

Managing Exchange Rate Risk: Practices of Malaysian Exporters of Palm Products

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ABSTRACT

This paper investigates the practices of Malaysian exporters of palm products in managing their exposure towards fluctuations in exchange rates and the level of awareness towards this exposure. The study was conducted on the 261 companies that were registered with the Malaysian Palm Oil Board for exporting palm products. Data related to exchange rate risk exposure and the risk mitigation strategies were collected by distributing a survey form via e-mail and facsimile as well as through random telephone interviews. The results show that the Malaysian exporters of palm products are commendably aware on their exposure towards exchange rate risk. However, not all of them manage their exchange rate risk by using the available hedging instruments. The Malaysian exporters of palm products are found to favour the use of forward contracts over the options contracts to minimise their risk.

Keywords: exchange rate risk, risk mitigation, forward contract, palm products.

INTRODUCTION

Background

Exchange rate is one of the key factors that support trade performance globally. It is necessary as it provides access to the creation of additional demand and supply for goods and services. Hence, it helps to boost global economic growth. Fluctuations in exchange rate are deemed to be one of the key factors in attracting demand for goods and services in a specific country. For example, when the US Dollar (USD) appreciates against other currencies, the price of commodities quoted in USD, such as soyabean

oil, becomes more expensive relative to other oils in other countries, hence, dampening the demand for soyabean oil. Schuh (1984) (as cited by Kristinek and Anderson [2002]) concluded that the decline in US agricultural exports performance in the 1980s was highly correlated with the appreciation of the US Dollar value.

Fluctuations in exchange rate hurt the profitability of a business, particularly those businesses which operate on a global scale. Additionally, exchange rate fluctuations put businesses into various dimensions of risks. First is the translation risk – the risk

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that arises from the valuation of assets and liabilities on the balance sheet of the multinational companies. In preparing the consolidated financial accounts, these multinational companies are required to translate the foreign currency values of their assets and liabilities into their home currency. Unpleasant effects caused by this requirement include increases in their liabilities and lowering of the equity values. These two scenarios depreciate the companies image and make it difficult for the companies to acquire additional investments for business continuation and expansion. Second is the transaction risk which only comes up when the companies enter into transactions. Differences in the exchange rate will affect the receivable and payable values from the import and export contracts. The risk is higher for a transaction that requires more time (several years) for delivery to take place, such as for the sale of vessels, planes and technologies. Changes in cash flow due to the

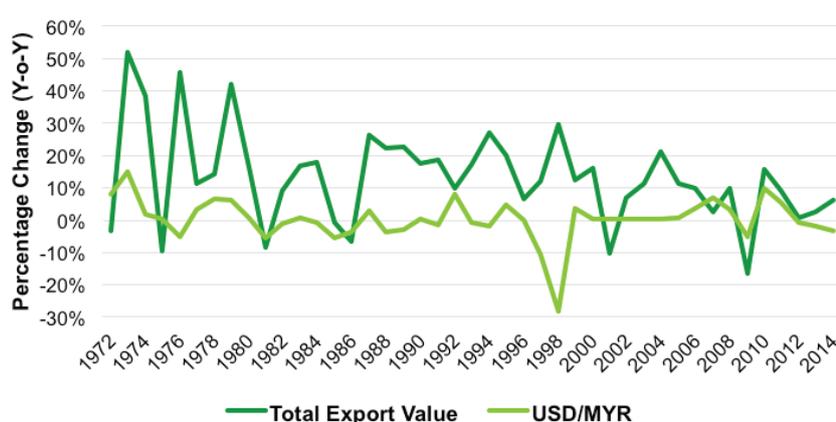
movements in exchange rates will consequently affect the repatriation of the dividends as well. Another dimension of risk that arises from exchange rate fluctuation is the economic risk. Similar to the transaction risk, this risk affects the cash flow of a company. The movement in exchange rates will affect the present value of uncertain future cash flows. It can be the risk of businesses not taking place due to the changes in exchange rate.

