Factors for Using Derivatives: Evidence From Malaysian Non-Financial Companies

Noryati Ahmad[1*]   Balkis Haris[2]

1.   Arshad Ayub Graduate Business School, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

2.   Department of Economics and Finance, Faculty of Business Management, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia.

* E-mail of the corresponding author: noryatia@salam.uitm.edu.my

Abstract

This study attempts to uncover factors that could influence Malaysian non-financial companies to use derivatives to manage their risk. In addition, it also tries to identify the hedging theory that is relevant to the Malaysian market. Univariate statistics analysis indicates significance differences between derivative users and non-users of Malaysian non-financial companies. The findings from binary logistic regression reveal that only current ratios (LIQ2) and market-to-book value (MTBV) are the main factors influencing these companies to use derivatives. Additionally, this study suggests that the underinvestment cost hypothesis rather than the financial distress hypothesis that are commonly found in US and Australia companies.

Keywords: derivatives, underinvestment cost hypothesis, financial distress hypothesis, market-to-book value

1. Introduction

Risk management practices from either financial or non-financial companies have attracted the attention of many researchers and policy makers. Series of economic and financial crisis that have occurred recently have prompted financial and non-financial companies to relook at their risk management practices. It is reported that derivatives are being widely used by firms globally :53.1% in New Zealand (Berkman, Bradbury and Magan, 1997), 61% of Fortune 500 S&P 500 firms in the U.S. (Howton and Perfect, 1998), 60% in the Netherlands (Bodnar, de Jong and Macrae, 2003), 59% in Sweden (Alkebäck, Hagelin, and Pramborg, 2006), 67% in U.K. (El-Masry, 2006), 78% in combined dataset of Hong Kong and Singapore (Sheedy, 2006) and 61.6% in a sample from four Nordic countries consisting of Denmark, Finland, Iceland, and Sweden (Brunzell, Hansson and Liljeblom, 2009) since it is known to be an effective and inexpensive risk management tool. In the Asia-Pacific region, the development of derivatives market has found to be growing rapidly. Survey by Futures Industry Association in 2010 revealed that Asia-Pacific has overtaken North America as the world's biggest derivatives market, accounting for 38 percent of global total compared to 33 percent for the latter (Burgos, 2010). The study also documented a surge in the trading volume of derivatives contracts in the Asia-Pacific region amounting to 4.2 billion contracts in the first half of 2010 compared to the same period previous year. This growth was driven by the upward demand for hedging among Asian corporations especially from Korea, India and China.

A survey conducted by Ameer, Mat Isa and Abdullah (2010) revealed that the usage of derivatives among Malaysian companies are not as extensively as those in the developed countries due to their lack of exposures on derivatives as well as derivatives are considered to be costly and complex products.

Both primary and secondary data collection have been used to investigate companies' risk management practices and factors determining their risk management practices. These studies focus mainly on developed countries such as US, UK and Australia as they are noted for having a well-developed derivative markets. Studies on the risk management practices in the developing countries are still relatively few. In addition, findings on factors determining the use of derivatives on the companies of these countries seem to differ particularly with regards to size and leverage. Those findings mainly support the financial distress cost hypothesis. This phenomenon warrants the need to discover whether those determinants factors and theoretical rationale are similar in the developing countries. Specifically, we want to explore why derivatives are used by Malaysian non-financial companies and more importantly what are the driving forces for the use of derivatives among these companies. Are they similar to those found in the developed countries? What are the theoretical rationales of Malaysian non-financial companies in using derivative to hedge? Our approach differs from those of Ameer (2010) by taking a broader perspective and does not isolate the companies

based on the types of derivatives used. We also employ binary logistic model as opposed to the author's multivariate regression model and exclude the financial sector from our sample since derivative usage is a necessity in their business line.

2. Theoretical Rationale of Using Derivatives

Justification for company to resort to hedging can be explained either from the perspective of company's intention to maximize its value or to maximize management utility. (Heaney and Winata, 2005). Derivative can maximize firm value due to its impact on after tax cash flows, agency costs, financial distress costs and underinvestment costs (Smith and Stulz, 1985; Bessembinder, 1991 and Froot, Scharfstein and Stein, 1993). Smith and Stulz (1985) find that company's before tax cash flow volatility can be reduced when company hedge which subsequently reduces its tax liability and increases the value of its after tax cash flow. Agency cost arises when managers tend to put their own interests before the shareholders' interests. A manager that owns a substantial amount of company shares will be motivated to use derivative to mitigate firm risk since their wealth is linked to the company's market value. Hedging is said to reduce agency costs which allows firms to have higher debt to equity ratio (Modigilani and Miller, 1963; Stulz, 1990). Higher leverage forces managers to venture into investments that will increase firm value and hence cover the cost of capital of the firm. The probability of company heading for financial distress can be avoided through hedging since hedging can protect the variability of the company future stream of cash flows and provides sufficient internal funds for unexpected fluctuations in investment spending or external financing (Froot, Scharfstein and Stein, 1993; Heaney and Winata ,2005 and Nguyen and Faff, 2002).

