standards. Following are some of the benefits of adopting IFRS -

5.1 Better Global Comparability:

IFRS improves the transparency of financial reporting as well as better comparability of performance of business enterprises. Investors, customers, suppliers, bankers would be easily able to compare when two financial statements follow the same reporting procedure. As the Indian companies are becoming global through their operations outside the country and having investor base, IFRS would enable a comparison of Indian companies with global competitor.

5.2 Better Access to International Capital Market and Lower Cost of Capital

IFRS are being used by the firms of reporting financial results across the world. Currently many firms for expansion of their operations around the world seek to raise capital at cheaper cost which is available in American, European, Japanese capital markets. To meet the regulatory requirements of these markets or the expectations of the investment banker and investors Indian companies should report their financial results as per IFRS. Thus adoption of IFRS would help the Indian companies in accessing international capital markets for raising funds at cheaper cost. It would also help the companies that are raising capital and listed only in stock exchanges in India in attracting the international investors by providing financial information that is more transparent and understandable for the international investor community.

5.3 Easy Cross Border Listing

Adoption of IFRS would eliminate the obstacles in cross-border listing by ensuring that financial statements are more transparent. Indian firms require funds for their expansion of operations as well as acquisitions around the world. These funds requirements are being met through raising of capital markets like European and American capital markets. Because of these many Indian companies are listed in the stock exchanges of these markets. One of the major pre-requisites of getting listed on European Markets is preparation of accounts as per IFRS requirements.

5.4 Avoidance of Multiple Reporting

Currently, many large Indian business groups like TATA,BIRLA,MAHINDRA,AMBANI etc have firms registered in India and also firms outside India in European and American capital Markets. The firms registered in India prepare their accounts as per Indian Accounting Standards whereas firms registered in other countries prepare their financial statements as per Reporting Standards of the respective country. This increases the effort of finance function; introduces complexity in financial reporting and increases costs of the finance function. Group-wise adoption of IFRS would eliminate the need for such multiple financial reporting by the Indian companies as they would be following single set of financial reporting.

5.5 Better Quality of Financial Reporting

Adoption of IFRS would help the firm in bringing in better quality of financial reporting due to consistent application of Accounting Principles and improvement in reliability of financial statements. Historical cost would be substituted by fair value for various balance sheet items which enable the companies to know its true worth.

5.6 Economic Growth

The convergence with IFRS benefits the economy by increasing growth of its international business, higher cross-border capital flows and transaction. It facilitates maintenance of orderly and efficient capital markets and also helps to increase the capital formation and thereby economic growth. It encourages international investing.

5.7 Opportunities for Accounting Professional

Convergence with IFRSs also benefits the accounting professionals in a way that they are able to sell their services as experts in different parts of the world. It offers accountants in public practice them more opportunities in any part of the world if same accounting practices prevail throughout the world. For accounting professionals in industry as well as in practice, their mobility to work in different parts of the world increases. Being a comparatively new subject, professionals like CAs and CFAs with sound theoretical and practical knowledge of IFRS are certain to have more opportunities in the times to come.

6. Challenges on Adopting IFRSs in India

6.1 Amendment to the Existing Laws

The accounting framework in India is deeply affected by laws and regulations. It is mainly the Indian Companies Act,1956 and Indian GAAP which governs the accounting practices in India. Other existing laws, such as SEBI regulation, RBI Regulation, IRDA regulation also provides guidelines on preparation of financial statements. IFRS do not recognise these laws. For adoption of IFRS these existing laws have to be amended as per the requirements of IFRS. ICAI has to receive co-operation from other regulators (like, SEBI,RBI, IRDA), tax authorities, courts and tribunals to make the adoption successful.

6.2 Shortage of Trained and Experienced Resources

It has been observed that at present India does not have enough number of resources with training or experience in IFRS. The adoption of IFRS by the Indian companies would result in huge demand for IFRS trained or experienced resources. Along with professional accountants other resources like Accountants , Govt. Officials, CEOs, would be responsible for smooth adoption of IFRS. This would create a huge demand for training to be provided to a large group. Currently India lacks training facilities and trained or experienced resources to train such a large group.

6.3 Creation of Awareness about IFRS

Adoption of IFRS means a complete set of different reporting standards which will have significant difference with Indian GAAP. Currently there is still absence of awareness of IFRS among the stakeholders. Considerable time and efforts would be required on making complete awareness and communicating to investors, Banks, stock exchanges, Commodity exchanges, the analyst community etc which would be big task for the companies.

6.4 Measurement of Business Performance

Adoption of IFRS would have significant difference with Indian GAAP. This would have significant impact on financial position and financial performance of the Indian companies. The fair value measurement can bring a lot of volatility and subjectivity in the financial statements. As till now the Indian companies have been following Historical Cost basis for preparation of financial statements.

6.5 Complexity in Financial Reporting

There will be a need to consider several factors which were not required and relevant as per the Indian GAAP for preparation of financial statements with adoption of IFRS.As already discussed fair value measures would require the companies , auditors ,users and regulators to get familiar with fair value. This would initially increase the complexity in financial reporting process and may make financial statements more difficult to understand for certain class of users.

