

Impacts of Foreign Currency Exposure on Malaysia's Firm Value: Firm Value, Hedging and Corporate Governance Perspectives

Roselene Yam Sou Cheng
SEGi College, Penang

Ei Yet Chu*
*Graduate School of Business
Universiti Sains Malaysia
Email: eychu@usm.my*

Saw Imm Song
*Department of Business Management
Universiti Teknologi Mara, Penang Branch*

Tian So Lai
*School of Economics, Finance and Banking
Universiti Utara Malaysia*

** Corresponding Author*

Abstract

Purpose: This study examines and assesses the relationship between foreign currency exposures in terms of account receivable and payable and firm value of Malaysia firms.

Design/methodology/approach: The study takes the balance sheet approach where a total sample firm of 148 Malaysia public reported their foreign currencies exposure from 2006 to 2013. Foreign currencies exposures in USD and SGD are regressed on firm value as these are most reported foreign currencies exposures. The study examines the issues from the perspective of firms' size, hedging strategy, and corporate governance perspective.

Findings: The findings suggest that Malaysia firms do not manage their exposures to USD well, both account payable and receivable. Large firms are also not well equipped to improve firm value when it is highly exposed, especially to USD as compared to SGD. Hedging strategies are not effective in the country as it does not significantly improve firm value. However, the presence of independent directors and large shareholders assert some monitoring effects on USD payables exposures and SGD receivable exposures, which lead to a positive firm value.

Research limitations/implications: Corporate governance could substitute the role of hedging strategy in managing foreign currencies exposures. The research is hindered by the limitation information on hedging reported in annual reports.

Practical implications: The study suggests the role of corporate governance is essential in various perspective of financial management. Large shareholders and independent directors could assert an effective role in monitoring risk as their controlling stake increases. In terms of USD exposures, which is more volatile, Malaysia firms are not managing USD exposures well

and lead to declining of firm value. Malaysia firms should be more prepared financially and strategically when dealing with USD exposure, which is more volatile.

Originality/value: The study applies balance sheet approach based on account payable and receivable on currencies exposure. Various perspective, especially issues on corporate governance is new when approaching the issues of foreign currencies exposures, especially in the contexts of emerging economy.

Keywords: Foreign currencies exposures, Malaysia, risk management, hedging, corporate governance

Introduction

Generally, risk management in foreign currency divides the exposure of foreign currency into operation exposure, transaction exposure and translation exposure (Eiteman, Stonehill and Moffett, 2006). Extant literature in foreign currency exposure study the issues from the balance sheet and economic model approach (Akay and Cifter, 2014). The balance sheet approach examines the outstanding account acceptable and account payable of foreign currencies' exposure while market model approach examines the exposure as the residual between foreign currency and its impact on stock markets. The balance sheet approach gives a perspective of a firm's account payable and receivables exposures of foreign currency while market model approaches the issues from sensitivity of stock prices when there are changes in exchange rates.

The East Asian financial crisis in 1997 had led Malaysia government to peg the Ringgit Malaysia against USD from 1997 to 2005. During the crisis, many Malaysia firms had not taken any protection measurements and badly hit by the crash of Ringgit Malaysia against USD, especially. After 2005, the government has pursued with the manage-float system just like prior to financial crisis. Since 2005, the Ringgit has strengthened from 3.60 to 3.00 against USD. The period has also shown an upsurge of Bursa Malaysia Composite Index. The strengthening of Malaysia Ringgit has two edges. Theoretically, it enhances importers' value as less Ringgit Malaysia is required to pay to their overseas sellers. On the other hand, it adversely affects exporters as exporters receive less Ringgit for each USD of goods exported overseas. The changes in the foreign currency affected firms in the country after their painful experience in 1997. A study to look at the issue from the exposures from balance sheet perspective is essential as its influence firm profit and loss account directly.

The fluctuation of the exchange rate will affect the costs and revenues of firms that involve in international trade or non-trade activities, as they are unable to estimate the inconsistency of costs and revenues. Thus, risk adverse companies will try to avoid or minimize any types of currency risk exposure by implementing risk management. Firms, which are big and are strong in financial strengths will apply hedging strategies such as option, swap, forward and future contract to limit their exchange rate risk exposures. In this context, we are uncertain on the general foreign currencies exposures of Malaysian firms. Moreover, we are uncertain how they manage foreign currency exposures that could minimize negative impacts on shareholders' value.

The paper is organized into five sections. Next, literature review and hypotheses development will be discussed; Section 3 explains the sample and methodology in this study. The findings are shown and discussed in section 4 and section 5 concludes the study.

Literature Review

Foreign Currency Exposures and Firm Value

Generally, multinational firms dealing in import, export and investment abroad will expose to foreign exchange risks but domestic firms will also be affected by exchange rate changes indirectly even though it is not dealing in international trade as the exchange rate fluctuation affect costs of imported materials. Pertaining to this, Aggarwal and Harper (2010) showed that 1265 domestic firms on the NYSE, AMEX and NASDAQ are no different from multinational firms that have direct involvement in international trade in terms of foreign exchange exposures due to the macroeconomic effect of USA.