Company with high degree of managerial ownership will most likely to hedge for the purpose of protecting the management's wealth within the firm (Aretz, Bartram and Dufey, 2007 and Smith and Stulz, 1985). Thus the manager's decision to use derivative will depend on whether hedging will increase earnings or market value. If the hedging decision increases company's earning which will enhance management's utility, then firm is more likely to hedge more. This explanation is based on the assumption that company is motivated to use derivates in order to maximize management utility. Table 1 provides the proxy used and predicted signs related to this study as well as summarizes the theoretical rationale for using derivatives to hedge.

Table 1: Theoretical Rationale of Using Derivatives, Its Proxies, Formula And Predicted Signs Related To The Independent Variables.

Theoretical Rationale		Proxy	Formula	Predicted Sign
Maximizing Firm Value	Financial Distress Cost Hypothesis	Leverage (LEV)	Total Debt/Market Capitalization	+
		Firm Size (SZE)	Market Value of Equity +Total Debt	+
	Underinvestment Costs Hypothesis	Market-to-book Value (MTBV)	Market Capitalization/Book Value	+
		Liquidity Ratio (LQ1)	Cash + Cash Equivalents/Firm Size	-
		Current Ratio (LQ2)	Current Assets/Current Liabilities	-
Maximizing firm utility	Agency Costs /Managerial Risk Aversion	Managerial Ownership (MO)	Directors or Officers Shareholdings/Total No. of Ordinary Shares Outstanding	+
	Agency Cost	Market-to-book Value (MTBV)	Market Capitalization/Book Value	+

1. Methodology and Hypothesis Development

The following independent variables are included in our model to examine the determinant factors of using derivatives among Malaysian non-financial companies: leverage (LEV), firm size (SIZE), liquidity ratio (LQ1), current ratio (LQ2), ratio of managerial shares over total shares outstanding (MO) and market-to-book value (MBTV). Our selection of these explanatory variables is based on theoretical implication and empirical evidence of previous literatures.

For the purpose of this study, 200 public listed non financial companies were identified covering a time period of 4 years (2006 – 2009). Most of the explanatory variables data was extracted from Thomson World scope, while data on managerial ownership was taken from the annual report of sample studied. Only 110 out of 200 companies are used due to unavailability of variables identified in the study.

1.1 Leverage

It is found that the company likelihood to use derivate is positively related with leverage (Dolde ,1995; Graham and Rogers,1999; Guay 1999; Hardwick and Adams,1999). It is argued that hedging will be able to reduce the chance of firm in a financial distress. Total debt to total assets ratio is used as the proxy for a firm's leverage.

1.2 Liquidity

Company that has higher levels of liquidity will try as far as possible not to source for costly external finanicng. High liquidity leads to lower exposures and thus resulted in firms have less incentive to hedge. Theoretically it is predicted that the company's liquidity is inversely related with probability of the company to use derivatives to manage its financial risks. The finding of previous study suggests that the more liquid the firm, the less likely it will use derivatives to manage risks (Nguyen and Faff, 2002). Similarly Heaney and Winata (2005) report that derivative users are those companies that have lower liquidity ratio than those companies that choose not to use derivatives. We use two proxies for measuring liquidity: ratio of cash and cash equivalents over firm size and current ratio which is calculated as current assets divided by current liabilities.

1.3 Size

It is argued that the large companies are likely to use derivatives to hedge risk exposure rather than small companies because they have the necessary resources and knowledge to do so (Mseddi and Fathi, 2010; Heaney and Winata, 2005 and Nguyen and Faff, 2002). However there has been conflicting results on the relationship between size and the use of derivatives. Findings from Ang, Chua and McConnell (1982) disclosed that small companies are more likely to be in financial distress and therefore will opt to hedge to protect them from going bankrupt. We used Nguyen and Faff,'s (2002) proxy for size which is calculated as natural logarithm of market value of equity and total debt.

