CHAPTER 6

CONCLUSION

6.1 <u>Summary and Policy Implications</u>

The purpose of this study is to investigate the influence of exchange rate movements on the adjustments of export prices of Thailand's major manufactures.

Theoretical and empirical studies relate the effects exchange rates have on export prices to the so called ""exchange rate pass-through" (ERPT) phenomenon and "pricing-to-market" (PTM) behavior. While these two closely related phenomena can be observed bilaterally from export prices of industrial countries where exports are invoiced in their own currencies or in the export markets' currencies, this might not be the case for Thailand.

Owing to the predominant use of the US dollar as an invoicing currency, the bilateral exchange rates between Thailand and its export destinations should play a minor role in export pricing. The use of US dollar as a vehicle currency makes it more complicated to estimate the degree of bilateral pass-through from Thailand's export prices. Parsons and Sato (2006) is an example of the lack of pass-through relationship from the export side of four East Asian countries including Thailand.

In lieu of examining the ERPT or PTM behavior as did past studies. This study aims to explore what the true relationship between exchange rate movements and export prices should be. Once the significant role of US dollar invoicing is taken into considerations, exchange rate variable that really influences the export prices should not be the bilateral exchange rates between Thailand and its export partners. Rather, it should be the exchange rate between the US dollar and the Thai Baht.

This study mainly answers the implicit question of "To what extent do the export prices in US dollar terms of selected manufactures adjust in response to the US dollar exchange rate?" Alternatively stated, this is to measure the degree to which dollar exchange rate is *passed-through to the dollar export prices*.

Johansen multivariate cointegration technique is utilized to examine long-run relationships between variables in the pass-through equation. At least one

cointegrating vector is found for all industry-specific pass-through equations except for the case of chemical products.

For the pass-through model which assumes symmetric export price adjustment between appreciations and depreciations of the Thai Baht, it is found that the degree of pass-through is quite low and varies across export industries. The estimated passthrough elasticities range from 0.04 to 0.65. On the whole, it can be said that Thailand is likely to be price takers in the international market of manufactures. However, the degree of pass-through is relatively high in the case of canned fish and motor cars. This might be attributable to the fact that Thailand is one of the major players in these export industries. Additionally, it is found that export industry with higher world's export share tends to pass-through exchange rate changes to dollar export prices at a higher rate.

For the other two variables, it can be inferred from the results that cost of production is highly influential in an adjustment of dollar export price in every industry. The competitors' price plays an important role in export pricing in furniture and parts and garments industry. This reflects the competitive environment of the world market of these exporting industries.

The other test in conducted to examine whether there is asymmetric passthrough during appreciation and depreciation episodes. Results show that the asymmetry is rejected in every industry except plastic. It can be concluded that most of manufactured export prices in USD behave in a symmetric fashion to the direction of exchange rate changes.

This study finds that, in general, there has been low degree of exchange rate pass-through to export prices in terms of US dollar in most of Thai manufactured export industries examined. Alternatively speaking, Baht per dollar exchange rate movements have limited impact on the adjustment of manufactured export prices in US dollar. This implies that exporters of manufactures tend to stabilize export prices which are denominated in US dollar. The results support the small country paradigm. Say, Thailand's exporters of manufactures behave like the price taker in the world market, bearing the variable markup due to exchange rate movements.

So long as dollar export prices do not adjust proportionally according to exchange rate changes, the relative prices in terms of dollar of Thailand's exports are

little affected. However, what should be additionally considered is the bilateral exchange rate of the US dollar against the destination market currencies because it is the variable that the importers of Thailand's exports perceive. Furthermore, stabilizing dollar export prices implies that exporters encounter uncertainties in their markups. Relying solely on the US dollar as an invoicing currency is risky. The use of other currencies such as the Japanese Yen and the Euro might be an alternative way to diversify risk. And last but not least, on the supply side, the derivative market which provides a variety of hedging instrument should be developed.

6.2 Limitations and Suggestions for Further Study

The estimation in this study is conducted with some limitations as follows.

First, data of the true cost of production is unavailable, we proxy it by the product-specific PPI. The PPI series are obtained from surveys by the Ministry of Commerce. The surveyed firms include both exporting and non-exporting firms. Therefore, the PPI may not efficiently represent the true cost of production of exporting firms.

Second, due to product heterogeneity, export prices of competing exporting countries which are chosen to proxy the competing prices may not represent the true competing prices in each industry.

Third, while the statistic shows that more than 83% of Thailand's total exports are invoiced in US dollar, export industry-specific statistic of invoicing is unavailable. Owing to this, we do not know the proportion of each currency used in invoicing each export product. Some export goods may heavily depend on US dollar invoicing but some may not.

Fifth, the different classification of export price index and industry data makes the study of inter-industry difference in pass-through more difficult to be compared.

This study covers eight export industries. In fact, there are other export products which are important but they are not included in this study because of data problem. Furthermore, there may be factors that make export price adjustment different across industries such as the foreign ownership and control and product differentiation. The internal pricing policy by multinationals may be influential in the adjustments of export prices. All these are left for further research.