The results are consistent when it is applied in the European market. The research by Nydahl (1999) found that around 26 percent of the 47 firms in the sample of Swedish firms are significantly exposed to exchange rate changes. In the study of Bartram (2008) which performed a detailed analysis of the foreign exchange rate exposure of a large nonfinancial multinational German firm VEBA AG showed that the firm has significant exposure to foreign exchange rate risk due to its foreign currency-based activities but the exposure was insignificant to the total cash flow performance.

Exchange rate exposures have two edges towards firms' value. However, it is the ability of firms' risk management that minimise the exposure and enhance the value of the company. Foreign currency exposures are similar across countries. Based on 100 European blue chip companies from 2001 to 2012, Mozumder, Vita, Larkin and Kyaw (2015) found that there is no difference of foreign currencies exposures between Eurozone, and non-Eurozone, financial and non-financial firms. However, there is a positive relationship between exchange rate fluctuation and the market value of firms.

The impacts of currency exposures are very much depending on time variations of the study. The factors of uncertainty and different time dimensions influence the findings. Grambovas and Mcleay (2006) showed that the currencies of Eurozone firms response positively to firms' value in the pre-Euro period in anticipating of introduction of Euro currency. Afterwhich, the currency exposures led to negative relationship with firm value.

There are many ways of measuring foreign currency exposures, depending on availability of reporting in a particular country. Ademola and Kemisola (2014) used account collection period and account payment period as proxies for working capital management which are associated with accounts receivable and accounts payable. When a firm involves in foreign currencies based activities, both accounts receivable and accounts payable will expose to foreign currencies risk as a result of fluctuation on the exchange rate. Using a similar approach, Abuzayed (2012) showed that account payment period and account collection period have a negative relation and positive relation, respectively to firms' profitability. Vural, Sokmen and Cetenak (2012), Muscettola (2014) also evidenced positive and negative relationship between account payable and receivable and firms' value.

In general, account payable in foreign currencies reflect uncertainties of payment overseas and its tendency to reduce firm's value when the foreign currency becomes volatile and on depreciating trend. A higher exposure of account payable reflects that firms need to pay a higher amount of money from home currency perspectives, therefore it leads to a lower firm value. Hence, the study proposes that:-

H1a: There is a negative relationship between firm value and foreign currency payable exposures.

On the other hand, the value of account receivable in foreign currency exposures implies that the amount of home currency received will be bigger when home currency is under downward pressure. Exporters benefit from depreciation of home currency as the amount of money exchanged is more than the contract amount which is in foreign currency. Therefore, the study proposes that:-

H1b: There is a positive relationship between firm value and foreign currency receivable exposures.

Firm's Size and foreign currency exposure

Size's effect has significantly influence financial decisions in firms. Large firms generally have an effective risk management strategy, which is guided by a good team of risk management in order to minimize the business risk and maximize firm's value. They are also more efficient, experience in international business, and benefited from economies of scale than smaller firms. They may position better in coordinating their global foreign currencies assets and liabilities in order to reduce the net total foreign currencies exposure as well as having enough resources and knowledge in practicing hedging activities. In the UK, Zhou and Wang (2013) demonstrated a larger firm size is positively correlated with foreign exchange exposure implying a bigger firm involved in higher degree of foreign activities.

However, the effectiveness of large firms in practicing good risk management produce mix results. In this perspective, El-Masry and Abdel-Salam (2007) proved that exchange rate exposure significantly impacts on stock returns of the large firms as compared to smaller firms. Mozumder, Vita, Larkin and Kyaw (2015) showed that the relationship between foreign currency exposure and firm size is weak. In their finding, a smaller firm has more exposed to exchange rate movement compared to larger firms, especially during the financial crisis. Lee and Jang (2010) studied on U.S. lodging firms also show that domestic firms and smaller firms are more exposed to foreign currency risk comparable to multinational firms as multinationals are able to diversify away from the risk. Similarly, Aggarwal and Harper (2010), domestic firms also faced foreign currency exposure and the level of exposure is related inversely to firm size.

The finding is consistent with Lee and Jang (2010) on the study of the U.S. lodging firms' effect of internationalization on foreign currency exposure coefficient showed that domestic firms which are smaller in size are more exposed to foreign currency risk. Similarly, Aggarwal and Harper (2010) illustrated an inverse relationship between foreign currency exposure and firm size.

Following the big size effect that bigger firm will be more effective, and have the necessary risk management in their foreign currencies exposures in account payable and receivable, the study proposes that:-

H2a: There is a positive relationship between firm value and foreign currencies payable exposure in a large firm.

H2b: There is a positive relationship between firm value and foreign currencies receivable exposure in large firm

Hedging and Foreign Currency Exposures

The prime motive of using hedging by a company is to manage the risk that involved in their daily business operations. Basically, hedging provides insurance against risks arising out of the price fluctuations (Eiteman, Stonehill and Moffett, 2006). It is a common practice that multinational firms may achieve better position by engaging financial hedging to reduce the adverse effect of net total foreign exchange rate exposure on firm's performance in coordinating their global foreign currencies assets and liabilities (El-Masry and Abdel-Salam, 2007).

