CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

The adoption of a flexible exchange rate system by many countries after the breakdown of the Bretton Woods system in 1973 has caused large swings of exchange rates. Economists have been interested in the effects of exchange rate changes on current account adjustment, terms of trade, inflation and import and export performances. The mechanism behind the effects of exchange rate movement on adjustments of these macroeconomic variables is the adjustment of traded goods prices in response to exchange rate changes. The relationship between exchange rate changes and prices has been extensively studied and is recognized as the exchange rate pass-through.

Thailand's exchange rate regime has shifted from the basket currency exchange rate system to the managed floating exchange rate system since July 2, 1997. There have been significant volatilities in exchange rate of Baht vis-à-vis other currencies since that time. Figure 1.1 shows the monthly percentage change of the bilateral Baht per US dollar exchange rate and nominal effective exchange rate (NEER) during 2000-2006.

The Thai economy depends heavily on the external sector. The degree of openness rose from nearly 80 percent in 1995 to more than 120 percent in 2006 (Figure 1.2)[1]. Furthermore, the economy is recognized as a classical case of export-led growth phenomenon (Athukorala and Suphachalasai, 2005). This emphasizes the important role played by the export sector in stimulating economic growth of the country. Of all products exported from Thailand, manufactured exports account for the largest proportion; i.e. they account for more than 70% of total exports (Figure 1.3). Regarding Thailand's position in the global economy, Thailand's GDP ranked thirty-third in the world in 2006, with the value of 206,338 million US dollars. This

[1] Degree of Openness refers to the sum of import and export values divided by the country's GDP.

accounts for only 0.43 percent of the world's GDP (World Bank, 2008). From these figures, it can be asserted that Thailand is characterized as a small open economy.

Generally, it is believed that a small open economy is likely to acts as price takers in international markets and easily affected by external shocks. The traded goods prices in domestic currency should respond completely to exchange rate changes. Say, a small open economy has to absorb the full amount of exchange rate changes into their prices. On the import side, exchange rate is expected to fully pass-through to import prices denominated in domestic currency. On the export side, exporters are likely to bear the full amount of exchange rate changes by not passing through exchange rate changes to importer's currency, resulting in markup adjustment in the same proportion as of the exchange rate movements.

In a situation where the exchange rate is highly volatile and Thailand is characterized as a small open economy, it is interesting to see how export prices respond to exchange rate movements. While existing literatures (e.g. Menon, 1992 and Mahdavi, 2002) implicitly assume that exports are invoiced in the exporter's currency so that they are able to study the extent to which exchange rate changes are transmitted from export prices in exporter's currency to export prices in destination currency, this study takes into account the fact that more than 80 percent of Thailand's exports are invoiced in US dollar, a widely used vehicle currency (Figure 1.4), and that changes in the dollar exchange rate should be mostly relevant in export pricing decision. Therefore, this study examines how dollar exchange rate changes are transmitted to the export prices in US dollar terms.

Export prices of Thailand's major manufactures are selected to be a case study. The reason is due to the large proportion of manufactured exports in the country's total exports. Figure 1.5 displays movements of US dollar exchange rate and export price of manufactures in Baht terms. There were some co-movements between these two series even though they are not exactly the same. According to this, one might expect that export prices denominated in Baht may, to some extent, respond correspondingly to exchange rate fluctuations. Alternatively, export prices in US dollar terms remains quite stable when the exchange rate changes.

This study covers export prices of manufactures from eight important export industries. The disaggregation into industries is motivated by the belief that exchange

rate should have different impacts on the adjustment of export prices across industries.

1.2 Objectives of the Study

1. To investigate the adjustment of export prices of selected manufactures in response to exchange rate changes.
2. To examine whether the export price adjustment is asymmetric between the appreciation and depreciation of the Thai Baht.

1.3 Scope of the Study

This study examines the adjustment of export prices of Thailand's eight major manufactured exports which include

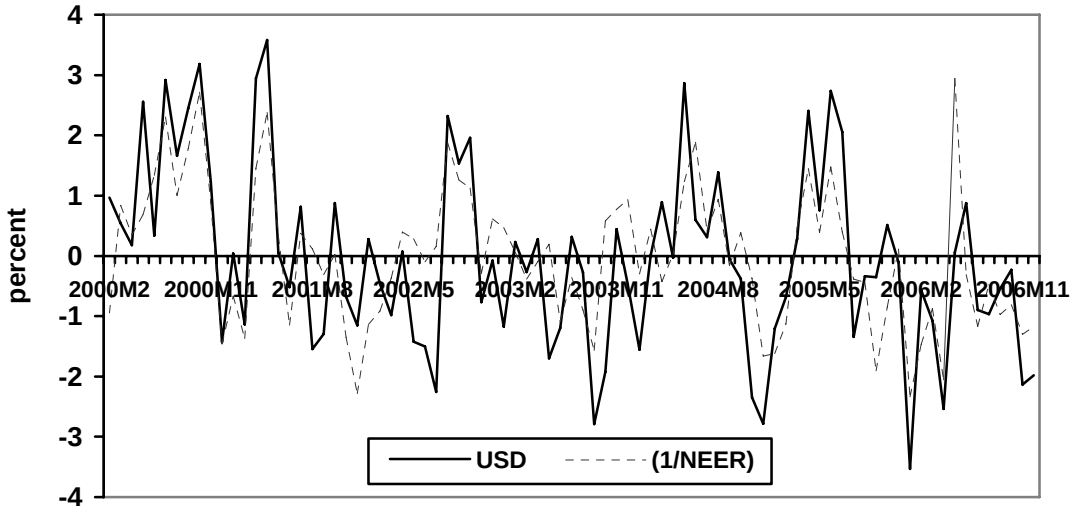
1) Rubber products
2) Canned seafood
3) Iron & steel and their products
4) Furniture and parts
5) Motor cars, parts and accessories
6) Garments
7) Plastic products
8) Chemical products