6.6 Increased Initial Cost

Adoption of IFRS would lead to increase initial one-time cost. This cost includes additional cost of modifying IT systems, costs of training internal corporate staff, increased audit cost, costs of educating various constituents like investors, analysts, Board members etc.

7. Recommendation for Facing the Challenges:

In order to face the challenges ahead in the implementation of IFRSs in India the following views are being recommended:

7.1 Regulatory Reforms;

First and foremost steps regarding towards implementation of IFRSs in India is to bring necessary regulatory reforms to the existing laws in compliance to IFRSs. The Government should take initiative for bringing changes in case of all existing Companies Act 1956(which already have been in process), Tax Laws(in process), Foreign Exchange Management Act, Insurance Act etc. as per the requirement of IFRSs. Similarly the other regulatory authority like RBI,IRDA, SEBI would also need to initiate to accept IFRSs to replace their prescribed existing accounting rules.

7.2 Trained Skilled Human Resource:

In the step of implementation a big question is whether the country has sufficient trained and skilled people who could understand IFRS properly and implement it. For implementation of IFRS in India, a large number of trained Accountants and Auditors in IFRS are required for proper implementation which are absent in the current scenario in India. Though the Institute of Chartered Accountants of India (ICAI) has started taking initiative in this regard but still it is not sufficient to meet this requirement.

7.3 Establishment of Monitoring Board:

Merely adoption of IFRSs is not going to bring high quality in the financial reporting in the country. Effective enforcement and monitoring mechanism is very much necessary to ensure high quality financial reporting by the corporate organisation. In order to make sure the compliance of IFRSs by the corporate organisation a common monitoring board should be formed comprising of representatives from the law makers of the country and ICAI. The board should be able to play both advisory role as well as monitoring the compliance part. Because at the initial stage the advisory role of the board would be very important for the corporate organisation.

7.4 Encouraging the Business Enterprises for Adoption:

As at the initial stage the business enterprises have to bear some expenses in relation to infrastructure (IT), training of existing staff, new recruitment, etc might lead to hesitation for adoption of IFRSs. The government, regulatory authority should encourage them through incentive, relaxation in some criteria who comply with the IFRSs.

7.5 Create Awareness:

The government should take steps along with other regulatory bodies like ICAI, RBI, IRDA,SEBI to create awareness on the importance of IFRSs and its adoption in relation to quality improvement in Financial reporting.

7.6 Improvement on Quality of Accounting Education:

Only quality of accounting education in a country ensures the availability of trained accountants and auditor in a country. Therefore an initiative for curriculum development and training-the-trainers activities is required to be taken by ICAI alongwith the academic community of universities.

8. Conclusion

The environment of high quality corporate financial reporting depends on effective enforcement mechanisms. All the interested parties such as Regulators and Law makers, Professional Accountants and auditors Top management and Directors have to come together in the process of working for adoption of IFRSs. The Government and the Regulators should establish legal and regulatory environments that provide for compliance with all the IFRSs. The Government should frame/ revise laws in consultation with NACAS to reflect the IFRSs. Similarly, various Regulators(like RBI,SEBI,IRDA etc) should frame/revise regulations in consultation with ICAI. This should be considered as a high priority. The Professional accountants and auditors should ensure that the financial statements are prepared and audited in compliance of IFRSs. Industry associations such as Federation of Indian Chambers of Commerce and Industry (FICCI), Associated Chambers of Commerce (Assocham) and Confederation of Indian Industries (CII) should have to play an important role in preparing their constituents for the adoption of the IFRSs. For increasing awareness ICAI,RBI, SEBI,IRDA should work jointly to design awareness programme on importance of compliance with accounting and auditing standards. ICAI has to play a great role as an educator for creating foundation of IFRS in the country for the future. In order to ensure a minimum quality standard in teaching accounting and auditing in all over the country ICAI has to take an initiative along with the universities for curriculum development and training for the trainer activities.

Annexures-1

After detailed deliberations on the various implementation challenges, especially those elated to legal and accounting framework, transitional issues, and sector specific concerns, the following roadmap for convergence with IFRS has been finalised by the Core Group:

Phase	Date	Applicable for
Phase I	1st April 2011	i. Companies which are part of NSE – Nifty 50 ii. Companies which are part of BSE – Sensex 30 iii. Companies whose shares or other securities are listed on stock exchanges outside India iv. Companies whether listed or unlisted, whose net worth exceeds Rs. 1,000 crores, as at March 31, 2009.
Phase II	1st April 2013	Companies, whether listed or unlisted, whose net worth exceeds Rs. 500 crores but does not exceed Rs. 1,000 crores, as at March 31, 2009.
Phase III	1stvApril 2014	Listed companies which have a net worth of Rs. 500 crores or less.

