CORE

THE IMPACT OF OWNERSHIP STRUCTURE, MORAL HAZARD AND CAPITAL REGULATION ON RISK TAKING IN MALAYSIAN BANKS

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DOCTOR OF PHILOSOPHY UNIVERSITI UTARA MALAYSIA

THE IMPACT OF OWNERSHIP STRUCTURE, MORAL HAZARD AND CAPITAL REGULATION ON RISK TAKING IN MALAYSIAN BANKS

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ABSTRACT

This study examines relationship between ownership structure and moral hazard with risk taking of Malaysian banks and also investigates the moderating effects of capital regulation on these relationships. Despite many claims and arguments that associate high risk taking of Malaysian banks with the existence of large shareholders and moral hazard related to loan activities (high loan growth and loan concentration), the practices are still prevailing until present. The fact that banks are highly regulated also creates issue on how regulation moderates the relationship between ownership structure and moral hazard related to loans with bank risk taking. Bank risk taking in this study is measured by standard deviation of return on equity, standard deviation of return on assets and Z-SCORE (insolvency risk). Ownership structure comprised of insider ownership, family ownership, government ownership, institutional ownership and foreign ownership. Moral hazard is proxied by loan growth and loan concentration while capital regulation is proxied by capital adequacy requirement. Using secondary data, total number of observations of this study is 294. Data are collected from 21 commercial banks in Malaysia, comprising of 9 domestic banks and 12 foreign banks over 1990-2008 period. In testing the relationships between ownership structure, moral hazard and capital regulation on bank risk taking, two regression test are used. Multiple regression is used to test the relationship between ownership structure and moral hazard on bank risk taking, while hierarchical moderated multiple regression is used to test the moderating effects of capital regulation on the relationship between ownership structure and moral hazard to bank risk taking. The multiple regression results revealed that different type of ownership structure has different impact on bank risk taking. The results on moral hazard show that loan growth increased insolvency risks of banks, while loan concentration create variation in bank returns (standard deviation of return on equity) but decrease probability of failure (high Z-SCORE) of the banks. Further, hierarchical moderated multiple regression revealed that capital adequacy requirement has significant moderating impact on the relationship between ownership structure and moral hazard with standard deviation of return on equity and insolvency risks. In contrast, it has insignificant moderating effects on the relationship between ownership structures and moral hazard with standard deviation of return on assets. Overall, findings of this study imply that the existence of large shareholders in Malaysian banks does not increase bank risk taking (as measured by variations of returns and insolvency risks), the impact of loan growth in increasing banks risks will only be felt in the long term while loan concentration, although create variation in bank return but would increase bank stability in the long term. The result also imply that capital regulation implemented by Malaysian regulators is appropriate for the Malaysian banks as higher capital adequacy requirements might creates unintended effects whereby banks might response by increasing their risk taking.

Key words: bank-risk taking, ownership structure, moral hazard, capital regulation