The country being an economy that is driven by trade, Malaysian companies are also exposed to all the above risks as the degree of Malaysia's trade openness is high. Total trade is larger than the value of gross domestic product (GDP) itself. In 2016, Malaysia's total trade was estimated at RM 1.49 trillion (MATRADE, 2017), while GDP was estimated at RM 1.23 trillion (Economic Planning Unit, Prime Minister's Department, 2017). During the Asian financial crisis of 1997-1998, the Malaysian Ringgit (RM) was severely affected, depreciating by almost 30%

against USD. This Ringgit depreciation caused Malaysia's total exports in 1998 to surge by more than 30% in value compared to that of 1997 (Figure 1). During the same period, export earnings from palm oil, which was one of the major primary commodity exports, also rose sharply by 69% in the first seven months of 1998 due to increased export unit value of palm oil following the depreciation of the Ringgit (Ministry of Finance Malaysia, 2017).

Developments in advanced economies, such as the US interest rate hikes, can cause the ASEAN currencies to be volatile. The appreciation of USD in 2015 following economic development in that country negatively affected other currencies all over the ASEAN countries. In 2015, RM plunged by 18.6%, the Indonesian Rupiah (IDR) fell 12.8%, the Singapore Dollar (SGD) dropped 7.7%, the Thailand Baht (THB) depreciated by 5.5% and the Philippine Peso (PHP) by 2.5% (Ministry of International Trade and Industry, 2016). The depreciation of RM positively affected Malaysia's exports in value as more than 70% of these exports were traded in USD.

Arising from this fact, Malaysian exporters were deemed to be at risk. In normal trade, the purchase price is agreed upon based on the exchange rate at that time, but payment is not made until delivery takes place in the future. This type of trade is very risky as the exchange rate is unpredictable and it creates uncertainty over the profit to be made. Such a situation, consequently, discourages exporters to be involved in international trade. If exporters are sufficiently risk-averse, an increase in exchange rate volatility raises the expected



Source: Department of Statistics, Malaysia (2017) and the Federal Reserve Bank of St. Louis, USA (2017).

Figure 1. Year-On-Year percentage change between total export value in Malaysia and the exchange rate, 1972-2014.

marginal utility of export revenue, and hence it induces them to increase exports (Ozturk, 2006). However, with the development of risk management tools, the risk which arises from uncertainty of the exchange rate can be minimised.

This study investigates the practices of Malaysian exporters of palm products for managing exchange rate risk and analyses their level of awareness in relation to foreign exchange exposure. The outcome of this study is expected to help policy makers determine the relevant risk mitigation tool in the event of a currency crisis, and promote a more efficient risk management system to the industry players in order to enhance the trade volume of Malaysian palm products.

LITERATURE REVIEW

According to a study by the International Monetary Fund (IMF), exchange rate movement influences the volume of imports and exports of a country. The IMF study found that, on average, a 10% real effective exchange rate depreciation in an economy's currency is associated with a rise in real net exports by 1.5% of gross domestic product (GDP) (Leigh *et al.*, 2015). Exchange rate movement has also affected Malaysian palm oil export performance to China (Zaidi *et al.*, 2014). A study by Batten and Belongia (1984) (as cited by Kristinek and Anderson [2002]) also found that the real exchange rates negatively affected U.S. agricultural exports, but the impact was influenced by the level of income in the importing countries as well.

The impact of exchange rate fluctuations on export performance varied according to the type and elasticity of the

tradable goods and services. Kost (1976) (as cited by Kristinek and Anderson [2002]) found that the impact was minor on agricultural trade, as it depended on the supply-and-demand elasticity of the commodity. In 2013, Jung-ho Baek examined the short- and long-run effects of exchange rate changes on trade flows of bilateral trade between South Korea and Japan. Using the auto-regressive distributed lag (ARDL) approach, he found that South Korea's exports and imports were responsive to the bilateral exchange rates. However, in the long run, the sensitivity of South Korea's exports to Japan, due to the exchange rate changes, was less compared to that in the short run, and it differed between the industries (Baek, 2013). A similar outcome was found in a study on the effect of exchange rate movements on the Australian economy. The structural vector auto-regression (SVAR) model in that study suggested that the aggregate effect of the exchange rate shocks gave significant differences in response across industries. The impact was higher in industries that were more exposed to trade due to their reliance on foreign demand and import competition (Manalo *et al.*, 2014).