The export value and share in total manufactured exports of each export industry is presented in table 1.1. Due to the predominant use of the US dollar as export invoicing currency, the export prices are prices of exports in terms of US dollar to the world market. And the exchange rate is expressed in terms of the Thai Baht per unit of US dollar. This study covers the seven year period between January 2000 and December 2006. All data are monthly.

1.4 Organization of the Study

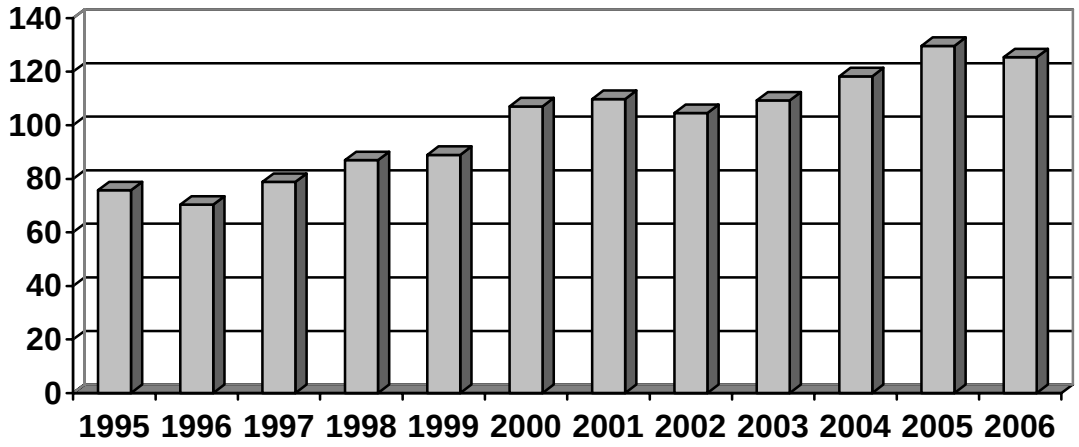
The study is composed of six chapters. The first chapter is the introduction of the study specifying the significance, objectives, scope and organization of the study. The second chapter reviews the survey of the studies related to the relationship between exchange rates and prices. The third chapter provides the theoretical background and framework in analyzing the response of export prices to exchange rate movements. The fourth chapter presents the empirical methodology. The fifth chapter analyzes the results. The final chapter presents conclusions drawn from this study.