1.4 Managerial Ownership

Past literatures have supported the notion that when managers held a large portion of company shares then they would have an incentive to use derivative in an attempt to protect their invested wealth (Ameer, 2010, Adam, 2002, Adkins, Cater and Simpson, 2007). Operationally, we use the ratio of number of shares owned by managers to the total number of ordinary share outstanding to represent managerial ownership. Accordingly we predict a positive relationship between managerial ownership and the usage of derivative.

1.5 Market-to-book value

Companies tend to be exposed if they have higher level of growth options (Nguyen and Faff, 2010; Froot et al., 1993) since they need to source for external funds to finance such investments. Resorting to external financing is usually very costly for these companies. Hence, there is a possibility for the companies not to undertake these projects (underinvestment costs) which as a result will not increase the firm's value and not maximize shareholders' wealth. To reduce dependence on costly external financing that could eventually lead to underinvestment; company could use derivatives to counteract this situation. Previous literatures used market-to-book value (MTBV) ratio to proxy for firms' investment opportunity (Nguyen & Faff, 2002; Heaney & Winata, 2002; Nguyen & Faff, 2010; Ameer, 2010). The market-to-book value is calculated as a ratio of market capitalization over book value. We expect a positive relationship between book value and the incentive to hedge.

In their studies, Ameer (2010) and Greczy,Minton and Schran (1997) discovered that different industry sectors have an impact on the decision to use derivative. To capture this effect, a dummy variable equals to 1 for seven industry sectors (plantation, technology, construction, trading and services, property and consumer products respectively) and 0 otherwise are used in our model to examine the industry effects.

Based on the above discussion of the explanatory variables studied, the following hypotheses statements are developed:

$H_{a1:}$ *The higher the debt to total assets ratio (LEV), the greater the likelihood that the firm will use derivatives*

$H_{a2:}$ *The larger the firm size (SIZE), the greater the likelihood that the firm will use derivatives*

$H_{a3:}$ *The higher the liquidity ratio (LQ1), the lower likelihood that the firm will use derivatives*

$H_{a4:}$ *The higher the current ratio (LQ2), the lower likelihood that the firm will use derivatives*

$H_{a5:}$ *The higher the market to book value (MTBV), the greater likelihood that the firm will use derivatives*

$H_{a6:}$ *The higher the managers shares ownership (MO) to total shares outstanding, the greater likelihood that the firm will use derivatives.*

Binary logistic regression is employed to examine our hypotheses (Nguyen and Faff, 2002; Heany and Winata, 2005). To identify factors that motivate firms to use derivative, we assigned a variable of 1 for those firms that are classified as "derivative user" (DU) and a variable of 0 when they are "non-derivative user" (NDU).The following binary logistic regression model is used to examine the hypotheses statements developed and is expressed as follows:

$$P = \frac{1}{e^{(-(\beta_0 + \beta_1 LEV + \beta_2 SIZE + \beta_3 LQ1 + \beta_4 LQ2 + \beta_5 MTBV + \beta_6 MO + \beta_7 DUM))}} \qquad (1)$$

Where coefficients $\beta_1 LEV, \beta_2 SIZE, \beta_3 LQ1, \beta_4 LQ2 \beta_5 MTBV$ and $\beta_6 MO$ represents the independent variables for leverage, size, liquidity ratio, current ratio, market-to-book value and managerial ownership while β_0 is the constant term. P is the probability in the range of 0 to 1. $\beta_7 DUM$ is the coefficient to capture the industry effect.

2. Empirical Findings

As displayed in table 2, the p-values for size, leverage, market-to-book value and liquidity are statistically significant but insignificant for managerial ownership. This implies that the mean values of those variables are statistically different between user and non-user of derivatives. The mean values of the sample of derivative users tend to be larger than non user, in terms of size (SIZE) and market-to-book value (MTBV). Derivative users are under more financial constraints as shown by lower level of liquidity (LQ1) and lower current ratios (LQ2).