Exchange rate risks can be measured by the misalignment or the deviation of the real exchange rate from a hypothetical equilibrium exchange rate. In a study on the impact of exchange rate risk on Malaysian palm oil exports, Noor Zahirah *et al.* (2011) discovered that the misalignments negatively affected palm oil exports in the long run. Results from one of the models in that study suggest that a one percentage point increase in exchange rate

misalignment (overvaluation) was expected to reduce palm oil exports by 0.1 to 0.2 percentage points. In spite of this situation, devaluation of the currency was not the best option to regain exports as there was no significant relationship found between undervaluation – which happened after RM was pegged to USD – and the exports of palm oil.

Fluctuations in exchange rate influenced the exports of Malaysian oil palm products, one of the main commodity exports of the country; these include crude palm oil (CPO), palm kernel expeller (PKE) and palm-based finished products (FP). Performance of the exchange rate between the major producers and suppliers of palm oil, namely Indonesia and Malaysia, also affected the offtake of palm oil from these two countries. Malaysian palm products were at a disadvantage when IDR depreciated while RM appreciated. In addition to that, it is also important to note that fluctuation in the exchange rate of the importing country was also one of the factors that influenced the demand for palm oil. It was found that the fluctuations in the exchange rate of countries with stronger currencies, such as EU, had no effect on the exports of Malaysian palm oil products (Ahmad Borhan, 2010).

In a study of the palm oil market in Ghana, fluctuation of the Ghanaian Cedi was found to be one of the significant determinants of the demand for Ghana's palm oil. Depreciation of the Cedi against USD persuaded exporters to export more so as to maximise profits. Assuming all other things being equal, the study found that a 1% depreciation of the Cedi over USD increased the demand for Ghana's palm oil by about 11.4% (Kuwornu, *et al.*, 2009).

Tools and techniques for exchange rate risk management

Fluctuations in exchange rate influence the tendency of a firm to be involved in international trade; thus, it is essential to increase awareness in good risk management practices. There are two approaches in handling the risk exposure to exchange rate variation, namely, through operational hedges and financial hedges. Operational hedges involve physical activities that consist of non-financial counterbalancing actions such as relocation of production, sourcing and sales (Boyabatli and Toktay, 2004). Meanwhile, financial hedges comprise derivative instruments such as forwards, futures, options and swaps. Among the industry players of seven main sectors in Malaysia, the plantation companies are the main users of the derivatives. This is due to the availability of the CPO futures market on the Bursa Malaysia Derivatives (Ahmad and Haris, 2012). The decision to use derivatives by the players in the plantation sector is driven by the stand of profitability and liquidity of the company (Isa *et al.*, 2017). Based on the Bursa Malaysia Company announcement webpage, about 26% of the listed companies in the Bursa disclose the use of foreign currency and interest rate derivatives. Forward contracts are highly used in proportion to other hedging tools, namely, future and swap contracts (Ameer, 2010).

Among the hedging tools used for financial hedging are the following:

i. *Forward Contract*

A forward foreign exchange rate contract is an agreement to buy or sell a given amount of foreign currency at some date

in the future at an exchange rate fixed today.

ii. *Future Contract*

While equivalent to forward contracts in function, it differs in several important features. It is traded on an exchange; hence, it has standardised and limited contract sizes, maturities and currencies. In Malaysia, these contracts are traded in the Bursa Malaysia Derivatives market.

iii. *Swaps*

These make up a financial instrument that allows the buyer to exchange one set of cash flow in one currency against another set of cash flow in another currency. The most common kind of swap is an interest rate swap. Unlike future contracts, swaps do not trade on exchanges. They are over-the-counter (OTC) contracts between businesses and financial institutions.

iv. *Options Contract*

This is an agreement that gives the purchaser of the option the right to buy or sell a particular asset at a later date at an agreed upon price. Options are said to be 'too expensive' as compared to forward contracts on the basis that some price have to be paid for upside potential afforded by the option (Bodnar, 2017).

