

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**THE DETERMINANTS OF COMMERCIAL BANK  
LENDING IN MALAYSIA**

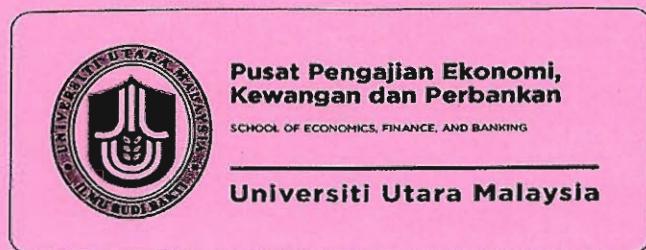


**MASTER OF SCIENCE (BANKING)  
UNIVERSITI UTARA MALAYSIA  
JUNE 2016**

**THE DETERMINANTS OF COMMERCIAL BANK LENDING IN  
MALAYSIA**



**Research Paper Submitted to  
School of Economics, Finance and Banking  
Universiti Utara Malaysia,  
In Partial Fulfillment of the Requirement for the Master of Science (Banking)**



**PERAKUAN KERJA KERTAS PENYELIDIKAN**  
(*Certification of Research Paper*)

Saya, mengaku bertandatangan, memperakukan bahawa  
(*I, the undersigned, certify that*)  
**LEE ENG SHENG (818927)**

Calon untuk Ijazah Sarjana  
(*Candidate for the degree of*)  
**MASTER OF SCIENCE (BANKING)**

telah mengemukakan kertas penyelidikan yang bertajuk  
(*has presented his/her research paper of the following title*)

**THE DETERMINANTS OF COMMERCIAL BANK LENDING IN MALAYSIA**

Seperti yang tercatat di muka surat tajuk dan kulit kertas penyelidikan  
(*as it appears on the title page and front cover of the research paper*)

Bahawa kertas penyelidikan tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.  
(*that the research paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the dissertation*).

Nama Penyelia : **DR. AZIRA ABDUL ADZIS**  
(Name of Supervisor)

Tandatangan :   
(Signature)

Tarikh : **19 JUNE 2016**  
(Date)

### **Permission to use**

In presenting this research paper in partial fulfillment of the requirements for the Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this research paper in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor or in her absence, by the Dean of School of Economics, Finance and Banking where I did my research paper. It is understood that any copying or publication or use of this research paper parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my research paper.

Request for permission to copy or to make other use of materials in this research paper in whole or in part should be addressed to:

Dean of School of Economics, Finance and Banking

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman



**UUM**

Universiti Utara Malaysia

## Abstract

This study investigates the bank specific and macroeconomic determinants of commercial bank lending in Malaysia using a sample of 27 banks covering the period from 2005 to 2014. This study also examines the impact of macroprudential policy measure implemented in 2010 on the lending activities of Malaysian commercial banks. Employing a random effects estimation, the findings demonstrate that bank size and volume of deposit positively influence commercial bank lending in Malaysia, while liquidity negatively influences the lending activities. With regard to macroeconomic determinants, this study does not find any conclusive evidence to support the influence of gross domestic product (GDP), lending rate and cash reserve requirement on commercial bank lending activities in Malaysia. Moreover, the findings of this study also reveal that the macroprudential policy measure which was implemented in 2010 to curb the high level of household indebtedness does not give any significant impact on lending activities in Malaysia during the study period.



## Abstrak

Kajian ini menyiasat penentu pinjaman bank komersial di Malaysia dari aspek sifat-sifat tertentu bank dan faktor makroekonomi dengan menggunakan sampel 27 bank meliputi tempoh kajian dari tahun 2005 sehingga 2014. Kajian ini juga mengkaji kesan langkah dasar kehematan makro yang dilaksanakan pada tahun 2010 ke atas aktiviti pinjaman bank komersial di Malaysia. Menggunakan kesan anggaran rawak (*Random effects*), hasil kajian menunjukkan bahawa saiz bank dan jumlah deposit mempengaruhi pinjaman bank komersial di Malaysia secara positif, manakala mudah tunai mempengaruhi aktiviti pinjaman secara negatif. Berhubung dengan penentu makroekonomi, kajian ini tidak menemui sebarang bukti yang kukuh untuk menyokong pengaruh keluaran dalam negara kasar (KDNK), kadar pinjaman, dan keperluan rizab tunai ke atas aktiviti pinjaman bank komersial di Malaysia. Selain itu, hasil kajian ini juga menunjukkan bahawa langkah dasar kehematan makro yang dilaksanakan pada tahun 2010 untuk membendung hutang isi rumah yang tinggi tidak memberi kesan yang signifikan ke atas aktiviti pinjaman bank komersial di Malaysia dalam tempoh kajian.