Some of the literature concluded that the use of hedging strategy will enhance firm value. In the studies of Hagelin and Pramborg (2004) for the firms in United States, Allayannis and Ofek (2001) for Swedish firms, Junior and Laham (2008) for the firms in Brazil, Zhou and Wang (2013) for the firms in UK showing evidence that hedging activities could reduce the foreign currency exposure and enhance firm value.

The use of hedging strategy in managing foreign currency exposure is sometimes debatable as it incurs costs when the movement of the foreign exchange rate is stable. The impact of hedging is especially significant during the financial crisis. Yip and Nguyen's (2012) indicated that during the financial crisis, the level of foreign currencies derivatives mitigates foreign currency exposure. Moreover, multinational firms will engage in financial hedges and operational hedges combined with long-term financing, marketing and investment strategies that significantly improve foreign currencies exposure. On the other hand, Belghitar, Clark and Mefteh (2013) showed that the use of foreign currency derivatives reduces overall foreign currency exposures. However, the hedging strategies are not significantly found to influence firm value.

The effectiveness of hedging of foreign currencies is observed through its impact on net cash flows. A good hedging prevents firms from paying more when the currency depreciates and receiving less when the currency appreciates. The result of Bartram (2008) showed that the managers use hedging to reduce its exposure of total net cash flow. Generally, the hedging is proposed as enhancing firm value, therefore, the study proposes that:-

H3a: There is a positive relationship between firm value and foreign currencies payable exposure with hedging activities.

H3b: There is a positive relationship between firm value and foreign currencies receivable with hedging activities.

Corporate Governance and foreign currency exposures

Corporate governance plays an important role in monitoring the overall activities of a firm. Failing which, it may cause ineffectiveness in the risk management program and could have a negative impact on the firm's value. In this perspective, Allayannis, Lel and Miller's (2012) study across 39 countries highlighted that corporate governance plays an important role in monitoring the firm on the use of foreign currency derivatives as it can be used for managers' self-interest, hedging and speculative purposes. The establishment of strong internal and external corporate governance could ensure effective hedging that reduces risks in firms and further enhances firm value.

Corporate governance mechanisms such as independent directors have been emphasized as a mechanism to reduce the agency cost in firms. This is emphasized in OECD's code of corporate governance and has been adapted in many countries. The role of independent directors is to help

monitoring firms' decision and reduce conflicts between agent and principles. It also helps to reduce information asymmetry between shareholders and managers. Since 2000 Malaysia Code of Corporate Governance has also emphasized the requirement of 1/3 independent directors as the member of the board. The role of 33% of independent directors is to exert monitoring in firms decision making.

Another mechanism that could mitigate the risk management in firms is due to the alignment of interest of the managers. Jensen and Mecking (1976) states that managers should be given equity interest so that their objective align with other shareholders' interest. In Malaysia, where controlling owners are generally large shareholders, their presence could help to reduce agency problem as proposed by Shleifer and Vishny (1997). Mauri and Pajuste (2005) reveal that large shareholder with the fair distribution of votes have a positive effect on firm value. Similarly, Isokov and Weisskopf (2014) concluded that family firms with moderate ownership reveal higher value.

With the combined effects of independent directors and large shareholders as governance effects, a good governance improves firm value irrespective of firms' currencies exposures. Hence, the study proposes that:-

H4a: - There is a positive relationship between firm value and foreign currencies payable exposure with governance effects.

H4b: - There is a positive relationship between firm value and foreign currencies receivables exposure with governance effects.

Methodology

Although Malaysia firms have exposure to various currencies such as EURO, JPY, THB, RMB and AUD, but the major currencies used are USD and SGD. The data for measure is collected from firms' annual report where firms reported each r foreign currencies exposures equivalent in Ringgit Malaysia for account payable and asset receivable. The firm value is measured as Tobin's Q defined as market capitalisation divided by total assets. The data is obtained from Osiris database. A high Tobin's Q implying investors perceive a higher market value of the firm as compared to book value.

$$TBQ_{i,t} = \alpha_i + \beta_1 USD_{pay\ i, t-1} + \beta_2 USD_{rec\ i, t-1} + \beta_3 SGD_{pay\ i, t-1} + \beta_4 SGD_{rec\ i, t-1} + \beta_5 control\ variable_{i,t-1} + \mathcal{E}_{i,t-1} \dots \dots \dots (1)$$

The independent variables are defined as follow. USD_{pay} = USD payables exposure, USD_{rec} = USD receivables exposure, SGD_{pay} = SGD payables exposure, SGD_{rec} = SGD receivables exposure, control variable = control variables. All the independent variables are applied at the lag of one year as Tobin's Q measure the value for firm's long term perspective. The foreign currencies exposures on account payable and receivable are obtained from annual report respectively. Control variables applied in this study include dummies for industries, trading and services sectors as comparison to consumer product sector. A year effect for 2010 is also applied as the year 2010 recorded the strongest Ringgit Malaysia currency for our study. The sample year covers from 2006 to 2013 which recorded the recovery of Ringgit Malaysia to around RM3.05 per USD in 2010.

