CHAPTER 1

INTRODUCTION

1.1 Statement of the problem

Manufacturing is a sector that is highly exposed to trade openness in the sense that export of manufacturing products accounted for over 80 percent of total exports while the share of imports of intermediate goods and capital goods used in manufacturing is reckoned to be over 60 percent of total imports. In terms of investment, several privileges provided by the Board of Investment (BOI) not only led local investors but also foreign ones to invest in the manufacturing sector. The market-friendly approach also drew many attentions from foreign investors to settle their production in Thailand. As a consequence, manufacturing sector is considered the largest foreign direct investment (FDI) recipient. Being highly exposed to international trade and foreign direct investment, the manufacturing sector is inevitably influenced by the role of exchange rates in the view of financial decision making. Especially, the adoption of the managed float exchange rate regime after the crisis has caused exchange rate to be floated and fluctuated in relation to the demand and supply of exchange rate in the market, and resulted in more difficulties in making investment decision.

The rationale for the effect of exchange rate movements on firm's investment can be explained via the firm's profit. The more firms have profitability, the greater is the incentive to expand production and the stronger in financial position facilitates the funding of their new investment projects. Exchange rate fluctuations have influenced firm's profit not only through changes in the prices of goods sold in export and domestic markets but also through changes in the prices of imported goods used as input in production. The sensitiveness of prices in response to exchange rate movements causes the impact on profit, and resulting long term investment decision.

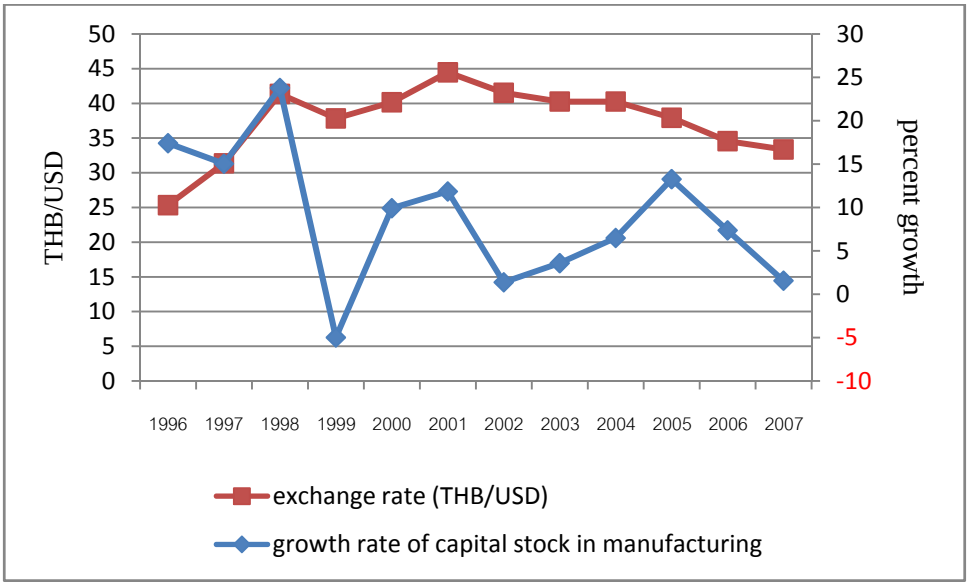
The size of the effect of exchange rates on investment is not uniform across firms but different according to a variety of factors such as the degree of exposure to exchange rates through export and import variable input share, and the degree of market power. The more a firm is dependent on export share, the larger is the increase in competitiveness and export volumes induced by exchange rate depreciation, and it is likely to imply an increase in investment in line with export expansion. On the contrary, investment tends to be more contracted in firm that relies heavily on imported input. Exchange rate depreciation would increase the import variable cost which brings the reduction in the marginal value of capital and therefore the level of investment. Furthermore, the degree of market power would also influence the effect of exchange rates on investment. Firms with high market power, implying firms with high price-cost markup, would have more ability in absorbing the impact of exchange rate changes in their markup than in low markup firms. Consequently, investment in high markup firms would be less sensitive to exchange rate movements.

There seems to be no clear relationship between exchange rates and investment because there is situation in which exchange rates can either benefit or suppress the investment. Exchange rate depreciation would lower real income and wealth of a domestic investor, thus the investment project is likely to postpone. Moreover, depreciation would raise imported capital goods and imported variable input cost which decreases the marginal value of capital and thus investment. However, depreciation would stimulate export, and drive investment to expand. Therefore, the effect of exchange rates on investment is unclear since we do not know which effect is dominant. As seen in figure 1.1, manufacturing investment increased in line with the depreciation in baht during 1999-2001. Since 2001, baht currency has been appreciating, the manufacturing dropped in 2002, yet it had kept increasing during 2002-2005. Unfortunately, investment has been dragging down in accordance with the trend of baht appreciation since 2006. However, due to various determinants jointly determining investment behavior, exchange rate alone may not strictly explain the movement in investment but one should not ignore its impact as Campa and Goldberg (1999) claimed that “if producers are not perfectly hedged against exchange

rate movement, their short- and long-run profitability, overall levels of investment could depend on exchange rates".

Figure 1.1

Movement in exchange rates and manufacturing capital stock



Source: Bank of Thailand

This study analyzes the sensitivity of investment to changes in exchange rate in order to understand how the movements in exchange rate after floating the currency would affect the manufacturing investment. We empirically investigate this impact by using the firm-level data in Thailand's manufacturing sector as a sample set. Moreover, we will examine the responsiveness of investment to exchange rate changes across industry-specific, and firm-specific, to explore different results among different characteristics. We hope that the findings of this study would help better understanding of investment behavior in Thailand's manufacturing sector responsiveness to the exchange rate movements that will eventually be a guideline to understand its effect through the pattern of investment as a whole country.

1.2 Objectives of the study

This study aims to explore three main issues.

1. To investigate how exchange rate changes affect the investment of Thailand's manufacturing firms through domestic sales, export revenues, and import costs of exchange rate exposure channels.
2. To examine the effect of exchange rates on investment across 9 industries, namely food and beverage; textile and footwear; wood and furniture; paper, printing and publishing; chemicals, petroleum, rubber and plastic; non-metallic and mineral product; metal and fabricated metal; machinery and equipment; and vehicle and transport equipment industries.
3. To examine the effect of exchange rates on investment in different types of firm's classification, namely, type of ownership and firm's size.

1.3 Scope of the study

This study uses the firm-level data from the industrial survey by Office of Industrial Economics, Ministry of Industry, to discover the relationship between firm's investment and exchange rate changes. There are about 645 firms in sample each year. The period of time is for the year 2001-2005, in which the situation of the exchange fluctuations occurred.

1.4 Organization of the study

The organization of this study is as follow:

Chapter 1 presents the introduction of the study. It provides statement of the problem, objectives and scope of the study. Chapter 2 provides review of literature and research methodology used in the study. This chapter also includes useful theoretical framework underlying for the empirical model. Chapter 3 exhibits the characteristic of our sample data. The empirical results are shown in chapter 4. And finally, chapter 5 provides the conclusion, and the policy implication.