IFRSs would not be applicable for		a. Unlisted companies which have a net worth of Rs. 500 crores or less and whose shares or other securities are not listed on stock exchanges outside India. b. SMEs

Annexure-2

The roadmap for convergence with IFRS in respect of insurance companies, banking companies and non-banking finance companies is as follows:

Category of Company	Applicable Date
1. Insurance Companies	1st April, 2012
2. Banking Companies (i) All scheduled commercial banks and those urban co-operative banks ("UCBs") which have a net worth in excess of Rs. 300 crores. (ii) UCBs which have a net worth in excess of Rs.200 crores but not exceeding Rs. 300 crores (iii) UCBs which have a net worth not exceeding Rs. 200 crores and Regional Rural banks (RRBs)	1st April, 2013 1st April, 2014 IFRS not applicable,may adopt voluntarily.
3. Non-Banking Financial Companies ("NBFCs") (i) All NBFCs which are part of NSE-Nifty 50, BSE Sensex 30, and have a net worth in excess of Rs.1,000 crore (ii) All listed NBFCs and those unlisted NBFCs which do not fall in the above category and which have a net worth in excess of Rs. 500 crore (iii) Unlisted NBFCs which have a net worth of Rs. 500 crores or less	1st April, 2013 1st April, 2014 IFRS not applicable, may adopt voluntarily.

Annexure-3

Time Line for adoption of IFRS:

Country		Target date for convergence to IFRS
Canada		2011
India	Companies with networth of Rs1000 crore and those which are part of BSE Sensex and NIFTY and Companies listed overseas exchanges	April,2011
India	All Companies with net worth Rs.500-1000 Crore	April 2013
India	Banks and Non Banking Finance Companies	April 2013
India	All listed companies with net worth of Rs.500 crore or less	April 2014

Japan		2011
Malaysia		2012
Maxico		2012
United Kingdom		2012
USA		2014-15

Source: Markets in Motion, 2010

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Marketing Planning Process of Manufacturing Companies in Nigeria: Empirical Study of Selected Companies

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Abstract

Marketing planning is a fundamental task in organizations. It represents the mechanism for linking organization activities to its markets. In this sense, a "fit" is established between organization's operational activities and its environment. To achieve this fit, organizations must put in place marketing planning processes that are responsive to the nature and character of the business environment in which they operate.

Extant literature posits that the marketing planning processes of organizations in developed economies are responsive and are effective tools for improving organization's profitability. Unfortunately, this has not been established for organizations in developing economies. Specifically, there is dearth of empirical evidence as to whether the marketing plans of organizations in Nigerian are able to create the bridge that relates their activities to the hyper-turbulent business environment. In light of this, the study utilizes the marketing planning processes of 96 manufacturing companies as the independent variable and the achievement of the marketing objectives as the dependent variable to inquest the subject of discourse.

The study focused on the use of frequency distributions and transcriptions of the audio recording as the bases for analyses. The findings reveal that though the marketing planning processes of the sampled organizations follow a bottom-top procedure, inputs by bottom level managers to the draft of the marketing plan are filtered out by successively higher managers as the draft of the marketing plan progress upward for approval. In relation to the planning process, 89.6% assessed company's weaknesses, 91.7% determined company's strengths, 90.6% ascertained the threats, and 87.5% assessed the external opportunities prior to the formulation of the marketing plan. Furthermore, 94.8% of the company has their marketing planning as a bottom-top approach with 81.2% stressing that the process begins from the product manager(s) and ends with the chief executive officer. 91.7% of the company emphasized that the bottom-top approach does not adequately meet the marketing objectives of the manufacturing companies.
The study concludes that the Marketing planning process of manufacturing companies in Nigeria do not adequately respond to the needs of the business environment.

1. Introduction

Marketing planning plays a crucial role in attaining successful market performance in all progressive organizations (Slater and Olson, 2001). Hooley et al. (1992) had earlier stressed this perspective when they empirically established that market performance is associated with positive attitudes toward marketing planning. Though marketing planning is important, its process lies at the heart of its potency.

Marketing planning is a process of actively determining in advance what should be done in order to achieve specific goals? It further encompasses how it should be done? Why it should be done? When it should be done? Where it should be done? And who should do it? In this sense, it gives organizations focus on its chosen path(s).

The marketing planning process helps organizations to have in-depth understanding of the maneuvers of competitors as well as help build superior customer relationships. By engaging in marketing planning activities, organizations are likely to achieve higher sales growth, higher market share growth, high returns on assets, high margins on profit and high employee growth (Upton et al. 2001; Beaver and Prince, 2002; Carland and Carland, 2003; Gibson and Casser, 2005).
Empirical studies have tended to suggest that the marketing planning processes of organizations in developed economies are structured in such a way that it helps in improving market performance. Unfortunately this notion has not been established in developing economies such as Nigeria. The paucity of empirical evidence regarding the subject of discourse in Nigeria underscores the rationale for examining the marketing planning process of the manufacturing companies.

2. The Research Problem

The marketing plan is the most important operating document that a company has. It is the bridge that dynamically relates a company's activities to its clientele. Although the marketing plan is critical to the success of manufacturing companies in Nigeria, the processes of its development and approval by companies is sparsely documented and not well understood. In view of the obscurity revolving round the developmental process of the marketing plan, there is tendency to argue that manufacturing companies in Nigeria do not steer their marketing activities according to pre-conceived plan. Given this scenario, it will not be an overemphasis to assert that the wide spread failure that characterized companies in Nigeria is adduced to lack of comprehensive marketing plan.
Even if marketing plan does exist in some companies, there is dearth of empirical evidence that established the efficacy of the marketing plan in responding to the needs of the marketing objectives of manufacturing companies in Nigeria.