In general, a large firm is frequently using hedging activities in order to minimize the foreign exchanged exposure and maximize the firm value. In order to examine the relationship between foreign currencies exposure and firm value in the consideration of firm size and hedging, the study controls the regression with the following conditions. Throughout all the regression, generalised weighted least squares are applied to reduce the problem of heteroscedasticity.

where $E(TBQ_{i,t} | SIZE) = f(SIZE)$, where firm size more than RM239 million (median of the sample in this study)

where $E(TBQ_{i,t} | HEDGING) = f(HEDGING)$, firms with hedging activities only.

where $E(TBQ_{i,t} | INDEPENDENT \text{ and } LARGE \text{ SHAREHOLDER}) = f(INDEPENDENT > 0.33) \text{ and } f(LARGE \text{ SHAREHOLDER} > 15\%)$

The sample of this study consists of 148 Malaysian listed firms on Bursa Malaysia. Bursa Malaysia consists of 916 listed firms'. The study scrutinized 500 listed firms' annual report under three sectors that are consumer products, industrial products and trading or services, and found that there are 148 listed firms annual reports have available information on the foreign currencies exposure in account receivable and account payable. As foreign currencies exposure tend to vary under different market conditions, the sample period focuses on the years before the declination of crude oil price in 2014.

Findings

Table 1 shows the number (percentage) of firms involved in foreign currencies exposure for receivables and payable exposure for eight years from 2006 to 2013. It can be observed that there was an increasing trend for both receivables and payables exposure for the past 8 years. The numbers are in the increasing trend due to more firms have reported their risk exposure in their annual report, and secondly, more firms are now involved in international trade and other activities. Moreover, there are not much difference between the number of firms report account receivable and account payable from 2006 to 2013.

Table 1: Firms with Foreign Currencies Exposure Reported in Account receivable and Payables

	2006	2007	2008	2009	2010	2011	2012	2013
Receivables	64	69	82	84	100	103	114	109
	43.2%	46.6%	55.4%	56.8%	67.6%	69.6%	77.0%	73.3%
Payables	58	62	77	87	90	101	111	106
	39.2%	41.9%	52.0%	58.8%	60.8%	68.2%	75.0%	71.6%

Source: From Sample of 148 Listed Firms

Note: % of firms involved in foreign currencies exposure can be found by dividing the total number of sample 148

Figure 1 illustrates exposures of firms in Malaysia towards different foreign currencies. The value of the USD exposures amounted to RM5, 000 million equivalents reported by 101 firms in 2013, indicates that majority of export firms using USD as their trade currency. This is followed by exposure in SGD (61 firms) of RM2, 160 million equivalent in 2013. From our 148 sample firms, 16 firms recorded the account receivable of RM197 million equivalents for Renminbi (RMB) transaction. In 2013, the value of exposures to Euro (25 firms) also declined to RM44 million equivalents from the peak in 2011. Other currencies that are less significant for Malaysia

exporters are Japanese Yen (JPY)- 8 firms reported and Australia Dollar (AUD)-12 firms reported.

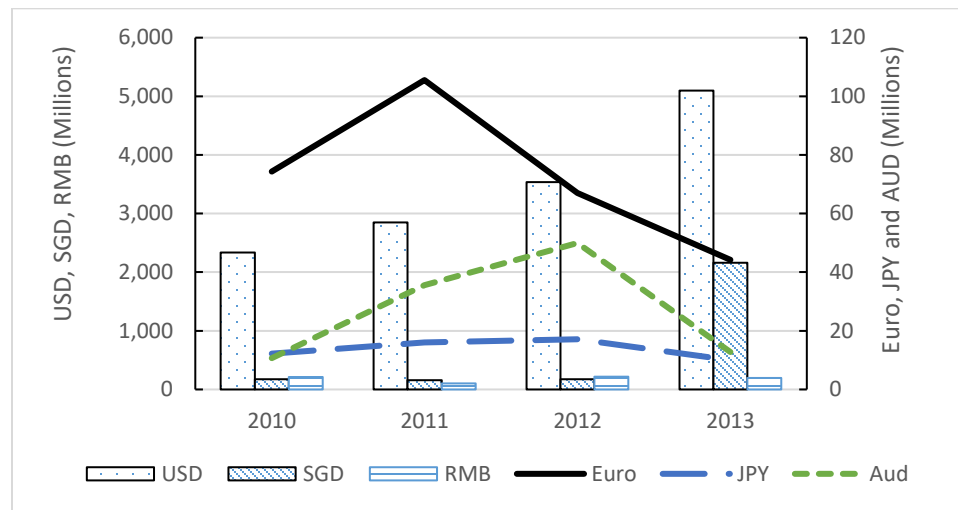


Figure 1: Total Account Receivable (currencies exposures) 2010-2013

Figure 2 illustrates Malaysia firms' account payable exposures. Malaysia import exposures in USD amounted to RM11,868 million by 81 firms in 2013. Forty-four Malaysia firms recorded RM293 million equivalents to SGD. From our sample, 15 firms reported their RMB exposures of RM65 million equivalents. The number of Malaysia firms expose to Euro and JPY was 38 and 20 for the value of RM145 million and RM306 million, respectively. As the numbers of observation for exposures in RMB, Euro, JPY and AUD are too few, this study focuses the currencies exposures in USD and SGD and its impact on firm value.

