Chapter 1

# INTRODUCTION

## 1.1 Importance and Background of the Research

Efficient market hypothesis (EMH) asserts the relationship between earnings announcement and price adjustment after the announcement is absorbed by market (Affleck-Graves and Mendenhall, 1992). The market is said to be strong efficient if a stock price fully and instantaneously reflect relevant information. In the semi-strong form efficient market, the stock price should reflect any kind of public information. Therfore, testing of semi-strong form efficient market can be conducted by observing how the stock price moves on or around the date of public announcement.

Studies on semi-strong form efficient markets in the past have focused on many types of relevant public announcements to the market such as stock split, initial public offerings (IPOs), dividend announcements, earning announcements, announcements of accounting changes, unexpected world events, economic news, and corporate events (such as mergers and acquisitions, reorganization, and various security offerings). The effect of announcements on stock prices has a problem of distortion and ambiguous interpretation. Distortion of stock price when the announcement is made is due to a discretionary process of interpreting relevant information. Dividend, earnings, and any kind of accounting or internal announcements impact semi-strong form efficient markets. Ambiguity of information occurs because investors are unable to predict the impact of the announcement on firms' value. An example of this type of announcements, includes mergers and acquisitions, analyst recommendations or security issuance announcements. For example, the merger announcement effect on stock price shows that investors will decide to buy the stock only if they understand clearly how the merged firms' cash flow is affected. In other words, using previous announcements events as grounds to test for market efficiency in the semi-strong form presents the problem to investors of unclear future cash flows. In the event of 'doubt' about future cash flows, it is difficult to measure the responsiveness of investors to the event.

This study corrects the problem of 'doubt' about future cash flows at the time of the announcement by using a directly related announcement about future cash flow when a firm commits to a new business contract.

In Thailand or other developing markets, where investors may have no capability to interpret the effect of financial information (i.e., merger, leverage announcement) precisely, considering less complex events that show an impact on firms' value, such as winning business contracts , can eliminate the problem of 'doubt' about cash flow. Using this kind of information is more appropriate to test the market efficiency, since it can incorporate the weighted effect on the announcement information. This research also uses size of contract and whether the contract counter party is governmental or nongovernmental, as weighted effects of the announcement. More explicitly, this study separates the contract into five budget sizes of investment projects and test its effect on stock prices both on and after the announcement dates of project approval.

Many prior studies examine market price effects of contracting in the developed economies (Bazerman & Amuelson, 1983; Diltz, 1990; Elayan, Pukthuanthong, & Li, 2004; Elayan & Pukthuanthong 2004; Elayan, Roll, & Pukthuanthong, 2006; Houston & Johnson, 2000). However, very few existed for developing countries. In Thailand, although the results of market value effects of contract announcements should be of great interest to researchers, regulators, firm management, investors and new market participants as it is expected to provide empirical evidence that contracting is considered to be a value-added business exchange for a firm, impact of contract award on the market price of the winning firms is fairly new and thus very little academic research has been conducted to study this topic. Therefore, this issue is of great significance to study for the progress and development of the Thai capital markets.

## 1.2 Aims of the Research

The primary aim of this study is to examine abnormal returns of the stocks around contract announcement. The secondary aim is to examine direction between the abnormal return measures whether results are sensitive to the different measures (the OLS market model and the capital asset pricing model). The third aim is to examine the difference of market reactions to different types of contract announcements.

The verification of the third aim in this study would involve investigation of the following matters:

(i) Government and Military contracts vs. corporate contracts

(ii) Five different budget size contracts (see Difinition part for more details).

### 1.3 Research Questions and Hypotheses

The main purpose of this study is to examine abnormal returns of the stocks around contract winning announcement. If winning contracts are considered good news for winning firms, investors should respond favorably to such announcements and the prospect of future cash flow should be impounded into their security prices immediately under the premise that the capital market is efficient. This issue leads to research question 1.

*Research question 1:* Do abnormal returns exist surrounding the announcements of business contracting?

**$H_{01}$:** The expected value of the cumulative average abnormal return is equal to zero.

**$H_{A1}$:** The expected value of the cumulative average abnormal return is not equal to zero.

In addition, since the two abnormal return measures (the OLS market model and the capital asset pricing model) employed to estimate abnormal return using different procedures, it is important to consider whether results are dependent upon which of the measure is used. This secondary aim generates research question 2.

***Research question 2***: Is the abnormal return result of security associated with a contract announcement firm dependent upon which of the abnormal return measures is used?

**$H_{02}$:** The OLS market model and the Capital asset pricing model measures on abnormal return of winning firm are not correlated.

**$H_{A2}$:** The OLS market model and the Capital asset pricing model measures on abnormal return of winning firm are correlated.

The third objective is to examine the difference between market reactions for different types of contract announcements. The disaggregated types of contracts are divided into two groups: (1) government vs. corporate contracts, and (2) five different size contracts. These issues generate research question 3a – 3b.

Research question 3a is generated to investigate the different announcement effects when both government and corporate contracts are awarded. Government contracting is regard as a 'safe' project. Future cash flow to the firms that sign contracts with government agencies is 'implicitly guaranteed'. Therefore, according to the signaling hypothesis, we should observe higher abnormal returns when the contract is signed with government agency. However, we may not see the abnormal returns on the announcement of contracts signed with the Thai government because government information is more efficient than corporate information due to the capabilities of government networks to make public news announcements across the country. We may not observe abnormal returns for business contracts with government agencies. These issues generate research question 3a and the hypothesis 3a are as follows.