These problems led to the puzzling questions as to how manufacturing companies in Nigeria carry out their marketing planning tasks. Moreover, is the marketing plan effective in meeting the marketing needs?

3. The Objective

The objectives the research addresses are:

1. To find out how manufacturing companies in Nigeria carry out their marketing planning tasks
2. To find out who initiates the marketing planning process
3. To find out the procedures the draft of the marketing plan undergo prior to approval
4. To examine the effectiveness of the marketing plan in meeting companies marketing objectives

4. The Mixed Perspectives on the Benefits of Marketing Planning

A search of extant literature examining the benefits of marketing planning to companies is saturated with inconsistent conclusions. Cappel (1990) amplified this view by observing that there is no consistent association between marketing planning and benefits to companies. Conclusions from empirical studies revolving round planning -benefits relationships apparently can be categorized into two distinct groups: positive or zero relationship. Studies showing a positive link between marketing planning and benefits to companies are that of (Cravens, 2000; Crittenden, 2002**;** Czinkota and Ronkainen, 1998**;** Tersptra and Sarathy, 2000**,** Kotler et al., 2001**;** Naffziger and Kuratko, 1991). Schwenk and Shrader (1993); Miller and Cardinal (1994) using meta-analytic approach found that planning influences firm performance. Cavusgil and Zou (1994) comprehensive study of marketing planning and benefits relationship postulated that performance of companies is determined by their marketing strategy. Boyd (1991) published a detailed meta-analytic review that involved aggregation of 29 samples on a total of 2489 organizations. This author stressed that the results of previous research were equivocal and noted that existing research were subject to a great deal of management errors in the form of inadequate treatment of the breadth of the planning construct which varies from single dimensional to multi dimensional and from interval to ordinal categories. This shortcoming, the author argued underestimated the benefits of planning. Empirical studies in firms have generally used a single response measure such as financial outcomes in the marketing planning – benefits debate. This approach is at variance with the multi dimensional view of marketing planning (Kukalis 1991; Veliyath and Shortell, 1993). It was against this backdrop that Jeffrey and Chris (1999) pointed out that a new multi-dimensional measure of planning is needed. These authors stressed that even though planning entails a variety of tasks, most research employs planning comprehensiveness as the independent variable and that researchers have focused almost exclusively on the financial consequences of planning, effectively ignoring the intermediate, non financial benefits associated with the process of planning and adduced the mixed link between planning and its benefits to these shortcomings. Findings where marketing planning does not lead to appreciable benefits include that of **(**Lyles et al. 1993; Rue and Ibrahim, 1998; Mckiernan and Morris, 1994; Watts and Ormsby, 1990). These authors emphasize that marketing planning has no potential payoff for enterprises because it is a conceptual activity suited solely to large firms. The ambiguous nature of the relationship between marketing planning and benefits has made the debate on the subject matter to rage on in the marketing planning literature with the fundamental question: Is there really an association between marketing planning and benefits to companies?

5. Organizational Structure and Marketing Planning Process

Basically, structure indicates the direction of flow of communications, control, and authority in companies. With respect to marketing planning process, it indicates whether such flow follows a top-down or bottom-up process. If the process is top-down, it is regarded as formal and centralized. If the reverse is the case, it is termed decentralized. The structuring of a company is an attribute of its marketing planning process. The structure specifies who does what in the development of the marketing plan. A well structured company is characterized by various teams that contribute inputs to the marketing plan. Through the mechanism of organizational structure, team inputs to the marketing plan are coordinated to improve a company's market performance. A primary role of structure is to build and support effective communication networks between top and middle level management. When communication among members in the hierarchy is cordial and effective, members channel their collective skills and knowledge to developing marketing plan that is capable of improving company's performance. The essence of choosing a particular structural design is to facilitate the conversion of environmental inputs into useful outputs (i.e improved market performance). Therefore, a structure that is designed such that structural elements work in unification to create synergy will inevitably lead to the development of marketing plan that is not only responsive to the needs of the business environment, but facilitates the improvement of market performance. Companies put in place organizational structures that promote formal practices in their marketing planning. The formal practices indicate how controllability, authority, power, and communications flow from the top level to the lower level during the marketing planning process. Reid and Adams (2001) observed that companies with less formal practices have more limited organizational capabilities than those with high formal practices.

Although, formal structures permits capabilities in developing the marketing plan, it must be stressed that formal structures are associated with high developmental costs requiring huge financial resources which are more available to larger firms (Klaas et al 2000). The huge costs may be explained by the fact that organizational structure revealing high level of centralization creates departments that are highly specialized and differentiated. Despite the huge financial costs associated with highly formal structures, Damanpour (1996) argued in favour of it by noting that specialists in differentiated departments have potentials to increase the depth of knowledge base, which in turn increases the development of new ideas that translates into improved market performance. On the contrary, the structuring of marketing planning activities contracts the communication channels. Sheremata (2000) observed this by stressing that the linear flow of communications within the structure diminishes the quality and quantity of ideas contributed to the marketing plan document. Despite this shortcoming, formal hierarchical structure is in no doubt the mechanism for coordinating inputs to the marketing plan. Through hierarchy, a well coordinated flow of communications and inputs to the Marketing plan is achieved.