Table 2: Descriptive Statistics for Derivative Users and Non-Derivatives Users

		SIZE	LEV	MTBV	LQ1	LQ2	MO
Derivative Users (n=192)	Mean	4.5E+09	1.0262	2.8059	0.2519	2.1769	0.364
	Standard Deviation	6.29E+08	0.9541	5.5665	0.4822	1.7862	0.541
Non-Derivative Users (n=248)	Mean	4.46E+08	1.3841	1.2339	0.3413	4.3629	1.502
	Standard Deviation	79308998	1.6786	1.4471	0.4593	8.6368	12.34
Ho: Derivative Users = Non-Users	t-statistics	-5.39386	2.4167	-4.2660	1.9807	3.4495	1.277
	p-value	1.16E-07***	0.01628***	2.44E-05***	0.0482**	0.0006***	0.202

*** and ** denote statistically significant at 1% and 5% level

Table 3 reports the correlation coefficients of the explanatory variables studied. No serious correlations are detected.

Table 3: Correlation Coefficients of Independent Variables

	LEV	MTBV	LQ1	LQ2	MO	SIZE
LEV	1.000					
MTBV	-0.245**	1.000				
LQ1	0.356**	-0.175**	1.000			
LQ2	0.031	-0.072	0.104*	1.000		
MD1	0.063	-0.091	0.054	0.031	1.000	
SIZE	-0.369**	0.369**	-0.203**	-0.069	-0.082	1.000

*** and ** denote statistically significant at 1% and 5% level respectively

Panel A of table 4 below displays the estimated results of the logistic regression that exclude the industry effects. Our findings indicate that only the coefficient for current ratio (LQ2), market-to-book value (MTBV) and managerial ownership (MO) are statistically significant and in line with the predicted sign. The significant negative result on current ratio shows that the firm has more incentive to use derivatives if its liquidity position is low. The market-to-book value estimated coefficient is also found to be significant and positive. This implies that the higher the level of growth options for the firm (proxy by market-to-book value) will lead to higher possibility for firm to use derivatives in order to avoid from foregoing good project investments that would enhance the firm's value. Both these results appear to support the underinvestment costs hypothesis. Our findings concur with those of Ameer (2010), Nance, Smith and Smithson (1993) and Greczy et al. (1997) but contradict those of Nguyen and Faff (2002) and Mian (1996). On the other hand result on liquidity using another proxy, that is, cash and cash equivalents divided by firm size (LQ1) is not statistically significant. Plausible explanation is that this variable seems not to be an appropriate proxy for liquidity.

Table 4: Logistic Regression Analysis of the Likelihood of Using Derivative

Panel A: Logistic Regression Estimates				
Independent Variables	Coefficient	p-value	Exp(β)	Predicted Sign
SIZE	-0.0154	0.7790	0.98	mixed
LQ1	-0.0982	0.7126	0.91	-ve
LQ2	**-0.1122**	**0.0002*****	**0.89**	**-ve**
LEV	-0.0821	0.3827	0.92	+
MO	**-0.3051**	**0.0173****	**0.74**	+
MTBV	**0.1523**	**0.0221****	**1.16**	+
C	0.3934	0.7259		
Panel B: Summary Statistics for Logistic Regression				
LR Statistics	49.1621	6.92E-09		
MacFadden R-Squared	0.08155			
H-L Statistics	12.0426	0.1493		
Prediction Evaluation (success cutoff = 0.5)	NDU=0	DU=1	Total	
% Correct Prediction	79.03	59.38	70.45	
% Incorrect Prediction	20.97	40.63	29.55	

*** and ** denote statistically significant at 1% and 5% level

Although the estimated coefficient for managerial ownership (MO) is statistically significant, its direction is however not in tandem with the theoretical predictions. The results seem to imply that if the managers possess high amount of shares, they are less likely to hedge. Similar findings are reported in Nguyen and Faff (2002) and Haushalter (2000). Hence based on these results we can conclude that firm size (SIZE) and, leverage (LEV) appear not to be the driving forces behind the probability of firm using derivatives. Our findings appear not to support the financial distress hypothesis and agency cost hypothesis but rather the underinvestment cost hypothesis.

Exp(β) column explains the marginal effect of the size, leverage, market-to-book value, liquidity, current ratio and managerial ownership on the probability of derivatives usage. The results suggest that market-to-book value (MTBV) has the greatest impact on the firm using derivatives, that is, for every 1% increases in MTBV the likelihood for the companies to use derivatives increases by 1.16%. Current ratio and managerial share ownership also have an influence on the companies' decision to use derivative to hedge. In the case of current ratio, a 1% increase in the ratio will reduce the likelihood of companies to use derivative decreases by about 0.89%.