ABSTRAK

Penyelidikan ini mengkaji perhubungan struktur pemilikan dan kesalahan moral dengan pengambilan risiko bank-bank Malaysia dan juga memeriksa kesan penyederhanaan undang-undang modal ke atas perhubungan tersebut. Di sebalik tanggapan dan hujahyang mengaitkan pengambilan risiko bank-bank Malaysia dengan kehadiran pemegang saham besar dan kesalahan moral berkaitan aktiviti pinjaman (pertumbuhan pinjaman tinggi dan konsentrasi pinjaman), keadaan tersebut terus wujud hingga kini. Kenyataan bahawa bank mempunyai regulasi yang tinggi juga mencetuskan isu tentang bagaimana regulasi memoderasikan perhubungan di antara struktur pemilikan dan kesalahan moral berkaitan pinjaman dengan pengambilan risiko bank. Pengambilan risiko bank diukur oleh variasi pulangan atas ekuiti, variasi pulangan atas aset dan juga risiko ketidakmampuan membayar (Z-SCORE). Struktur pemilikan terdiri dari pemilikan dalaman, keluarga, kerajaan, p institusi dan asing. Kesalahan moral diwakili oleh pertumbuhan pinjaman dan konsentrasi pinjaman, sementara undang-undang modal diwakili oleh keperluan kecukupan modal. Kajian ini menggunakan data sekunder 9 bank tempatan dan 12 bank asing bagi tahun 1995-2008 dengan jumlah keseluruhan Analisa berbilang regresi digunakan untuk menguji pemerhatian sebanyak 294. perhubungan struktur pemilikan dan kesalahan moral dengan pengambilan risiko bank, sementara regresi berbilang penyederhanaan bertingkat digunakan untuk menguji kesan penyederhanaan undang-undang modal terhadap perhubungan tersebut. Analisa berbilang regresi mendedahkan bahawa jenis struktur pemilikan yang berlainan menghasilkan kesan yang berlainan ke atas pengambilan risiko bank. Keputusan analisis terhadap kesalahan moral menunjukkan pertumbuhan pinjaman meningkatkan ketidakmampuan membayar bank, sementara konsentrasi pinjaman mewujudlkan variasi di dalam pulangan (variasi pulangan atas ekuiti) tetapi menurunkan kemungkinan kegagalan bank. Regresi berbilang penyederhanaan bertingkat pula mendedahkan, keperluan kecukupan modal menyederhanakan kesan terhadap perhubungan di antara struktur pemilikan dan kesalahan moral dengan variasi pulangan atas ekuiti dan risiko ketidakmampuan membayar, tetapi tidak mempunyai kesan penyederhanaan terhadap perhubungan struktur pemilikan dan kesalahan moral dengan variasi pulangan atas asset. Keseluruhannya, hasil kajian menunjukkan pemegang saham besar di bank-bank Malaysia tidak meningkatkan pengambilan risiko bank (diukur dengan variasi di dalam pulangan dan risiko ketidakmampuan membayar), pertumbuhan pinjaman meningkatkan ketidakmampuan membayar, sementara konsentrasi pinjaman meningkatkan kestabilan bank. Seterusnya, undang-undang modal yang dilaksanakan oleh kerajaan Malaysia bersesuaian untuk bank-bank Malaysia kerana undang-undang modal yang lebih tinggi akan menyebabkan bank meningkatkan pengambilan risiko mereka.

Katakunci: Pengambilan risiko bank, struktur pemilikan, kesalahan moral, undangundang modal

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LIST OF ABBREVIATIONS

BAFIA Banking and Financial Institutions Act

BLUE Best Linear Unbiased Estimator

BNM Bank Negara Malaysia

CAR Capital Adequacy Requirement

FEM Fixed Effects Model

GLS Generalized Least Square

NPL Non-performing Loans

OLS Ordinary Least Square

RAM Rating Agency Malaysia

REM Random Effects Model

SDROA Standard Deviation of Return on Asset

SDROE Standard Deviation of Return on Equity

VIF Variance Inflation Factor

CHAPTER ONE

BACKGROUND OF THE STUDY

1.0 Introduction

The financial crises in 1985-1986 and 1997-1998 that had hit Malaysian banks revealed the vulnerabilities of the banking industry. The Malaysian banks are highly associated with high risk taking due to their concentrated ownership structure and lending practices. The existence of large shareholders and moral hazard behavior of banks due to high loan growth and concentrated loan portfolio are argued as the main cause of the vulnerabilities (i.e., Obiyatullah, 1998; Laeven, 1999). However, despite many claims and arguments that relate concentrated ownership and moral hazard through loan activities with high risk taking (i.e., Thillainathan, 1999), the trends still prevailing in the Malaysian banking sector. Furthermore, capital regulation imposed on the banking institutions to manage their risk taking, creates concern on the effects of capital regulation in moderating the relationships between ownership structure and moral hazard with Malaysian bank risk taking. Thus, the purpose of this study is to examine the relationship of ownership structure and moral hazard with bank risk taking and also the moderating effects of capital regulation on the relationships.

1.1 Risks and Banking Institutions

Risk is very important in evaluating the actual returns and performance of a firm (Cade, 1997). Risk is defined as exposure to uncertainty of outcome or the possibility that

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