6. Methods

The study employed semi- structured questionnaire and audio recorder to generate data from 96 manufacturing companies that were included in the sample. The sample was determined using non-random sampling technique. The questionnaire posed questions on whether the marketing planning process takes input from the internal and external business environments prior to marketing planning; the mechanism used in putting in place the marketing plan with emphasis on who does what? The review processes and what are specifically done during the reviews. The data generated were analyzed using descriptive statistical approach and transcription of the recorded information. Although descriptive statistical technique was utilized, the Cronbach alpha was used to test the validity and consistency of the items that were used to operationalized the research variables. The coefficient revealed 0.79 which means that the items adequately measured what the study purports.

7. Results

The results of the marketing planning procedures of the manufacturing companies in Nigeria are presented in table 1 to 7.

Table 1 The Company Determine Its Internal Weakness Prior to Developing the Marketing Plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	3.1	3.1	3.1
	Disagree	3	3.1	3.1	6.2
	Neutral	4	4.2	4.2	10.4
	Agree	86	89.6	89.6	100.0
	Total	96	100.0	100.0	

Table 1 reveals that 3.1% of the sampled company strongly disagree that internal weaknesses are assessed prior to the formulation of the marketing plan. Similarly, 3.1% disagree. And 4.2% are neutral on this issue. While 89.6% agree that internal weaknesses are evaluated prior to the development of the marketing plan.

Table 2 The Company Determine Its Internal Strengths Prior to Developing the Marketing Plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	5	5.2	5.2	5.2
	Neutral	3	3.1	3.1	8.3
	Agree	88	91.7	91.7	100.0
	Total	96	100.0	100.0	

Table 2 shows that 5.2% of the company strongly disagree internal strengths are evaluated, 3.1% are neutral and 91.7% agree that strength factors are determined prior to the development of the marketing plan.

Table 3 The Company Forecasts External Threats Prior to Developing the Marketing Plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	3.1	3.1	3.1
	Disagree	6	6.2	6.2	9.4
	Strongly Agree	87	90.6	90.6	100.0
	Total	96	100.0	100.0	

According to table 3, it is revealed that 3.1% strongly disagree on the issue raised. 6.1% merely agree on the issue. While 90.6% strongly agree on the issue.

Table 4 The Company Forecasts External Opportunities Prior to Developing the Marketing Plan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	5	5.2	5.2	5.2
	Disagree	5	5.2	5.2	10.4
	Neutral	2	2.1	2.1	12.5
	Agree	84	87.5	87.5	100.0
	Total	96	100.0	100.0	

Table 4 shows that 5.2% strongly disagree on the evaluation of external opportunities. In a similar vein, 5.2% simply agree on the issue. 2.1% are neutral and 96% agree

Table 5 The Marketing Planning Process is Bottom-Top

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	5	5.2	5.2	5.2
	Agree	21	21.9	21.9	27.1
	Strongly Agree	70	72.9	72.9	100.0
	Total	96	100.0	100.0	

According to table 5, it is evident that 5.2% are neutral on whether the marketing planning approach is bottom-top. 21.9% agree that the approach is bottom –top and 72.9% strong agree on the issue.

Table 6 Product Manager-Group Product Manager-Marketing Manager-CEO

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	3	3.1	3.1	3.1
	Agree	15	15.6	15.6	18.8
	Strongly Agree	78	81.2	81.2	100.0
	Total	96	100.0	100.0	

Table 6 indicates that 3.1% are neutral on the issue that marketing planning commences with the product manager and progresses to the chief executive officer.15.6% agree on the issue and 81.2% strongly agree on the issue.

Table 7 The Marketing Plan does not achieve the Marketing Objectives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	88	91.7	91.7	91.7
	Strongly Agree	8	8.3	8.3	100.0
	Total	96	100.0	100.0	

Table 7 strong suggests the marketing planning plan is not efficient in achieving the marketing objectives of manufacturing companies in Nigeria. This is against the backdrop that 91.7% agree that the marketing plan does not achieve the marketing objective and 8.3% strongly agree on the issue. The marketing planning process is depicted in figure.