***Research question 3a:*** How do the returns to firms engaging in government contracts compare with returns to firms in corporate contracts?

**$H_{03a}$:** The returns to firms engaging in government contracts compared to returns to firms in corporate contracts are not different.

**$H_{A3a}$:** The returns to firms engaging in government contracts compared to returns to firms in corporate contracts are different.

Research question 3b focuses on the question of how the size of a business contract affect stock returns. The size of a business contract conveys important signals to future cash flow. Large business contract announcements should attract more investors and lead to higher prices or higher returns around the announcement date, according to the signaling hypothesis.

***Research question 3b:*** How do the returns to firms engaging in five different size contracts differ?

**$H_{03b}$:** The returns to firms engaging in five different size contracts are not different.

**$H_{A3b}$:** The returns to firms engaging in five different size contracts are different.

## 1.4 Expected Benefit

### *1.4.1 Statement of Significance*

In particular, this study is expected to make significant contributions with practical implications for the following parties:

(i) ***University:*** This research is expected to provide a contribution of knowledge for several subjects in the Finance discipline.

(ii) ***Regulators:*** This study is expected to provide a framework for regulators of capital markets, which will enable regulatory bodies to review policies and practices of announcement procedures in the capital markets in Thailand.

(iii) ***Investors and new market participants:*** The research is expected to provide information to current investors and future financial market entrants on the market value of the contract winning firms.

(iv) ***Analysts and researchers:*** Participants in capital markets utilize information provided by market analysts and researchers. This research is expected to provide new information on the impact of business contracting on the market value of the contract winning firms.

In addition, since many financial markets in developing countries reflect similar behaviors in response to new information in the market, the findings in this study should also be applicable for market participants in financial markets of other emerging markets in developing countries as well. However, for future research, it may be interesting to collect data from other countries and conduct a comparative study.

### *1.4.2 Contribution to Knowledge*

This study will contribute to the literature in several ways. This is the first study that samples cover the period from January 1994 – June 2010, allowing a much larger sample of business contracting. This is the only study of contracting in Thailand that uses the largest dataset. In addition, this 16.5 year time frame of the study covers more than a full market cycle which allows examination during rising and declining markets. This means that a review period is long enough to include significant variations in economic activity. In addition, this study is the first event study in Thailand that employs the OLS Market Model and the Capital Asset Pricing Model (CAPM) to calculate abnormal returns of the winning firms. These will be obtained another perspective on valuation effect of business contracting in Thailand that has not been previously researched in Thailand; therefore, it is expected to close this important gap in the finance literature.

**1.5 Definetions**

***Winning firm:*** Winning firm refers to the firm engaging in business contract with other business corporation or government department. The winning firm expects to receive income from its contractee.

***Abnormal rate of return:*** Abnormal return refers to the amount by which a security's return of winning firms differs from the market's expected rate of return based on the market's rate of return and the security's relationship with the market. In this study, security's return will be drawn from the OLS Market Model (MM) and the Capital Asset Pricing Model (CAPM).

***Contract announcement:*** Contract announcement refers to the announcement on singing business contract of the listed companies in the Stock Exchange of Thailand. All announcements are announced by the Stock Exchange of Thailand during January 1994 – June 2010.

***Contract size:*** Contract size refers to project value (budget) of each contract. Project values are divided into five sizes using the percentile of 20, 40, 60 and 80 for five the groups. The details of the five contract sizes are shown in the following table.

**Table 1.1:** Summary of five contract sizes

| Contract Type | Percentile | Size of Project Value | N |
|---|---|---|---|
| Extra small size contracts : (XS) | ≤ 20 | Less than or equal to 8,4780,555 baht | 131 |
| Small size contracts : (S) | 20 ≤ 40 | Between 8,4780,555 baht and 184,800,000 baht | 130 |
| Medium size contracts : (M) | 40 ≤ 60 | Between 184,800,000 baht and 399,508,960 baht | 131 |
| Large sixe contracts : (L) | 60 ≤ 80 | Between 399,508,960 baht and 931,732,835 baht | 126 |
| Extra Large size contracts : (XL) | 80 ≤ 100 | More than 931,732,835 baht | 131 |
| N.A. | - | - | 27 |

### *1.6 Overview of the Research*

This research is structure as follows. First, we explain our rationale in this chapter. In Chapter two, literature related to efficient market and event studies are described. In particular, the discussion of how the event studies can be utilized to test the effect of business contract announcements also provids in Chapter two.

Chapter three presents the research methodology. Three null hypotheses associated with the three research questions are set. This chapter also details the methods of investigating the hypothesis tests. Data collection method, sample selection, the methodology used in the event study, and statistical tests of hypotheses are discussed.

Chapter four reports the empirical results of the hypothesis tests conducted on market price effects of business contracting during the 16.5-year period, January 1994- June 2010. In addition, the relationship between abnormal return performance measures is reported.

Chapter five presents a summary of this research study. This chapter includes conclusions and discussion, along with the implications of the research. This chapter also discusses the limitations and possible future directions for market price effects of business contracting studies in Thailand.

### *1.7 Summary*

This chapter provides a brief introduction to the background to research problem. It also introduces the aims of this research study, as well as the issues that will be examined. This chapter also provides expected results, including the significance of this study and the contribution to knowledge. In addition, the structure of this research report is also outlined. The next chapter will provide a review of the literature on the market price effects of business contraction in Thailand.