

## A Cross-Sectional Study on Foreign Exchange Risk Management by Malaysian Manufacturers

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**Abstract:** Malaysian manufacturers are exposed to the increasingly volatile marketplace which is full of risks and uncertainties including surprises at times. Such undesirable events may eventually affect the state of financial wellbeing of such entities involved. Thus, the availability of new technologies and techniques of risk treatment is critical in managing such risks and uncertainties. In this respect, this study will focus on Foreign Exchange Risk Management (FERM), which is expected to provide the needed efficiency in risk mitigation or treatment for the Malaysian companies concerned. Data was collected based on the companies' latest available annual reports. Interestingly, FERM is noticeably becoming increasingly popular among companies in the Asian region nowadays. It must be emphasized that this study aims to provide an insight into the FERM practices among the Malaysian manufacturers in particular. The study on the whole reveals some interesting findings among which suggested that majority of the manufacturers is non-users of FERM. In addition, the study shows that some of these manufacturers have actually used natural hedging to mitigate foreign exchange risk. The study also reveals that users of FERM are usually the larger manufacturers that used forward contracts to manage foreign exchange risk. It is also interesting to note that among the users of FERM, a few manufacturers have actually adopted Enterprise Risk Management (ERM) Framework for strategic decision-making.

**Key words:** Foreign exchange risk management, risk management, currency risk management, Malaysia

### INTRODUCTION

During the last Asian Financial Crisis in 1997, many companies in Malaysia suffered foreign exchange losses due to devaluation of Malaysian Ringgit against major currencies like the US Dollar and the British Pound. This was due to the fact that many companies has foreign debts as well as trading overseas. According to IMF report (1998), one of the many factors contributed to these losses was poor assessment and management of foreign exchange risk. Thus, lesson learned from the crisis has led to more involvement by companies in foreign exchange risk management.

Earlier studies on the management of foreign exchange risk mainly focus on: Factors that influence firms to involve in foreign exchange risk management (Hardwick and Adam, 1998; Berkman and Bradbury, 1996; Nance *et al.*, 1993; Batten *et al.*, 1993) and foreign exchange risk management practices (Sheedy and Elizabeth, 2006; Capstaff and Marshall, 2005; Abor, 2005).

Studies on the management of foreign exchange risk in developing countries are scarce. Perhaps, the first study in Malaysia was done by Yazid (2001). He focused on the perceptions and practices of foreign exchange risk management among Malaysian multinationals. Since, these multinationals are big, their management of foreign exchange risk are expected to be different to manufacturers.

The objectives of this study are twofold: The practice of foreign exchange risk management among companies and the influence of organisational's characteristics on the management of foreign exchange practices.

The notion of foreign exchange risk management is commonly used among international firms. Nonetheless, there is no uniformly accepted definition of foreign exchange risk management.

For the purpose of this study, foreign exchange risk management is defined as a comprehensive framework aimed at avoiding or minimising currency risk exposures through the use of financial instruments like forwards, futures, options and swaps.

Earlier studies, Nance *et al.* (1993), Rawls and Smithson (1990), Berkman and Bradbury (1996) and Smithson *et al.* (1995) suggested that foreign exchange risk management would benefit companies. In addition, Chow *et al.* (1997) argued that risk management could reduce the effect of foreign exchange volatility on companies. Hence, foreign exchange risk management gives a positive effect to shareholders. Dolde (1993) in a study on US companies showed that foreign exchange risk management add value to them. This is supported by Makar and Huffman (1997) that foreign exchange risk management has a positive correlation with foreign exchange risk.

Dolde (1993) surveyed United States firms and found that larger firms were more involved in foreign exchange risk management. This is due to large resources that they have such as, human resource and financial capabilities. A study on Malaysian multinationals (Yazid, 2001) showed similar result, that is users of foreign exchange risk management were multinationals with larger assets.

Meanwhile, Sheedy and Elizabeth (2006) did a study on Hong Kong and Singaporean firms. The study showed that risk management practices were quite similar to that in the United States. Companies used financial instruments for managing foreign exchange risk. Forward contracts were generally popular among these companies. Fatemi (2000) showed a similar finding, that is forward contracts rank as the most frequently used financial instrument to manage currency risk.