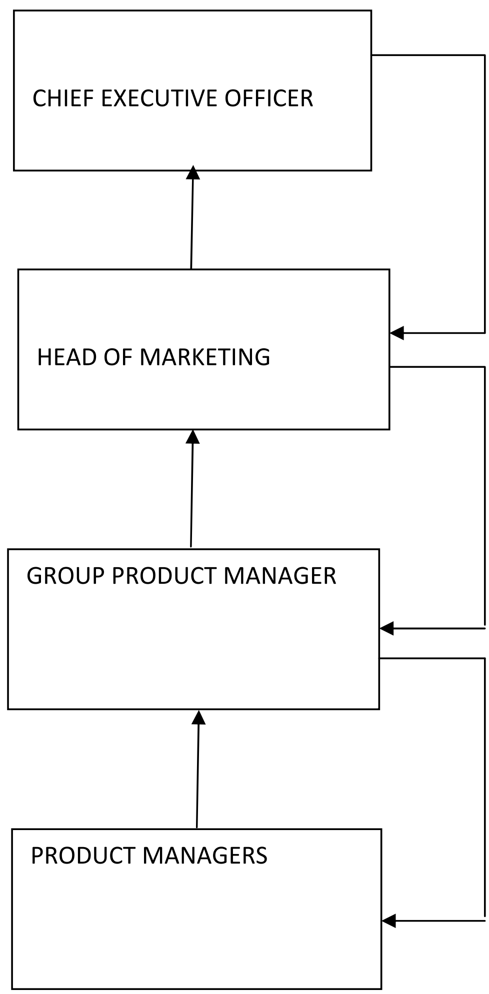

Figure 1 The Marketing Planning Process

8. Discussion and Implications for Management

The findings reveal that the marketing planning process in manufacturing companies in Nigeria begins with analyses of the business environment. The analyses entail collection of information from the internal and external environments. On the basis of the environmental information, company's strengths and weaknesses are ascertained. Opportunities and threats are also discerned as a result of the analyses.

Given the realities of the strength, weakness, opportunity and threat factors, product managers develop draft of the marketing plan. Upon completion of the draft by the product managers, it progresses upward in the hierarchy to the group product managers for review. If the review is at variance with what ought to be contained in the draft, the group product manager amends the areas that are at variance. From the group product manager the draft progresses to the head of marketing for review. In a similar fashion, the head of marketing contributes input to the draft especially to areas that differ from the perspective of the head of marketing. This is to state that the contributions made to the draft of the marketing plan by the group product manager and the head of marketing are intuitively carried. From the head of marketing, the draft progresses to the chief executive officer for review. The chief executive officer reviews the draft of the plan to ascertain if it fits into what he thinks should be contained in the draft. If the contents is consistent with what he thought should be contained in the draft, top management meeting is called for approval of the plan. If the reverse is the case the draft goes back to the head of marketing and downward to the product managers and the process starts all over.

The findings have insightful management implications that are in the direction of recommending that inputs from lower level managers should be maintained in the marketing plan as it progress in the structure to the chief executive officer. The strategic position and the proximity of lower level managers to the market enable them to have a better view and comprehensive understanding of customer needs.

9. Conclusion

The findings showed that though the marketing planning processes of manufacturing companies follow a bottom-top procedure, inputs by bottom level managers to the draft of the marketing plan are filtered out by successively higher managers as the draft of the marketing plan progress upward for approval. As a result of this, the contents of the marketing plan do not reflect practical realities of the market, but the perceptions of successively higher managers.
Given this reality, the study concludes that the Marketing planning process of manufacturing companies in Nigeria do not adequately respond to the needs of the business environment.

10. Direction for Future Research

The present study is limited. First it focused on selected manufacturing companies. Furthermore, descriptive statistical technique was the only approach utilized. These observations limit the study in term of generalization. As a consequence, it is suggested that future research should address the subject of discourse focusing on diverse industry. Additionally, robust statistical approach should be used in future analysis.

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Factors Affecting Financial Performance of Agricultural Firms Listed on Shanghai Stock Exchange

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Abstract

The research aims to examine the effect of liquidity, asset utilization, leverage, economic prosperity and agricultural products price index on financial performance of agricultural firms listed on Shanghai Stock Exchange (SSE) from 2006 to 2010. Linear regression with ordinary least square (OLS) was used. After taking into account the problems of non-stationary data series, multicollinearity, heteroskedasticity and autocorrelation, the research found that asset utilization and leverage are factors that affect financial performance of agricultural firms listed on SSE.

Keywords: Firm Financial Performance, Listed Agricultural Firms, Shanghai Stock Exchange (SSE)

1. Introduction

As the stock market of China has been developing 20 years, the listed firm has become the leading role in the Chinese economy. Financial performance of listed firms becomes the issue of common concern of the stakeholders including the shareholder, the creditor, the company staffs and the government administration. China is also a large agricultural nation, and rural population accounts for 75%.

According to Wu et al. (2010), good financial performance is the precondition of agricultural listed firms to be sustained and healthy development. Qin et al. (2011) also showed that agricultural listed firms are essential on the sustainable development of agriculture. The small population quantity, slow development, weak growing capacity, relatively poor rationality and unbalanced regional distribution situation of China's agricultural listed firms have seriously restricted the development of China's agricultural economy. Hence, examining factors affecting financial performance of agricultural firms listed on SSE is very important.

2. Objectives

1. To examine the effect of liquidity on financial performance of agricultural firms listed on SSE.
2. To examine the effect of asset utilization on financial performance of agricultural firms listed on SSE.
3. To examine the effect of leverage on financial performance of agricultural firms listed on SSE.
4. To examine the effect of economic prosperity on financial performance of agricultural firms listed on SSE.
5. To examine the effect of agricultural products price index on financial performance of agricultural firms listed on SSE.