METHODOLOGY

In line with the objective of this study, which was to examine the practices of Malaysian palm product exporters in managing their exchange rate risk, a qualitative research methodology was employed. A survey was used to collect data for this study. To understand the impact of exchange rate risk

on the exports of Malaysian palm products, a review of the existing studies was conducted as has been presented in the Literature review.

The list of respondents was obtained from the *Directory of Malaysian Exporters of Palm Products* published by the Malaysian Palm Oil Board in 2014 (Trade Development Unit, Economics and Industry Development Division, 2014). Two hundred and sixty-one companies were registered in the Directory. As the number was not large, the study focused on all the companies without any sampling.

The construction of the survey was based on the studies by Ito *et al.* (2013) and Zachariah (2009). The questionnaire was divided into five sections. It was a semi-structured questionnaire which consisted of open-ended and closed-ended questions. The questionnaires were sent *via* e-mail and facsimile to the respective trading managers as listed in the Directory. Additionally, telephone interviews were also conducted at random to collect data for the survey. Among the data collected were the company profile, involvement in international trade, exchange rate risk management practices, and other related issues that influenced the company's trade decision. The data collected were analysed using statistical software, and the results were then interpreted and presented in frequencies to draw conclusions and recommendations.

RESULTS AND DISCUSSION

Out of 261 listed companies in the Directory, only 144 companies responded, representing 55.2% of the population. The respondents held various positions at the time of the survey, with 56.2%

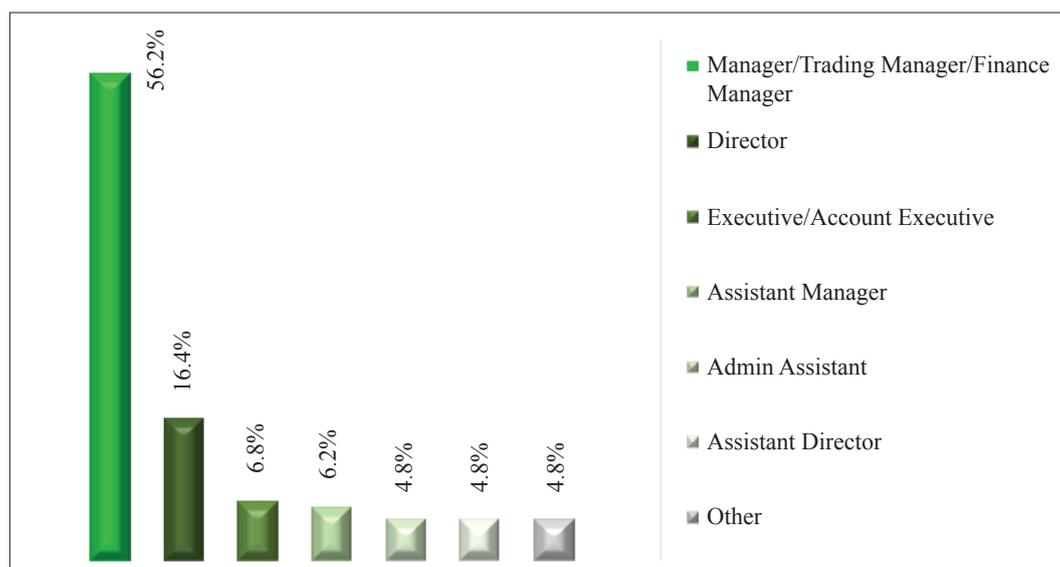


Figure 2. Breakdown of respondents by job category.

being mainly manager, which included trading manager who was responsible for the trading activities of the companies. This job category was followed by the director of the company, executive, assistant manager, administrative assistant, assistant director, and others (Figure 2). Based on the random telephone interviews, it was found that the director was generally involved in the trading activities when the size of the company was small, *i.e.* consisting of about four or five people.