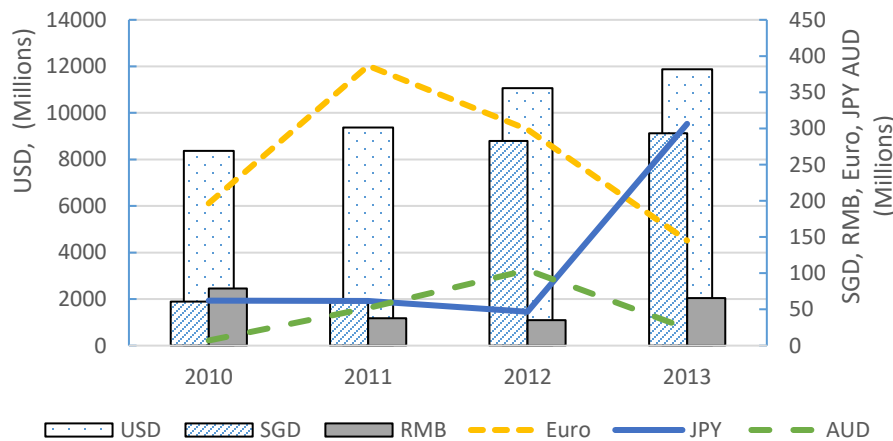


Figure 2: Total Account Payable (currencies exposures) 2010-2013

41 firms or 28% Malaysian listed nonfinancial firms have protected their currency risk via hedging from year 2006 to 2013 (Receivables and Payables). In other words, more than half of the firms were not practicing hedging activities to reduce the foreign currency risk. From the above table, it can be observed that Malaysian listed nonfinancial firms are practicing hedging activities mostly on the receivables, which may due to a higher amount of export value denominated in foreign currencies.

Table 2: Number of Firms Involved in Hedging Activities

	2006	2007	2008	2009	2010	2011	2012	2013
Receivables	25	31	35	39	42	36	38	36
	17%	21%	24%	26%	28%	24%	26%	24%
Payables	2	3	4	6	2	9	11	9
	1%	2%	3%	7%	1%	6%	7%	6%

Table 3 presents the descriptive statistics of the variables applied for the regression analysis. We applied total assets of the firms to normalize currencies exposure for receivables and payable exposures. The mean of firm value (Tobin's Q) is 0.620 implying the firm value for Malaysia listed non-financing firms are averagely low in value. The mean for foreign currencies exposure for USD receivables and USD payables are 0.035¹ and 0.032² which is higher than SGD receivables 0.009 and SGD payables 0.005 respectively. USD exposure is higher than SGD exposure implies that Malaysian firms mostly use USD to conduct business activities with their international counterparts as USD is a worldwide acceptable currency. On the other hand, SGD is mainly transacted with Malaysian cross-border partner Singapore for trading purposes. Lastly, the median of assets value is RM239 million and we have classified the size of firms as large if the firm's assets value is more than RM239 million.

Table 3: Descriptive Statistics

EXPOSURE	MEAN	MEDIAN	MAXIMUM	MINIMUM	STANDARD DEVIATION
Tobin Q	0.620	0.510	3.150	0.080	0.479
USD Payables	0.032	0.011	0.589	-0.004	0.064
USD Receivables	0.035	0.020	0.149	0.000	0.036
SGD Payables	0.005	0.001	0.074	0.000	0.012
SGD Receivables	0.009	0.003	0.066	0.000	0.014
Assets	1,260,816	239,374	35,439,900	34,099	4,240,609

Note 1: All the foreign currencies exposure values have been normalized by Total Assets.

Note 2: All Asset value are in RM'000.

As shown in Table 4, the correlation coefficient is not significantly high as none of the value is more than 0.7. The correlation coefficient for both USD receivables and payables with Tobin Q is -0.227 and -0.112, respectively. The negative sign implying a higher USD exposure likely lead to negative firm value. Besides, the correlation coefficient for SGD receivables and payables exposure with Tobin Q is 0.117 and 0.097 which are both in positive sign indicates the exposure to SGD is likely to increase firm value. On the other hand, the correlation coefficient between SGD receivables and SGD payables exposure is 0.669, indicating that Malaysia and Singapore are an active trading partner in import and export activities.