3. Research Scope

This research intends to investigate factors that affect financial performance of firms focusing only on the agricultural firms listed on SSE. Dependent variable of the study is return on assets (ROA), and independent variables are liquidity as proxied by current ratio (CR), asset utilization as proxied by total asset turnover ratio (TA), leverage as proxied by debt ratio (DR), economic prosperity as proxied by gross domestic products (GDP) and agricultural products price index as proxied by producer price index of agricultural products (PPI). This study uses quarterly data from financial statements starting from January 2006 to December 2010.

4. Hypotheses

According to the objectives of this research, the research hypotheses are as follows.

Hypothesis 1: Liquidity has a positive effect on financial performance of agricultural firms listed on SSE.

Hypothesis 2: Asset utilization has a positive effect on financial performance of agricultural firms listed on SSE.

Hypothesis 3: Leverage has a negative effect on financial performance of agricultural firms listed on SSE.

Hypothesis 4: Economic prosperity has a positive effect on financial performance of agricultural firms listed on SSE.

Hypothesis 5: Agricultural products price index has a positive effect on financial performance of agricultural firms listed on SSE.

5. Expected Benefits

The results of this study show factors affecting financial performance of agricultural firms listed on SSE. Therefore, it will be beneficial to agricultural firms to improve their financial performance, bringing prosperity to the Chinese economy. Moreover, this research can be used as a reference for future studies on factors affecting firm’s financial performance.

6. Literature Review

Zhang (2010) defined the firm performance as the results or outcomes of firm during a certain operating period and defined financial performance as the performance measured by using financial ratios. The early researches had used return on assets (ROA) to measure firm financial performance on studying the determinant of firm's financial performance (Barry et al., 1995; Waddock and Graves, 1997; Gerwin, Hans and Arjen, 2007; Guan, Qiu and Zhang, 2009; Yang, 2011).

Jose et al. (2010), Seema et al. (2011) and Sibeland Engin (2012) found that liquidity has a significant positive correlation to firm performance. Jose et al. (2010), Wu et al. (2010) and Seema et al. (2011) pointed out asset utilization has a significant effect on firm's financial performance. Xiao (2005), Chen (2008), and Wu et al. (2010) explored that leverage has a negative correlation with financial performance. Chen (2010), Zhang et al. (2010), John and Riyas (2011) and Sibel and Engin (2012) estimated that firm performance was positively affected by GDP. Booth et al. (2001), Deng et al. (2009), Wu (2011) and Ma (2011) found that high products price index caused a good firm performance.

7. Methodology

This research investigates and examines the effects of liquidity, asset utilization, leverage, economic prosperity and agricultural products price index on financial performance of agricultural firms listed on SSE. Therefore, the research is designed to use the quantitative research method and collecting the secondary data of firms' financial information. The financial information is collected from the quarterly financial reports, including balance sheets and income statements of each agricultural firm listed on SSE. This study is important since it allows us to make a preliminary identification of factors that affect the dependent variable of interest. It also allows us to identify variables that should be investigated further. First, Unit-root test is used to make data become stationary. Second, multicollinearity problem, heteroskedasticity problem and autocorrelation problem are checked and solved. Then, linear regression with ordinary least square (OLS) is used to examine factors that affect the financial performance of agricultural firms listed on Shanghai stock exchange.

8. Results

Table 1 The Results of Stationary Test by Unit – Root Test

Variables	Statistic	Prob.	Result
ROA	-5.18680	0.0000	Stationary
CR	-3.41916	0.0003	Stationary
TA	-3.83723	0.0001	Stationary
DR	-1.20070	0.1149	Non-Stationary
GDP	4.41278	1.0000	Non-Stationary
PPI	-6.60714	0.0000	Stationary
D(DR)	-5.71823	0.0000	Stationary
D(GDP)	-6.16574	0.0000	Stationary

Table 1 shows results of Unit Root Test that the probability value of variable ROA, CR, TA and PPI is less than 0.05, it means variable ROA, CR, TA and PPI are stationary. But the probability value of variable DR and GDP is greater than 0.05, it means variable DR and GDP are non-stationary. The first differencing should be applied to DR and GDP to make them stationary. After first differencing DR and GDP, the probability value is less than 0.05. Therefore, variable D(DR) and D(GDP) are stationary.

Table 2 The Correlation of the Independent Variables

Correlation	CR	TA	D(DR)	D(GDP)	PPI
CR	1.000000				
TA	0.269986	1.000000			
D(DR)	-0.014191	-0.070071	1.000000		
D(GDP)	-0.043438	0.150240	0.059831	1.000000	
PPI	-0.022966	0.016094	-0.025411	0.122203	1.000000

Table 2 shows the correlations of independent variables. It is found that the value of correlation coefficient is not above 0.80, which is the limit value for multicollinearity problem. Therefore, there is no multicollinearity problem. All the five independent variables can be used for further analysis.