Out of the 144 companies, only 123 companies responded that they were involved in international trade, while the remaining 21 companies stated otherwise. Some of the companies (which were not involved in trade, but were registered in the Directory) stated that they had applied for a licence to trade, but had yet to be involved in trading. This was in accordance with the Malaysian Palm Oil Board (Licensing) Regulations 2005 governing MPOB licensing matters which require companies to be licensed for the activities related to exporting or importing

palm oil, oil palm fruit, palm kernel, palm kernel oil, or oleochemicals (Malaysian Palm Oil Board, 2017). The traders exported mainly processed palm oil (PPO), which accounts for 48% of the export products, followed by oleochemicals (21%), crude palm oil or CPO (10%), and other products (21%) which were derivatives of crude palm kernel oil (CPKO), mixed palm fatty acids, mixed palm kernel acid oil, palm kernel expeller, phytonutrients, stearin, and sludge palm oil. This breakdown is in line with the Malaysian total exports of palm products in 2016 as shown in Figure 3.

To measure the degree of exchange rate risk exposure, the survey asked the number of currencies used in trading. About 67% of the respondents used only one currency in their trade, 22% used two currencies, and only 11% used more than two currencies. The main currency used in trading Malaysia palm products exports was USD. When setting up the export price, the choice of invoicing currency is important as it will help to minimise the risk of exchange rate

fluctuations. Figure 4 shows that the invoicing currency of the Malaysian palm oil exporters was USD. USD is always the top choice for invoicing currency in world trade as it offers stability, liquidity and low transaction costs (Björn, 2008).

One of the main concerns in international trade is the risk of exchange rate movement. In spite of using USD as the invoicing currency, the risk of currency fluctuations cannot be totally eliminated. About 81% of the respondents were aware that they were exposed to the said risks. However, only 65% of them managed the risks by hedging them using the available derivatives in the market. The foremost instrument used by the Malaysian exporters was the forward contract, followed by the options contract, and other strategies (see Figure 5).

As stated in the beginning of this paper, a forward contract is an obligation between two parties to exchange a specified amount of foreign currency at a predetermined rate for settlement on a predetermined date. A forward contract provides protection to the

companies involved. However, as the companies were obliged to deal at the agreed-upon rate, they were not in a position to take advantage of favourable movements in rates that occurred between the booking of the contract and completion of the deal. Due to this weakness, a forward contract is a cheaper alternative compared to an options contract. Hence, it is always a preferred instrument over the options contract.

As far as exchange rate risk is concerned, not all exporters of palm products in Malaysia minimise the risk by hedging. About 35% of the respondents did not hedge their position. The main reason for not hedging was a lack of internal resources and knowledge in managing the risk. Some of the companies also found that the foreign exchange products offered in the market were too expensive and speculative. Hence, they opted to engage in another strategy to minimise the risk,

such as buying back-to-back and ensuring that all their customers were using USD.

CONCLUSION

Fluctuations in the foreign exchange rate have caused uncertainties to the exporters. For the exports of Malaysian palm products, the fluctuation of the Ringgit did not significantly affect the export volume of palm products as most of the products were quoted in more stable currencies such as USD. However, fluctuations of the exchange rate influenced the cash flows. In business, it is all about the money. A company will strive its best to maximise its profit at the lowest cost possible. Due to this behaviour, most of the exporters of palm products in Malaysia used hedging instruments to protect their cash flows. Based on the survey, it can be construed that the awareness of the Malaysian exporters of palm products of

the risk of foreign exchange movement is commendable, with 81% of the respondents knowing that they were exposed to risk. Nonetheless, only 65% of them managed their risks by using appropriate financial hedging instruments, while the remainder did not hedge their positions. It was also noted that the Malaysian exporters were constantly looking for the cheapest option available in the market, which is evidenced by the higher frequency of use of forward contracts over option contracts. Overall, it can be concluded that exposure to the exchange rate risk mitigation tools in international trade needs to be intensified among the Malaysian exporters as this will encourage them to trade more actively. Their participation is very important as it will help to boost the economy. Given the importance of international trade for the palm oil industry, good practices in risk management among the Malaysian palm products exporters need to be enhanced. In order to create a more efficient exchange rate risk management system, the policymakers, the financial institutions and the exporters need to work hand in hand.