Moreover, the correlation coefficient between assets and Tobin Q is 0.368, implying that the value of assets increase, there is also an increase in the value of the firm. Hedging has a negative and low correlation with foreign currencies exposure indicating that with the implementation of hedging activities, it will reduce the level of firm's exposure. However, hedging shows a

¹ Mean for USD receivables 0.035 represent 3.5% of the total assets are receivables exposure.

² Mean of USD payables 0.032 represent 3.2% of the total assets are payables exposure.

negative correlation with Tobin's Q indicates that the cost of hedging may not be sufficient to offset the benefits for the firm.

Table 4 Correlation Coefficients

	TOBINQ	USD REC	USD PAY	SGD REC	SGD PAY	ASSETS	HEDGING
TOBIN Q	1.000						
USD RECEIVABLES	-0.227 (-3.226)***	1.000					
USD PAYABLES	-0.112 (-1.555)	0.498 (7.890)***	1.000				
SGD RECEIVABLES	0.117 (1.618)	-0.177 (-2.514)**	-0.100 (-1.410)	1.000			
SGD PAYABLES	0.097 (1.336)	-0.112 (-1.584)	0.089 (1.208)	0.669 (12.402)***	1.000		
ASSETS	0.368 (5.452)***	-0.068 (-0.948)	0.263 (3.746)***	-0.123 (-1.725)*	-0.049 (-0.684)	1.000	
HEDGING	-0.031 (-0.425)	-0.059 (-0.850)	-0.142 (-2.007)*	-0.189 (-2.679)**	-0.175 (-2.470)**	-0.029 (-0.405)	1.000

The regression results shown in table 5 assess the influences of foreign currencies exposures on firm value. The column (a) and (b) assesses the exposures in USD and SGD, respectively. In contrast to our prediction, account payable and receivable show opposite signs as predicted to hypotheses 1a and 1b. The finding for SGD exposures is interesting as both SGD account payable and receivable show a positive impact on firm value. In column (c), we regress on firms with both USD and SGD, and in column (d), the regression includes dummies for industries, and year effect 2010. The inclusion of dummies for industries sectors- industry, trading and services sectors, indicate that both sectors have relatively lower firm value than the consumer sector.

On the other hand, the time effect Year 2010 shows relatively higher firm value than other years. This implies that there is a recovery of firm performance immediately after the financial crisis 2008-2009. The findings are consistent with column (c), and we, therefore, find support for hypothesis 1a for USD where exposure for account payable will lead to lower firm value.

Similarly, we find a significant result for SGD account receivable exposures where it leads to a higher firm value for hypothesis 1b. The inconsistency of hypotheses and findings illustrate that some firms in our study do not possess effective foreign currencies' risk management. In order to address this, we include firm size effect where a bigger firm is expected to have better foreign currency management and hedging strategy in our regression in table 6. Table 6 presents the models where large size firms with total assets more than RM239 million (column e and f), the median of the sample's total assets in this study are regressed. Eighty-seven firms meet the criteria of large firms in our regression.

Table 5: Currencies Exposures and Firm Value

Dependent - Tobin's Q	(a)	(b)	(c)	(d)
C	0.6789 (48.2715)***	0.5877 (54.9476)***	0.6335 (70.3957)***	-0.6957 (-4.7195)***
USD	0.0003		-0.0003	-0.0007
PAYABLES (i, t-1)	(1.8644)*		(-7.7612)***	(-3.0136)***
USD	-0.0014		-0.0013	-0.0010
RECEIVABLES (i, t-1)	(-11.4255)***		(-4.7495)***	(-3.0715)***
SGD		0.0013	0.0000	0.0036
PAYABLES (i, t-1)		(1.2705)	(0.0639)	(1.8468)*
SGD		0.0026	0.0032	0.0038
RECEIVABLES (i, t-1)		(2.2076)**	(3.3119)***	(2.6263)***
INDUSTRIES				-0.0538 (-1.3129)
TRADING				-0.1198 (-2.4946)**
YEAR 2010				0.1028 (1.9601)**
R²	0.2262	0.1802	0.9347	0.7950
F-Statistic	65.7834	20.0023	576.147	76.1001

Note 1: Figures in the parentheses denote values of the t-statistics, *, ** and *** indicates statistical significance at the 10%, 5% and 1% respectively.

Note 2: All the foreign currencies exposure value have been normalized by Total Assets.

Note 3: Generalized weighted least squared are applied throughout all models.

Table 6: Currencies Exposures and Firm Value (Large and Hedging firms)

Dependent Independent	(e) Large Firm	(f) Large Firm	(g) Hedging	(h) Hedging
C	0.6686 (50.7161)***	-2.4512 (-7.8390)***	0.4337 (20.0790)***	-0.5349 (1.2617)
USD	-0.0006	-0.0015	-0.0024	-0.0006
PAYABLES (i, t-1)	(-3.5498)***	(-4.6264)***	(-1.6815)*	(-0.4289)
USD	-0.0008	0.0006	0.0008	-0.0009
RECEIVABLES (i, t-1)	(-2.0846)**	(1.1875)	(1.0265)	(-0.9401)
SGD	0.0069	0.0003	0.0068	0.0137
PAYABLES (i, t-1)	(1.2943)	(0.0505)	(0.8999)	(1.4093)
SGD	-0.0072	0.0062	0.0067	0.0032
RECEIVABLES (i, t-1)	(-2.0190)**	(1.9575)**	(1.4442)	(0.6355)
INDUSTRIES		-0.0626 (-2.9956)***		0.09501 (1.4223)
TRADING		-0.1602 (-2.8652)***		-0.1336 (-2.8031)***
YEAR 2010		0.0133 (0.1578)		-0.0806 (-0.9526)
R²	0.3651	0.5650	0.4692	0.8227
F-Statistic	11.7886	12.6643	8.1751	19.1352