## MATERIALS AND METHODS

This is the first time study to examine the practice of foreign exchange risk management among manufacturers in Malaysia. A random sample of 100 manufacturers selected among those which are listed under the “Industries Products” in the Malaysian Bourse. The actual population for companies under this category is 152. These companies are selected because of their heavy involvement in export and import activities.

Data on foreign exchange risk management practices are gathered from their latest available annual report i.e., 2005. The method of getting relevant information about these companies from their respective annual report is better compared to questionnaire survey. As argued by Vaus (1993) a low response rate is a major drawback for questionnaire survey.

## RESULTS AND DISCUSSION

This study reveals that only 45% of manufacturers were users of foreign exchange risk management, while the remaining 55% were non-users (Table 1).

Table 1: Percentage of users and non-users of foreign exchange risk management

Users/Non-Users	Percentage
Non-Users	55
Users	45

Table 2: Two samples independent t-test

	Mean	T-values
Total assets	Users = RM112,085,940 Non-Users = RM18,480,984	0.0138**
Foreign receivables	Users = RM7,871,868 Non-Users = RM1,674,120	0.0267*
Foreign payables	Users = RM1,603,415 Non-Users = RM657,098	0.1853
Total employees	Users = 1927 Non-users = 874	0.1305

\*\*significant at 1% \*significant at 5%

It is no surprise that the majority of the manufacturers were not involved in foreign exchange risk management. This is probably due to the current development of the economic events that occurred in the country, especially the decision made by the government to “manage float” Malaysian Ringgit against US Dollar. This policy will allow the Malaysian Ringgit to fluctuate within a limited band. On the other hand, lesson learnt during the recent Asian financial crisis in 1997 motivate some of these manufacturers to involve in foreign exchange risk management.

Much of the literature (Yazid, 2001; Dolde, 1993) indicate that firms with bigger assets are more involved in foreign exchange risk management. Presumably, bigger firms have more personnel who can actually analyses the costs and benefits of risk management. In this Malaysian study, manufacturers with larger assets and more employees are more likely to involve in risk management (Table 2). Therefore, the finding is consistent with many of the earlier studies in the subject.

Another interesting finding emerges from this study that is users of foreign exchange risk management seem to have larger foreign currencies receivables exposure (Table 2). The result shows a statistically significant difference between users and non-users, in terms of foreign currencies receivables.

In addition, all the manufacturers use forward contracts to mitigate foreign exchange fluctuations. This is of no surprise because forward contracts is simple and easy to understand compared to other instruments such as futures, swaps and options (Madura, 2000). Most of the manufacturers are only familiar with forward contracts. Moreover, the development of these financial instruments is some what stagnant. The banks are slow in offering new products for firms to manage financial risks.

**Financial risk management objectives:** The result suggests that manufacturers do not involve in speculative trading. They use financial instruments just for hedging purposes.

Table 3: Financial risk management objectives

	Percentage
To ensure adequate financial resources available for firms' development	42
To maximise shareholders' value	25
To reduce exposure to currency fluctuations	22
To minimise exposure to risks and cost associated with the financing, investing and operating activities	11

A larger number of manufacturers (42%) use risk management to ensure adequate financial resources to finance future companies' developments (Table 3). A total of 25% of them involve in risk management in order to create value to shareholders. Reducing exposure to foreign exchange fluctuations was the objective for 22% of these manufacturers. Only 11% use risk management to minimise exposure to risks and cost associated with the financing, investing and operating activities.

Therefore, it can be deduced that the role of foreign exchange risk management is to stabilise firms' earnings so that they have adequate funds for future expansion. At the same time, foreign exchange risk management is used to enhance shareholders' value.

**Monitoring and reporting:** According to the Malaysian Code of on Corporate Governance (revised 2007), one of the Board of Directors (BoDs) responsibilities is to identify principal risks and ensuring the implementation of appropriate systems to manage these risks. Thus, BoDs would like regular reporting on risk management.

This study shows that the majority (62%) of the manufacturers do quarterly report of foreign exchange risk management to the board (Table 4). A total of 32% report regularly to the board while only 6% of them report on monthly basis. Regular reporting to the board is necessary to curb any inappropriate actions by staff in dealing with financial instrument. The policy of not allowing staff to involve in speculative trading act as loss prevention technique for that matter.