## **Acknowledgements**

First of all, I would like to express my utmost gratitude to my respected supervisor, Dr. Azira Binti Abdul Adzis for her motivation, guidance and patience to teach me and support me during the process of completing this research paper.

Secondly, I would like to express my gratitude to my family members especially my beloved parents for encourage me and support me throughout this research paper process. Their unlimited encouragement and support had giving me confidence and strength to complete this research papers.

Last but not least, I would also like to thank my friends who have directly or indirectly provide assistance and motivation for me in the process of completing this research paper.



## Table of contents

Title page.....	i
Certification of research paper.....	ii
Permission to use.....	iii
Abstract.....	iv
Abstrak.....	v
Acknowledgements.....	vi
Table of contents.....	vii
List of tables.....	ix
List of figures.....	x

### CHAPTER 1: INTRODUCTION

1.1 Background of the study.....	1
1.2 Problem statement.....	3
1.3 Objective of the study.....	6
1.4 Significance of the study.....	6
1.5 Organization of the study.....	7

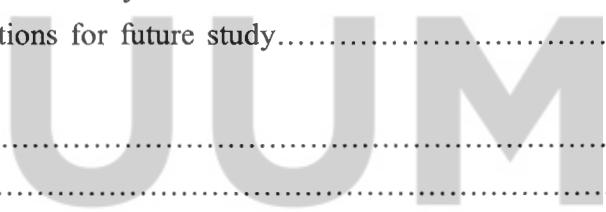
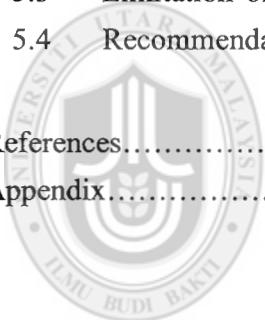
### CHAPTER 2: OVERVIEW OF LENDING ACTIVITIES IN MALAYSIA AND LITERATURE REVIEW

2.1 Introduction.....	8
2.2 Overview of commercial bank lending in Malaysia.....	8
2.3 Literature review and hypothesis statements.....	13
2.3.1 Bank's specific characteristics.....	14
2.3.2 Macroeconomic determinants.....	20
2.4 Conclusion.....	28

### CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction.....	29
3.2 Data.....	29
3.3 Sample.....	30
3.4 Regression model.....	32
3.5 Measurement of variables.....	33
3.5.1 Dependent variable.....	33
3.5.2 Independent variables.....	33
3.6 Technique of analysis.....	40

3.7 Conclusion.....	42
<b>CHAPTER 4: RESULTS AND DISCUSSIONS</b>	
4.1 Introduction.....	43
4.2 Descriptive statistics analysis.....	43
4.3 Correlation coefficients matrix.....	45
4.4 Variance inflation factor (VIF) test.....	46
4.5 Hausman test.....	47
4.6 Random effect regression.....	48
4.7 Conclusion.....	52
<b>CHAPTER 5: CONCLUSION AND RECOMMENDATION</b>	
5.1 Conclusion.....	54
5.2 Contribution of the study.....	56
5.3 Limitation of the study.....	56
5.4 Recommendations for future study.....	57
References.....	59
Appendix.....	62



## List of tables

Table 2.1	Summary of previous findings on determinants of bank lending...	25
Table 3.1	List of commercial banks in Malaysia.....	31
Table 3.2	Summary of all variables.....	39
Table 4.1	Descriptive statistics analysis.....	43
Table 4.2	Correlation coefficients matrix.....	45
Table 4.3	Variance inflation factor (VIF) test.....	46
Table 4.4	Hausman test.....	47
Table 4.5	Random effect regression.....	48
Table 4.6	Summary of the hypothesis testing results.....	53



## **List of figures**

Figure 2.1      Commercial bank loans to GDP ratio and GDP growth.....10  
Figure 2.2      Total loan and loan growth of commercial bank in Malaysia....12



## CHAPTER 1

### INTRODUCTION

#### 1.1 Background of the study

The lending activities can be described as the heart of commercial bank's banking business. The commercial bank plays an intermediary's role by linking the surplus unit and the deficit unit in the financial market together. Commercial bank accepts deposit from customers who have surplus of fund while at the same time uses the fund to grant loans to the deficit unit in the financial market. Malede (2014) depicts lending plays a primary role in commercial bank daily banking activities where loan and advances is the largest component in the bank's asset portfolio and it is also the predominant sources of revenue for the bank.