Table 3 Regression Results

Variables	C	CR	TA	D(DR)	D(GDP)	PPI
Coefficient	0.008786	-0.002526	0.113625	-0.080172	0.0000897	-0.013084
Std. Error	0.056985	0.004217	0.055348	0.014020	0.001390	0.051857
t – Statistic	0.154182	-0.598918	2.052932	-5.718289	0.064517	-0.252307
Prob.	0.8776	0.5497	0.0410	0.0000	0.9486	0.8010
R – squared	0.114421					
F – statistic	5.964960					
Prob.	0.000007					
Durbin – Watson stat	2.142937					

From Table 3, the regression equation of ROA can be written as follows:

$$\underset{(0.154182)}{ROA = 0.008786} - \underset{(-0.598918)}{0.002526\,CR} + \underset{(2.052932)^{*}}{0.113625\,TA} - \underset{(-5.718289)^{**}}{0.080172\,D(DR)}$$

$$+ \underset{(0.064517)}{0.0000897\,D(GDP)} - \underset{(-0.252307)}{0.013084\,PPI}$$

* = significant at the level of 0.05
** = significant at the level of 0.01

From the equation of ROA, the probability in the model equals 0.000007, which is less than 0.01 at the confidential level of 99%, meaning that all of the independent variables in the model can be used together to explain the dependent variable (ROA) at significant level of 0.01. R^2 equals 0.114421, meaning that the estimated equation can explain the change in ROA by 11.4421%. The probability of TA equals 0.0410, meaning that TA is significant at 0.05 level. TA is a factor that statistically significantly affects ROA. TA changes one unit will make ROA changed by 0.113625 unit in the same direction The probability of D(DR) equals 0.0000, meaning that D(DR) is significant at 0.01 level. D(DR) is a factor that statistically significantly affects ROA, and the coefficient of D(DR) is negative which means D(DR) is inversely related with ROA. The change in D(DR) affects to the change in financial performance of agricultural firms listed on Shanghai Stock Exchange in the opposite direction. D(DR) increases one unit will make ROA decreased by 0.080172 unit.

According to the results of Durbin – Watson value, there is no problem of autocorrelation in the model because Durbin – Watson value is 2.142937 (which is between 1.718 and 2.180), meaning that the disturbance in the equation is independent.

9. Conclusion and Discussion

The results of the study of factors affecting financial performance of agricultural firms listed on SSE showed that asset utilization positively affects financial performance, thus hypothesis 2 is accepted. Leverage negatively affects financial performance, hence hypothesis 3 is accepted. However, hypothesis 1 (liquidity), hypothesis 4 (economic prosperity) and hypothesis 5 (agricultural products price index) are rejected in this study, indicating that liquidity, economic prosperity and agricultural products price index cannot explain the change in financial performance of agricultural firms listed on SSE.

The significant effect of asset utilization on firm performance found in this study is consistent with Jose et al. (2010); Ding and Sha (2011); Seema et al. (2011). More specifically, as stated in Wu et al. (2010), asset utilization made a great contribution to the profitability level of firm, and had a significant positively effecting on the firm's financial performance. Additionally, the negative result between leverage and firms' financial performance is in the line with the findings of Rajan and Zingals (1995); Xiao (2005); Wu et al. (2010).

10. Recommendation

Based on the results of this research, there are some recommendations. Firstly, agricultural listed firms should improve the management level of agricultural listed firms; build its brand image and create a good firm's culture through learning advanced management experience and combined with the firm features; strengthen the ability of solvency and asset management of agricultural firms; speed up asset turnover to adapt the firm's development.

Secondly, agricultural listed firms should make full use of financial leverage and tax shield to reduce the weighted average cost of capital; reasonable control long-term debt ratio avoid the high financial risk and improve the financial performance of agricultural firms listed on Shanghai Stock Exchange.

Lastly, agricultural listed firms should improve the bankruptcy system to solve the problem of the inefficient use of long-term debt financing and soft constraints of debt. Establishing the security system of paying debts and improving bank monitoring for agricultural listed firms in order to leverage has a positive effect on agricultural listed firms.

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University of the Thai Chamber of Commerce, Thailand

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Thailand Management Association

Thailand Management Association (TMA) is a highly professional body of managers and executives, from all branches of business in Thailand who are dedicated to seeking and transferring knowledge through the exchange of the latest information on advanced managerial principles and practices in various fields. This exchange is considered as a contribution from the business sector to the efficient and productive utilization of human and material resources, which contributes ultimately to the well-being of the nation. In 1962, two top management development conferences, inspired by Mr. W.T.Utting, then Chief of the United Nations International Labor Organization (ILO), were organized, by the Thailand Management Development and Productivity Center. These two conferences concluded that the proper and well organized management training center was urgently needed, to improve the overall management skills of both local and foreign enterprises in Thailand. This led to the establishment of the Thailand Management Association, with the late Khun Snoh Nilkamhaeng, then Director of Lever Brothers (Thailand) Ltd., as its first president. The objectives are: 1) to improve the general abilities, education, technical knowledge and effectiveness of person engaged in management, by providing a forum for members for discussion of management subject, 2) to provide mutual assistance in applying management practices to increase the efficiency of the members' enterprises, 3) to propagate the concept that management is a worthwhile and honorable profession, and 4) to promote and maintain high ethical standards of management practices.

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