**Enterprise Risk Management (ERM):** Risk management has emerged as a new management concept in managing risk since 1950s. However, in the recent years literature on risk management focuses on ERM (Manab *et al.*, 2006; Walker *et al.*, 2002; Miccolis *et al.*, 2001). Despite these development, most of the companies surveyed use a traditional approach in managing business risks. In this study, only 18% of users of risk management has adopted ERM framework in their strategic business operations. This is not surprise because risk management in Malaysia

Table 4: Reporting to board of directors

	Percentage
Quarterly	62
Regular basis	32
Monthly	6

is still at "infancy" stage. Never the less, some of these manufacturers have move forward in finding new ways for managing risk.

According to Lam (2003) ERM is defined as a comprehensive and integrated framework for managing credit risk, market risk, operational risk, economic capital and risk transfer in order to maximise firm value. In addition, ERM can be divided into seven components as follows: Corporate governance to ensure BoDs take appropriate actions to mitigate risk, line management to integrate risk management through out the organisation, portfolio management to aggregate risk exposures, risk transfer to mitigate risk exposures that are deemed very serious, risk analytics to provide the risk measurement to quantify organisation's risk exposures, data and technology resources to support the analytics and reporting processes and stakeholder management to communicate and report the organisation's risk information.

The establishment of a Risk Management Policy is also crucial. This policy includes, among others, a structured process for identifying, evaluating and prioritising risks as well as clearly defining the risk responsibilities. The role of Risk Management Committee who is normally chaired by the Chief Executive Officer (CEO) or Managing Director (MD) to ensure the continued efficiency and effectiveness of the ERM framework. The committee has the responsibility to report to the BoDs on regular basis. The BoDs support to risk management program is very critical. This would ensure the success of ERM. Since ERM is a continuing program, periodical audit by the internal auditor is necessary. The auditor may provide feedback on the effectiveness of the ERM implemented.

**Reasons for not undertaking foreign exchange risk management:** This study shows that a considerable number (46%) of the manufacturers were not involved in foreign exchange risk management due to insignificant foreign currencies exposure. Table 5 indicates that foreign currencies receivables for users of foreign exchange risk management are RM7.8 million as compared to non-users at RM1.6 million. There is a significant difference between foreign currencies receivables between users and non-users. Therefore, the result suggests that foreign exchange exposure do influence manufacturers in making decision on risk management practices.

**Table 5: Reasons for non-engagement in foreign exchange risk management**

Reasons	Percentage
Insignificant foreign exchange exposure	46
Natural hedging	20
Close scrutiny of foreign exchange movement	18
Strict internal control system	5
Cost of using financial tools outweigh potential benefits	5
Managed closely with close consultations and negotiation with regular customers by way of price adjustments	4
Leading and lagging	2

A total of 20% of the manufacturers which were not involved in risk management used natural hedging in managing currency risk. Analysis of their respective annual reports showed that some of the manufacturers made arrangement to borrow in foreign currencies. Therefore, they actually limit their foreign exchange exposure because the revenue in foreign currencies is used to settle the loan. Presumably, these manufacturers tried to match revenues and liabilities in the same foreign currencies. A fraction of these manufacturers involve in leading and lagging payments depending on the currency rate movement.

A total of 18% of the manufacturers paid close attention to foreign currencies movement. Thus, they could take necessary actions at the right time. For example, they could adjust the prices according to exchange rate.

### CONCLUSION

The findings in this study shed some much needed light on the practices of foreign exchange risk management among manufacturers. The study reveals that a majority (55%) of the manufacturers are non-users of foreign exchange risk management. They would rather use natural hedging such as, borrowing in the foreign currency or matching their revenues and expenses in the same currency. In addition, their insignificant foreign currencies exposure led them not to involve in risk management.

The study shows that manufacturers with bigger assets, more number of employees and larger foreign currency receivables are likely to involve in foreign exchange risk management. Thus, the role of foreign exchange risk management is bigger to manufacturers with significant foreign currencies exposure. In addition, those users of foreign exchange risk management do quarterly report to the Board of Directors. Thus, keep the BoDs informed regarding risk management activities.

An interesting finding emerges from this study that indicates a few of the manufacturers are more advanced in managing risks. In particular, they have adopted the Enterprise Risk Management (ERM) in mitigating risks.

ERM is a holistic process in managing corporate risks for the purpose in increasing the firms' value that would benefit shareholders. The findings about ERM, in particular, are worthy of special attention and further research.

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