FOREIGN EXCHANGE RATE EXPOSURE AND DETERMINANTS OF USING FOREIGN CURRENCY DERIVATIVES: AN EMPIRICAL STUDY ON PUBLIC LISTED FIRMS OF MALAYSIA

BY

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ABSTRACT

Financial theory holds that fluctuations in exchange rate significantly influence open market firms by affecting their cash flows and firm value. Because of high market openness and fluctuations in Malaysian exchange rate, this study, therefore, aims to investigate the extent to which 224 sampled firms of Malaysia face foreign exchange risk during the period of 2008 to 2014. Similarly, the continuous improvement in derivative market structure has enabled corporations to effectively manage their foreign exchange risk by using a variety of financial hedging tools such as foreign currency derivatives (FCDs). Therefore, the second aim of this study is to investigate the extent of the influence of foreign exchange risk and other firm's characteristics on the use of FCDs. This study employs ordinary least square model and logistic regression model to achieve first and second aim of the study respectively. Results show that the fluctuations in exchange rate significantly affect Malaysian firms' value during the sample period. It is also found that hedging pattern of Malaysian firms is significantly explained by the foreign exchange risk. The findings reveal that financial distress, firm size and exposure to foreign business operations significantly affect FCDs use. However, the study finds no support for risk management committee, underinvestment theory and liquidity hypotheses in explaining derivative use. This study contributes to relevant literature by introducing two new variables: foreign exchange rate exposure and risk management committee; using new market index and estimating both total and residual exposures. The results have implications for managers by guiding them to carefully consider highly risky currencies while making international transactions. This study has also implications for investors by guiding them regarding investment decisions; for Bursa Malaysia Derivatives Berhad in relation to offering new or improve existing derivative products and for Malaysian government to formulate risk management strategies at national level.

Keywords: foreign currency derivatives; currency risk; financial hedging; Malaysian firms

ABSTRAK

Teori kewangan menegaskan bahawa fluktuasi kadar pertukaran secara signifikan mempengaruhi firma-firma dalam pasaran terbuka dengan mempengaruhi aliran tunai dan nilai firma. Oleh kerana keterbukaan pasaran yang tinggi dan fluktuasi kadar pertukaran Malaysia, kajian ini bertujuan untuk menyiasat sejauh mana firma-firma di Malaysia menghadapi risiko kadar pertukaran asing dalam tempoh 2008 hingga 2014. Begitu juga penambahbaikan berterusan struktur pasaran derivatif telah membolehkan syarikat menguruskan risiko kadar pertukaran asing secara efektif dengan menggunakan pelbagai alat lindung nilai seperti derivatif mata wang asing (FCD). Oleh itu, matlamat kedua kajian ini adalah untuk mengkaji sejauh mana pengaruh risiko pertukaran mata wang asing dan ciri-ciri lain sesebuah firma ke atas penggunaan FCD. Kajian ini menggunakan model kuasadua terkecil biasa dan model regresi logistik masing-masing bagi mencapai tujuan pertama dan kedua. Keputusan menunjukkan bahawa fluktuasi kadar pertukaran asing secara signifikan mempengaruhi nilai firma di Malaysia sepanjang tempoh kajian. Ia juga menunjukkan corak lindung nilai firma-firma di Malaysia dapat dijelaskan secara signifikan oleh risiko kadar pertukaran asing. Penemuan ini mendedahkan bahawa ketenatan kewangan, saiz firma dan pendedahan kepada operasi perniagaan asing secara signifikan mempengaruhi keputusan penggunaan FCD. Walau bagaimanapun, kajian ini tidak menyokong pembolehubah jawatankuasa pengurusan risiko, teori pelaburan dan hipotesis kecairan bagi menjelaskan kegunaan derivatif. Kajian ini menyumbang kepada literatur yang relevan dengan memperkenalkan dua pembolehubah baru iaitu pendedahan kadar pertukaran asing dan jawatankuasa pengurusan risiko; dengan menggunakan indek pasaran baru dan menganggarkan jumlah keseluruhan dan pendedahan residual. Kajian ini memberi implikasi kepada pengurus firma dengan membimbing mereka membuat pertimbangan yang teliti terhadap risiko mata wang semasa membuat transaksi antarabangsa. Kajian ini juga memberi kesan kepada pelabur dengan membimbing mereka dalam membuat keputusan pelaburan Bursa Malaysia Derivatif Berhad dalam menawarkan produk derivatif baharu atau menambahbaik produk sedia ada dan kerajaan Malaysia untuk merangka strategi pengurusan risiko di peringkat negara.

Kata kunci: derivatif mata wang asing; risiko mata wang; lindung nilai kewangan; firma-firma Malaysia

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LIST OF ABBREVIATIONS

AUD	Australian Dollar
CAPEX	Capital expenditures as a percentage of total sales
ECU	European currency unit
FBMEMAS	FTSE Bursa Malaysia EMAS Index
FBMKLCI	FTSE Bursa Malaysia KLCI
FCDs	Foreign currency derivatives
FSTS	Foreign sales ratio
FX	Foreign exchange
GBP	Great Britain Pound
GDP	Gross domestic product
GFC	Global Financial Crisis
IASB	International accounting standard board
IFRS	International financial reporting standard
INCOV	Interest-coverage ratio
JPY	Japanese Yen
LIQ	Liquidity
LVRG	Leverage ratio
MM	Modigliani and Miller
MTBV	Market-to-book value ratio
MYR	Malaysian Ringgit
NPV	Net present value
OLS	Ordinary least square
PER	Price-earnings ratio
RM	Return on market index
RMC	Risk management committee
SGD	Singapore Dollar
SIZE	Firm's size
TWI	Trade-weighted exchange rate index
UK	United Kingdom
US	United States
USD	US Dollar
VIF	Variance inflation factor

Chapter 1 INTRODUCTION

1.1 Background of the Study

Breakup of the Bretton Woods system during 1970s, increased globalization of businesses, intense competition, market imperfections and political uncertainties introduced several global and financial risks and challenges for corporate sector. For firms that are involved in international business activities, such as exports and imports, their cash flows and firm value are largely affected by the changes in exchange rate, that ultimately rendering the management of foreign exchange (FX hereinafter) risk as an important element of firm's objectives (Bartram, 2008). Corporate risk management is now becoming the essential part of corporate business planning. The ultimate goal of risk management is to enhance firm value and therefore, benefit shareholders. According to Thomas-Olivier (2007), risk management maximizes value creation in three ways: providing financial flexibility, supporting better decisions and enabling operational and strategic flexibility. A great number of studies, such as Panaretou (2013), Choi, Mao, and Upadhyay (2013), Sheedy (2006), and Bartram (2000) discuss risk management strategies at corporate level of different markets such as UK, Hong Kong, and Singapore under various conditions.

FX rate risk is a type of financial risk in which value of a firm is possibly affected by uncertain changes in exchange rate (Hakala & Wystup, 2002). Past studies (Hekman, 1985; Marston, 2001; Shapiro, 1975) highlight the fact that fluctuations in exchange rates are a major source of macro-economic uncertainty which affect the decisions of individual and institutional investors, returns, cash flows and values of firms. Géczy, Minton, and Schrand

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