Note 1: Figures in the parentheses denote values of the t-statistics, *, ** and *** indicates statistical significance at the 10%, 5% and 1% respectively.

Note 2: All the foreign currencies exposure value have been normalized by Total Assets.

Note 3: Generalized weighted least squared are applied throughout all models

In table 6, model (e), in large firms, the exposures of USD are found to be reducing firms value significantly via account payable and receivables. Similarly, exposure of SGD receivables does not enhance firm value, which illustrates high uncertainty in the foreign currency market. In model (f), control variables are included, we do not find support for hypothesis 2a for USD and SGD account payable exposures, as USD exposures show a negative relationship, while SGD exposures are insignificant. In fact, in a larger firm, USD payable shows a 0.15% further decline in firm value as compared to model (d) in table 5. Nonetheless, the regression shows a significant support for SGD account receivable exposures for the large firms, as a larger firm further enhance firm value. Hence, the hypothesis 2b for SGD is supported.

In model (g) and (h), we select only firms with the hedging strategy. A total of 42 firms are in the sample. None of the exposures variables have shown significant value for the study. We find no support that hedging could help firms in managing currency exposures and enhance firms' value. The study finds no support for hypothesis 3a and 3b.

Thus far, the study has not found the consistent support of the hypotheses for the currencies exposure and firm value. A larger size firm does not seem to be effective in risk management and the benefits of hedging are also not observed. We examine the last option based on the governance mechanisms- firms with independent directors which is more than 33% of total board member and large shareholders controlling more than 15%.

Table 7: Currencies Exposures and Firm Value (Independent Directors and large shareholders)

Dependent Independent	(i)	(j)
C	0.6377 (15.2689)***	-0.7919 (-2.6350)***
USD	0.0006	0.0019
PAYABLES (i, t-1)	(1.0254)	(2.4123)**
USD	-0.0022	-0.0027
RECEIVABLES (i, t-1)	(-3.8518)***	(-3.5272)***
SGD	0.0007	0.0024
PAYABLES (i, t-1)	(0.3582)	(0.9618)
SGD	-0.0025	0.0068
RECEIVABLES (i, t-1)	(1.3558)	(3.2194)***
INDUSTRIES		0.0849 (1.1173)
TRADING		-0.1237 (-1.7948)*
YEAR 2010		0.1374 (2.0945)
R²	0.3085	0.4937
F-Statistic	10.2606	10.7273

Note 1: Figures in the parentheses denote values of the t-statistics, *, ** and *** indicates statistical significance at the 10%, 5% and 1% respectively.

Note 2: All the foreign currencies exposure value have been normalized by Total Assets.

Note 3: Generalized weighted least squared are applied throughout all models

Under the condition of 33% of independent directors must be on the board and large shareholder who control more than 15%, the sample produces 97 firms' observation. The regression result shows USD payables exposure with the coefficient value of 0.0019 is positively correlated to firm value at 5% significant level. In contrast, USD receivable exposure is negatively correlated

to firm value with the coefficient value of -0.0027 at 1% significant level whereas SGD receivables exposure with a slightly relatively higher positive coefficient value of 0.0068 at 1% significant level. This implies that with 1% increase in SGD receivables exposure, there will be 0.68% increase in firm value. SGD payables exposure is however, positively not significant. Therefore, we accept Hypotheses H4a for USD payables and Hypotheses H4b for SGD receivables.

Comparing column (j) and (d) in consideration of governance effects (Independent directors and large shareholders) on the relation of foreign currencies exposure and firm value show that USD and SGD payables and receivables exposure are affected by internal factors. We observed that the influence of these internal factors have changed the regression model of USD payables exposure from negatively significant to positively significant, whereas SGD receivables exposure has a greater degree of positive impact. This evidenced that with effective corporate governance effects, it can help to improve the impacts of currency exposures towards a better firm value.

Conclusion

The study shows that Malaysia firms are especially exposed to USD and SGD. Although the acceptance of hypotheses and findings are not consistent, the exposure of USD regardless of account payable or receivables significantly reduce firm value, while account receivable and payable of SGD improve firm value. This indicates that Malaysia firms do not manage their exposures on USD well as compared to SGD. The reason could due to USD which is more volatile in the international market during the sample period. However, firms with high exposure to the account receivable in USD for the export, and lead to a negative value clearly indicate that Malaysia firms generally do not manage to reduce risks and costs in their currency exposure account.