Figure 1.1
Monthly Percentage Change in Exchange Rates, 2000-2006



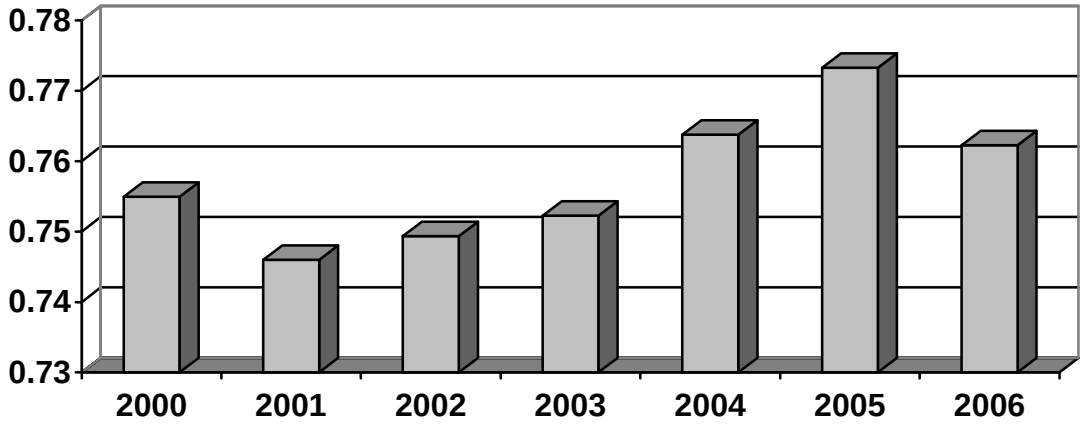
Source: Bank of Thailand

Figure 1.2
Degree of Openness of Thailand, 1995-2006



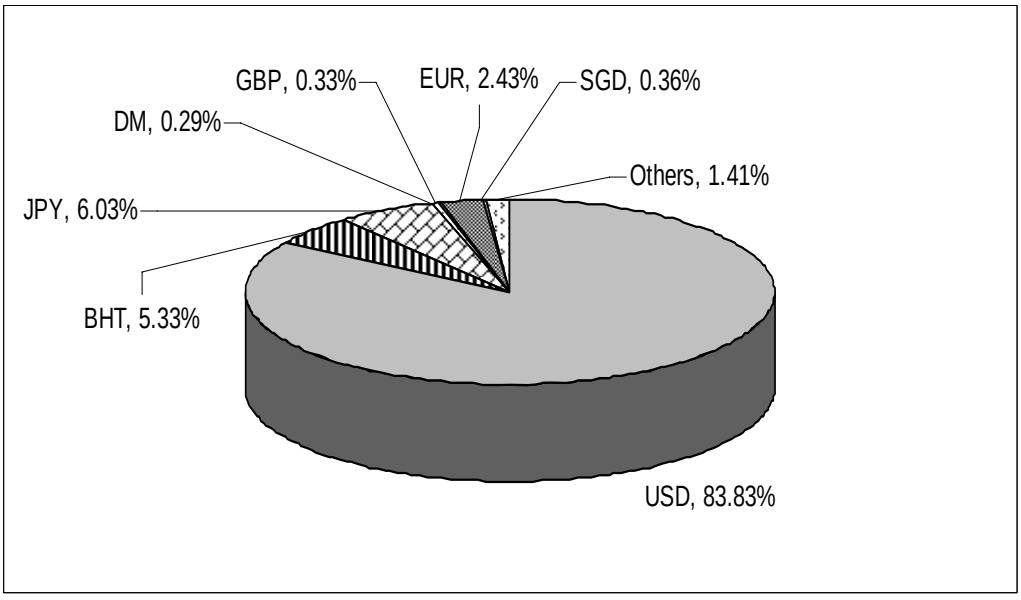
Source: Author's calculation (Data obtained from the Bank of Thailand and NESDB)

Figure 1.3
Proportion of Manufactured Exports in Total Exports



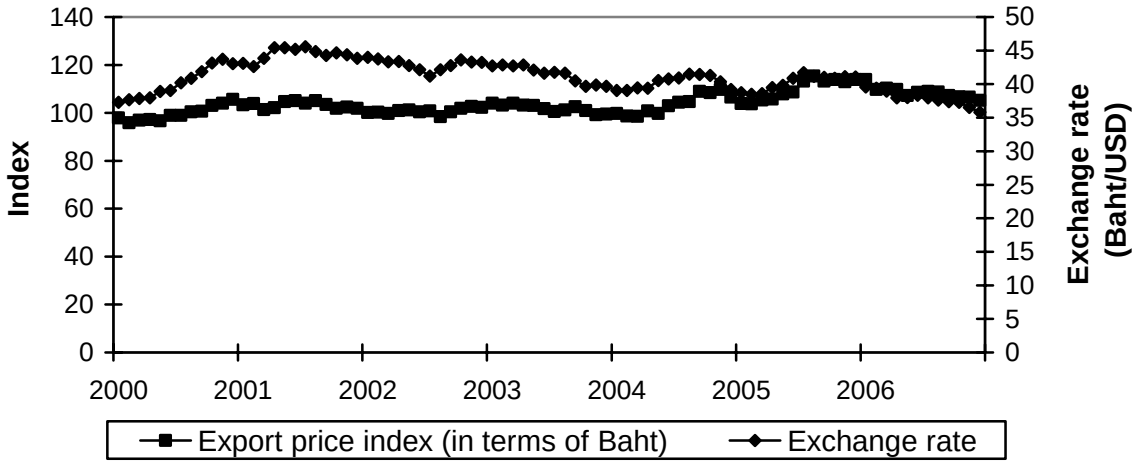
Source: Author's calculation (Data obtained from the Bank of Thailand)
Manufactured exports refer to exports of SITC 5-8

Figure 1.4
Currency Invoicing Ratio of Thailand's Exports (Average 2000-2006)



Source: Bank of Thailand

Figure 1.5
Exchange Rate and Export Price Index of Manufactured Products, 2000-2006



Source: Bank of Thailand

Table 1.1
Export Value of Selected Export Industries, 2000-2006

Industry	Export Value (Million Baht)	% share of total manufactured exports
1. Rubber products	498,681.66	2.61
2. Canned seafood	651,555.36	3.41
3. Iron & steels and their products	576,668.22	3.02
4. Furniture and parts	304,003.08	1.59
5. Motor cars, parts and accessories	1,397,569.84	7.32
6. Garments	857,018.62	4.49
7. Plastic products	365,247.76	1.91
8.Chemical products	530,434.49	2.78
Total	5,181,179.02	27.12

Source: Ministry of Commerce and author's calculation