Table 5:Logistic Regression Analysis of the Likelihood of Using Derivative
with Industry Effect

Panel A: Logistic Regression Estimates

	Coefficient	p-value	Exp(β)	Expected Sign
SIZE	-0.0731	0.2279	0.93	mixed
LQ1	-0.1341	0.6902	0.93	-ve
LQ2	**-0.1274**	**0.0002*****	**0.87**	-ve
LEV	-0.1425	0.2034	0.87	+
MO	-0.1598	0.1038	0.85	+
MTBV	**0.1160**	**0.0455****	**1.12**	+
Industrial	-0.3731	0.5531	0.18	Na
Plantation	**-1.3901**	**0.0282****	0.25	Na
Properties	-0.7310	0.2533	0.48	Na
Technology	-0.4984	0.4581	0.61	Na
Trading & Services	0.9227	0.1824	2.52	Na
Consumer	-0.8703	0.1849	0.217	Na
Construction	-0.8742	0.1566	0.198	Na
C	2.2704	0.0912	0.106	

Panel B: Summary Statistics for Logistic Regression

LR Statistics	88.6839	2.49E-13
MacFadden R-Squared	0.14711	
H-L Statistics	12.8654	0.1166

Prediction Evaluation (success cutoff = 0.5)	NDU=0	DU=1	Total
% Correct Prediction	78.63	51.56	66.82
% Incorrect Prediction	21.37	48.44	33.18

Note: *** and ** denote statistically significant at 1% and 5% level

When we incorporate the industry effect in our logistic regression model, MTBV and LQ2 remain to be significant factors influencing company to use derivatives even. Out of the seven sectors, only plantation sector seems to have a significant positive coefficient. This finding does not surprise us since it is known that our crude palm oil futures market is the only crude palm oil futures market in the world and has been the most active futures market among the crude palm oil traders. Bulk of futures market participant is from the crude palm future market traders that are familiar about the trading mechanics as opposed to its other futures markets like three month KLIBOR and Malaysian Government Securities (MGS). Generally MacFadden R-squared and Hosmer and Lemeshow Test (HL) statistics show that the model is well-specified.

5. Conclusion

This study attempts to identify the factors influencing non-financial companies to use derivatives to hedge. Current ratio (LQ2) and market-to-book value (MTBV) are significant factors influencing companies to hedge. Companies in the plantation sectors seem to be the main user of the derivatives. Our findings support the underinvestment cost hypothesis rather than the financial distress hypothesis that are commonly found in US and Australia companies. It shows that the non-financial companies studied use derivatives to avoid possible underinvestment problems. By hedging, these companies are able to generate sufficient internal cash flow to finance good investment opportunities

that can increase the firm value.

References

Adam, T. R. (2002), "Do Firms Use Derivatives To Reduce Their Dependence On External Capital Markets?", *European Finance Review*, Vol. 6. Retrieved 13 Mar 2011, From Ebscohost

Adkins, L. C., Carter, D. A., & Gary, S. W. (2007), "Managerial incentives and the use of foreign-exchange derivatives by banks", *Journal of Financial Research 30*, 399-413.

Alkebäck, P., Hagelin, N., & Pramborg, B. (2006), "Derivative Usage By Non-Financial Firms In Sweden 1996 And 2003: What Has Changed?", *Managerial Finance*, 32(2), 101-114. Retrieved April 28, 2011, From ABI/INFORM Global.

Ameer, R., Mat Isa, R., & Abdullah, A (2010), "A survey on usage of derivatives and their effect on cost of equity capital *", Technical Report, Institute of Research, Development and Commercialization, Universiti Teknologi MARA.

Aretz, K., Bartram, S. M., & Dufey, G. (2007), "Why Hedge? Rationales For Corporate Hedging And Value Implications", *Journal Of Risk Finance* (Emerald Group Publishing Limited), 8(5), 434-449. Retrieved April 28, 2011, From Ebscohost.

Berkman, H., Bradbury, M.E., & Magan, S. (1997). An International Comparison Of Derivatives Use. *Financial Management*, 26(4), 69-73. Retrieved January 1, 2011, From ABI/INFORM Global. (Document ID: 25309718).

Bessembinder, H. (1991). Forward Contracts And Firm Value: Investment Incentive And Contracting Effect. *Journal Of Financial And Quantitative Analysis,* 26(4), 519-532.

Bodnar, G. M., Jong, A. D., & Macrae, V. (2003), "The Impact Of Institutional Differences On Derivatives Usage: A Comparative Study Of US And Dutch Firms", *European Financial Management* 9, No. 3, 271-297.