Hedging strategies appear to be weak when used to countervail currencies exposures. It is found to be insignificant in explaining currencies exposures and firm value. However, it could also suggest that the benefits of hedging may not overwhelm the cost of holding hedging contract, which is expensive. Furthermore, firms may also not report their hedging in their annual report for strategic reasons.

Moreover, a larger firm which normally has higher currency exposures in the country are not effective in their management of foreign currency exposures, as only exposures of SGD receivables is able to enhance firm value. SGD account payable is also not significant. The findings suggest that large firms are not well equipped to minimise risks when firms have high exposures in foreign currency although large firms have higher resources.

The presence of large shareholders and independent directors, however, improve importers USD exposures in the payable account. USD receivables exposures are however significantly negative indicating prudent risk management is needed on exporters. The findings suggest that governance could play a significant role when hedging strategy is not effective in the study. The presence of large shareholders and independent directors could assert monitoring effect on firm financial decision-making.

Acknowledgement

The authors gratefully acknowledge the short-term grant from Universiti Sains Malaysia 304/PPAMC/6313056

References

- Abuzayed, B. (2012). Working capital management and firms' performance in Emerging Markets: The case of Jordan. *International Journal of Managerial Finance*, 8(2), 155-179.
- Ademola, O. J., and Kemisola, O. (2014). The effect of working capital management on market value of quoted food and beverages manufacturing firms in Nigeria. *International Journal of Business and Social Science*, 5 (8), 168-177.
- Aggarwal, R., and Harper, J. T. (2010). Foreign exchange exposure of "domestic" corporations. *Journal of International Money and Finance*, pp 1619-1636.
- Akay, G. and Cifter, A. (2014). Exchange rate exposure at the firm and industry levels: Evidence from Turkey. *Economic Modelling*, 43, 426-434.
- Allayannis, G., and Ofek, E. (2001). Exchange rate exposure, hedging and the use of foreign currency derivatives. *Journal of International Money and Finance*, 20, 273-296.
- Bartram, S. M. (2008). What lies beneath: Foreign exchange rate exposure, hedging and cash flows. *Journal of Banking and Finance*, 32(8), 1508-1521.
- Belghitar, Y., Clark, E., and Mefteh, S. (2013). Foreign currency derivative use and shareholder value. *International Review of Financial Analysis*, 29, 283-293.
- Eiteman, D. K., Stonehill, A. I., and Moffett, M. H. (2006). *Multinational Business Finance*. (11th ed.), Chicago: Addison-Wesley.
- El-Masry, A., and Abdel-Salam, O. (2007). Exchange rate exposure: do size and foreign operations matter? *Managerial Finance*, 33(9), 741-765.
- Grambovas, C. A., and McLeay, S. (2006). Corporate value, corporate earnings and exchange rates: An analysis of the Eurozone. *The Irish Accounting Review*, 13, 65-83.
- Hagelin, N., and Pramborg, B. (2004). Hedging foreign exchange exposure: risk reduction from transaction and translation hedging. *Journal of International Financial Management and Accounting*, 15 (1), 1-20.
- Isakov, D., and Weisskopf, J.-P. (2014). Are founding families special blockholders? An investigation of controlling shareholder influence on firms performance. *Journal of Banking and Finance*, 41, 1-16.
- Jensen, M. C., and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Junior, J. L., and Laham, J. (2008). The impact of hedging on firm value: Evidence from Brazil. *Journal of International Finance and Economics*, 8(1), 76-93
- Lee, S. K., and Jang, S. (. (2010). Internationalization and exposure to foreign currency risk: An examination of lodging firms. *International Journal of Hospitality Management*, 29(4) 701-710.
- Maury, B., and Pajuste, A. (2005). Multiple large shareholders and firm value. *Journal of Banking and Finance*, 29, 1813-1834.
- Muscettola, M. (2014). Cash conversion cycle and firm's profitability: An empirical analysis on a sample of 4,226 manufacturing SMEs of Italy. *International Journal of Business and Management*, 9 (5), 25-35
- Mozumder, N., Vita, G. D., Larkin, C., and Kyaw, K. S. (2015). Exchange rate movements and firm value. *Journal of Economic Studies*, 42 (4), 561-577.
- Nydahl, S. (1999). Exchange rate exposure, foreign involvement and currency hedging of firms - Some Swedish Evidence. Sveriges Riksbank Working Paper Series, No 81.

- Shleifer, A., and Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783.
- Vural, G., Sokmen, A. G., and Cetenak, E. H. (2012). Effects of working capital management on firm's performance: Evidence from Turkey. *International Journal of Economics and Financial Issues*, 2 (4), 488-495.
- Yip, W. H., and Nguyen, H. (2012). Exchange rate exposure and the use of foreign currency derivatives in the Australian resources sector. *Journal of Multinational Financial Management*, 151-167.
- Zhou, V. Y., and Wang, P. (2013). Managing foreign exchange risk with derivatives in UK non-financial firms. *International Review of Financial Analysis*, 29, 294-302.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.