In the context of Malaysia, lending activities is important for the commercial bank's banking business. This is because approximately 62% of the commercial bank's asset portfolio is constitutes by the loan and advances (Bank Negara Malaysia, 2015). Moreover, lending activities is also the main drivers of earnings for the commercial bank in Malaysia which approximately 70% of the commercial banks operating income is contributed by the interest income from the lending activities (Bank Negara Malaysia, 2014). Furthermore, the commercial bank lending also play an important role in supporting Malaysian economy. This is evidenced by the commercial bank loans to gross domestic product ratio have increased steadily from year 2005 to year 2014, which the ratio had recorded 78.37% on year 2005 and increased to 98.44% on year 2014 (Bank Negara Malaysia, 2015). This implies that commercial bank have a significant contribution in financing the economic activities in Malaysia.

The contents of  
the thesis is for  
internal user  
only

## References

Abdul Karim, Z., Azman-Saini, W. N. W., & Abdul Karim, B. (2011). Bank Lending Channel of Monetary Policy: Dynamic Panel Data Study of Malaysia. *Journal of Asia-Pacific Business*, 12(3), 225–243.

Al-Kilani, Q. A., & Kaddumi, T. A. (2015). Cyclical of Lending Behavior by Banking Sector for the Period (2000-2013): Evidence from Jordan. *International Journal of Economics and Finance*, 7(4), 57.

Amidu, M. (2014). What Influences Banks Lending in Sub-Saharan Africa. *Journal of Emerging Market Finance*, 13(1), 1–42.

Baltagi, B. H. (2005). *Econometric Analysis of Panel Data Third Edition*. Great Britain: John Wiley & Sons, Ltd.

Banga, S. M. (2013). Socio-Economic Significance of Commercial Banks in India: With Special Emphasis on Public Sector Banks. *International Journal of Advanced Research in Management and Social Sciences*, 2(1), 1-22.

Bank Negara Malaysia. (1999). *The Central Bank and The Financial System in Malaysia - A Decade of Change*. Kuala Lumpur: Bank Negara Malaysia.

Bank Negara Malaysia. (2011). *Financial Stability and Payment Systems Report 2011*. Kuala Lumpur: Bank Negara Malaysia. Retrieved from [http://www.bnm.gov.my/files/publication/fsp/2011/fs2011\\_book.pdf](http://www.bnm.gov.my/files/publication/fsp/2011/fs2011_book.pdf)

Bank Negara Malaysia. (2013). *List of Licensed Financial Institutions*. Retrieved from Bank Negara Malaysia: [http://www.bnm.gov.my/index.php?ch=fs\\_mfs&pg=fs\\_mfs\\_list&lang=en](http://www.bnm.gov.my/index.php?ch=fs_mfs&pg=fs_mfs_list&lang=en)

Bank Negara Malaysia. (2013). *Measures to Further Promote a Sound and Sustainable Household Sector*. Retrieved from Bank Negara Malaysia: [http://www.bnm.gov.my/index.php?ch=en\\_press&pg=en\\_press\\_all&ac=2841&lang=en](http://www.bnm.gov.my/index.php?ch=en_press&pg=en_press_all&ac=2841&lang=en)

Bank Negara Malaysia. (2014). *Financial Stability and Payment System Report 2013*. Kuala Lumpur: Bank Negara Malaysia .

Bank Negara Malaysia. (2015). *Financial Stability and Payment Systems Report 2014*. Kuala Lumpur: Bank Negara Malaysia.

Bank Negara Malaysia. (2015). *Monthly Statistical Bulletin*. Retrieved from Bank Negara Malaysia: [http://www.bnm.gov.my/index.php?ch=en\\_publication\\_catalogue&pg=en\\_publication\\_ms&mth=2&yr=2016&lang=en](http://www.bnm.gov.my/index.php?ch=en_publication_catalogue&pg=en_publication_ms&mth=2&yr=2016&lang=en)

Bank Negara Malaysia. (2016). *Statutory Reserve Requirement*. Retrieved from Bank Negara Malaysia: [http://www.bnm.gov.my/guidelines/01\\_banking/04\\_prudential\\_stds/01\\_statutory\\_20160127.pdf](http://www.bnm.gov.my/guidelines/01_banking/04_prudential_stds/01_statutory_20160127.pdf)

Cargill, T. F., & Mayer, T. (2006). The Effect of Changes in Reserve Requirements during the 1930s: The Evidence from Nonmember Banks. *Journal of Economic History*, 66(2), 417–432

Chernykh, L., & Theodossiou, A. K. (2011). Determinants of Bank Long-term Lending Behavior: Evidence from Russia. *Multinational Finance Journal*, 15(3-4), 193–216.