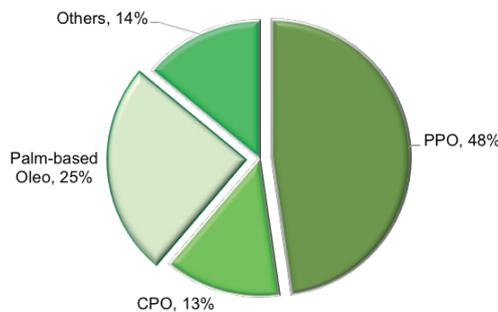


Figure 3. Malaysian exports of palm products based on export value, 2016.

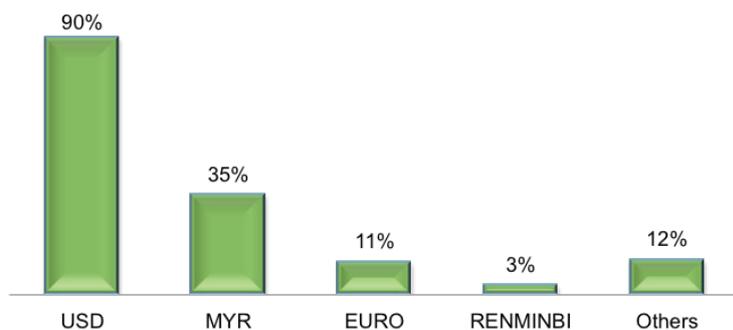


Figure 4. Invoicing currency used by Malaysian exporters of palm products in trade.

LIMITATION AND RECOMMENDATION

This study faced a limitation in reaching out to all the respondents as many of the companies registered in the Directory were dormant companies, i.e. registered but having no business, and this had led to a low response rate. For future studies, it is recommended that a qualitative approach be employed by using an expert interview methodology. This may give a deeper insight into the risk minimising strategies used by the exporters of palm products.

ACKNOWLEDGEMENT

The authors wished to acknowledge the Head of the Techno-Economics Research Unit, Group Leader of Production Economic Group and all subordinate of the Techno-Economics Research Unit of the Economics and Industry Development Division for their kind assistance and support in completing this study. The authors also wished to thank the Director-General specifically, and the Management of MPOB, for their support in conducting this research.

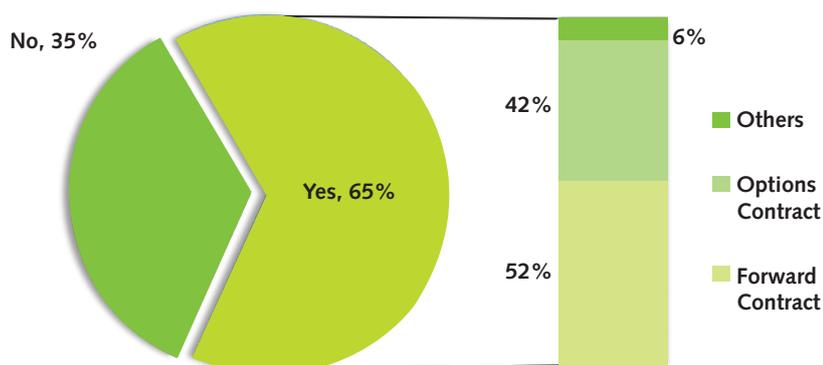


Figure 5. Hedging decision and its tools used by Malaysian palm products exporters.

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