Bodnar, G., Hayt, G., & R. Marston, (1998), " Wharton Survey Of Financial Risk Management By US Nonfinancial Firms", *Financial Management* 27, 70-91.

Brunzell, T., Hansson, M., & Liljeblom, E. (2009), "The Use Of Derivatives In Nordic Firms", NASDAQ OMX Nordic Digital Assets, 65/65967. Retrieved January 1, 2011,From http://www.nasdaqomx.com/Digitalassets/65/65967_The_Use_Of_Derivatives_I N_Nordic_Firms.Pdf

Burgos, J. (2010), "Asia Tops North America As Biggest Derivatives Market For The First Time", Bloomberg Online News. Retrieved January 21, 2011, From http://www.bloomberg.com/News/2010-10-15/Derivatives-Trading-In-Asiaovertakes- North-American-Level-For-First-Time.Html

Dadalt, P., Gay, G.D., & Nam, J. (2002), "Asymmetric Information And Corporate Derivatives Use", *The Journal Of Futures Markets*, 22(3), 241-267. Retrieved 29 April, 2011, From ABI/INFORM Global.

El-Masry, A., A. (2006), "Derivatives Use and Risk Management Practices by UK non-financial Companies," *Managerial Finance*, 32(2), 137-159. Retrieved January 1, 2011, From ABI/INFORM Global. (Document ID: 1000752721).

Froot, K. A. , Scarfstein, D. S. & Stein, J. C. (1993), "Risk Management: Coordination Corporate Investment and Financing Policies.", *Journal of Finance* , 48, 1629 -1658.

Geczy, C., Minton, B., & Schrand, C. (1997), "Why Firms Use Currency Derivatives," *Journal Of Finance*, 52(4), 1323 – 1354.

Guay, W.R. (1999). The Impact Of Derivatives On Firm Risk: An Empirical Examination Of New Derivative Users. *Journal Of Accounting & Economics*, 26 (1-3), 319- 351.

Haushalter, G.D. (2000), "Financing Policy, Basis Risk, And Corporate Hedging: Evidence From Oil And Gas Producers", *Journal of Finance*, 55(1), pp. 107–51.

Heaney R., & Winata H. (2005), "Use Of Derivatives By Australian Companies", *Pacific Basin Finance Journal*, 13 (4), Pp. 411-430.

Howton, S.D., & Perfect, S.B. (1998), " Currency And Interest-Rate Derivatives Use In US Firms", *Financial Management*, 27(4), 111-121.
.
Mian, S. L. (1996). Evidence On Corporate Hedging Policy. *Journal Of Financial & Quantitative Analysis*, 31(3), 419-439. Retrieved From Ebscohost. Doi: 9703261297

Modigilani, F. & Miller, M.H. (1963), "Corporate Income Taxes And The Cost Of Capital", *American Economic Review* 53, 433 – 443.

Nance, D. R., Smith, C. W., & Smithson, C. W. (1993), " On The Determinants Of Corporate Hedging", *Journal Of Finance*, 48(1), 267-284. Retrieved From Ebscohost. Doi: 4653401

Nguyen, H., & Faff, R. (2002), " On The Determinants Of Derivative Usage By Australian Companies", *Australian Journal Of Management,* 27, 1. June 2002.

Nguyen, H., & Faff, R. (2010), "Are Firms Hedging Or Speculating? The Relationship Between Financial Derivatives And Firm Risk", *Applied Financial Economi* 20: 10, 827 — 843. First Published On: 21 May 2010 (Ifirst). Retrieved January 11, 2011, From http://Dx.Doi.Org/10.1080/09603101003636204

Rashid Ameer. (2010), "Determinants Of Corporate Hedging Practices In Malaysia", *International Business Research*, 3(2), 120-130. Retrieved January 1, 2011, From ABI/INFORM Global. (Document ID: 2225515261)

Sheedy, E. (2006), "Corporate Risk Management In Hong Kong And Singapore", *Managerial Finance*, 32(2), 89-100. Retrieved January 1, 2011, From ABI/INFORM Global. (Document ID: 1000752691).

Smith, C. W. & Stulz, R. M. (1985), "The Determinants Of Companies' Hedging Policies", *Journal Of Financial And Quantitative Analysis*, 20, 391-405.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage: http://www.iiste.org

CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** http://www.iiste.org/Journals/

The IISTE editorial team promises to the review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library , NewJour, Google Scholar