

**UNIVERSITI TEKNOLOGI MARA**

**DETERMINANTS OF BANK'S EFFICIENCY  
DURING FINANCIAL LIBERALIZATION  
IN MALAYSIA**

**NUR ZAHIDAH BHRUDIN**

Thesis submitted in fulfillment  
of the requirements for the degree of  
**Doctor of Philosophy**

**Faculty of Business Management**

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## **CONFIRMATION BY PANEL EXAMINERS**

I certify that a panel of examiners has met on 9<sup>th</sup> September 2015 to conduct the final examination of Nur Zahidah binti Bahrudin on her Doctor of Philosophy thesis entitled “Determinants of Bank’s Efficiency during Financial Liberalization in Malaysia” in accordance with Universiti Teknologi MARA Act 1976 (Akta 173). The Panel Examiners recommend that the students be awarded the relevant degree. The panel of Examiners was as follows:

Rosalan Ali, PhD  
Professor  
Faculty of Business Management  
Universiti Teknologi MARA  
(Chairman)

Hairulnizam Hashim, PhD  
Seniour Lecturer  
Faculty of Business Management  
Universiti Teknologi MARA  
(Internal Examiner)

Annuar Md Nassir, PhD  
Professor  
Department of Economic and Management  
Universiti Putra Malaysia  
(External Examiner)


Robert Powell, PhD  
Associate Professor  
Edith Cowan University, Australia  
(External Examiner)

**SITI HALIJJAH SHARIFF, PhD**  
Associate Professor  
Dean  
Institute of Graduate Studies  
Universiti Teknologi MARA  
Date: 20<sup>th</sup> January 2016

## AUTHOR'S DECLARATION

I declare that the work in thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledgement as referenced work. This thesis has not been submitted to any other academic institution on non-academic institution for any degree qualification.

I, hereby, acknowledged that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student : Nur Zahidah binti Bahrudin  
Student I.D. No : 2010380639  
Programme : Doctor of Philosophy (Finance)  
Faculty : Business Management  
Title : Determinants of Bank Efficiency during Financial  
Liberalization in Malaysia  
Signature of Student :  .....  
Date : January 2016

## ABSTRACT

Financial institutions have been found to be one of the major contributors to the economy of numerous countries. The failure of this industry can affect the economic growth and the expanding economic opportunity. In the globalization landscape, financial liberalization also takes place, in which, the central bank permits foreign bank ownerships to invest and to establish their plans locally. The existence of foreign banks has created competitions for local owned banks when they attempt to achieve full efficient performance, as well as in becoming leaders in the market. In addition, the Malaysian government has implemented the new policy named Financial Sector Master Plan (FSMP) in order to strengthen and enhance the local banks operation. Therefore, the assessment of whether local banks have outperformed foreign banks is crucial, especially due to the execution of FSMP for the Malaysian banking system. For that reason, this study examined cost, revenue, and profit efficiency of both local and foreign banks in Malaysia. As the banking system has experienced major changes as a result of the program implemented by the central bank to improve the Malaysian banking sector, the analysis of this study was divided into three time range periods, which were: i) during the Asian financial crisis, ii) before the implementation of FSMP, and iii) since the inception of FSMP program. The DEA method was used to analyse the efficiency of 17 local and foreign banks from 1997 to 2011. The analysis revealed that local banks had been more efficient than foreign counterparts had been. As the competition among the banks increased, the risk also arose, whereby, along the way to be efficient, the banks were also involved with various types of risks. This factor led the study to incorporate credit risk, operational risk, and liquidity risk, together with two specific factors of bank (size of bank and ROA) with the efficient performance scale in order to analyse their influences towards the three types of efficiency. Besides, the Arellano Bond GMM approach was utilized for the analysis of risk and bank specific factor. The results illustrated that all types of risks and bank specific factors had been a significant influence towards cost efficiency. In fact, similar results were obtained for revenue efficiency, except for credit risk, in which there was an insignificant influence on revenue efficiency. On the other hand, the results for profit efficiency proved to be perplexing as all risks and bank specific variables did not significantly influence profit efficiency for the Malaysian banking institutions.

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