Costant, F. D., & Ngomsi, A. (2012). Determinants of Bank Long -term Lending Behavior in the Central African and Monetary Community (CEMAC). *Review of Economics & Finance*, 107-114.

Imran, K., & Nishat, M. (2013). Determinants of Bank Credit in Pakistan: A supply Side Approach. *Economic Modelling*, 35, 384–390.

MacDonald, S. S., & Koch, T. W. (2006). *Management of Banking Sixth Edition*. Singapore: South-Western Cengage Learning.

Malede, M. (2014). Determinants of Commercial Banks Lending: Evidence from Ethiopian Commercial Banks. *European Journal of Business and Management*, 6(20), 109-117.

Mayer, M. (2010). *Unbalanced Panel Data Models*. Retrieved from Universitat Wien: [http://homepage.univie.ac.at/robert.kunst/pan2010\\_pres\\_mayer.pdf](http://homepage.univie.ac.at/robert.kunst/pan2010_pres_mayer.pdf)

McCarthy.M, Schneider.D, & Tibb.S. (2010). Investment and Loans in US Banks. *Journal of Bank Accounting and Finance*, 19-24.

Moussa, M. A., & Chedia, H. (2016). Determinants of Bank Lending: Case of Tunisia. *International Journal of Finance and Accounting*, 5(1), 27–36.

N.Gujarati, D., & Porter, D. C. (2009). *Basic Econometrics*. Singapore: McGraw-Hill Company.

Nwankwo, G. (2000). Organizing for Financial Risk Management. *The Credit Administrator* 2(2), 32-39.

Olokoyo, F. O. (2011). Determinants of Commercial Banks' Lending Behavior in Nigeria. *International Journal of Financial Research*, 2(2), 61–72.

Olumuyiwa, O. S., Aluwatosin, O. A., & Chukwuemeka, O. E. (2012). Determinants of Lending Behavior of Commercial Banks: Evidence from Nigeria, A Co-Integration Analysis. *Journal of Humanities and Social Science*, 5(5), 71-80.

Pruteanu-Podpiera, A. M. (2007). The Role of Banks in the Czech Monetary Policy transmission mechanism. *Economics of Transition*, 15(2), 393–428.

Rabab'ah, M. (2015). Factors Affecting the Bank Credit: An Empirical Study on the Jordanian Commercial Banks. *International Journal of Economics and Finance*, 7(5), 166.

Richard, E. O., & Okeye, V. (2014). Appraisal of Determinants of Lending Behavior of Deposit Money Bank in Nigeria. *International Journal of Scholarly Research Gate*, 2(3), 142-156.

Rose, P. S., & Hudgins, S. C. (2013). *Bank Management & Financial Services*. Singapore: The McGraw-Hill Companies.

Sarath, D., & Pham, D. V. (2015). The Determinants of Vietnamese Bank's Lending Behavior. *Journal of Economic Studies*, 42(5), 861-877.

Sekaran, U., & Bougie, R. (2013). *Research Methods for Business*. Chichester: Wiley.

Simon Fraser University Canada. (2016). *Chapter 8: Multicollinearity*. Retrieved from Simon Fraser University: <http://www.sfu.ca/~dsignori/buec333/lecture%2016.pdf>

Sufian, F. (2009). Factors Influencing Bank Profitability in a Developing Economy: Empirical Evidence from Malaysia. *Global Business Review*, 10, 225–241.

Swamy, V. (2012). Financial Instability, Uncertainty and Bank Lending Behavior. *International Journal of Banking and Finance*, 9(4), 74–95.

Tomak, S. (2013). Determinants of Commercial Banks' lending Behavior: Evidence from Turkey. *Asian Journal of Empirical Research*, 3(8), 933–943.

Torres-Rena, O. (2007). *Panel Data Analysis Fixed and Random Effect using Stata (v. 4.2)*. Retrieved from Princeton University: <http://dss.princeton.edu/training/Panel101.pdf>

Wooldridge, J. M. (2002). *Econometric Analysis of Cross Section and Panel Data*. London: The MIT Press.