A STUDY ON PRODUCTIVITY OF MALAYSIA'S BANKING SECTOR: BEFORE AND AFTER MERGER

FARHANA BINTI ISMAIL

This project is submitted in partial fulfillment of
the requirements for the degree of Bachelor of Economics and Business
with Honours
(Industrial Economics and Organizations)

Faculty of Economics and Business
UNIVERSITI MALAYSIA SARAWAK
2007

ABSTRACT

A STUDY ON PRODUCTIVITY OF MALAYSIA'S BANKING SECTOR: BEFORE AND AFTER MERGER

By

Farhana binti Ismail

This study is undertaken to investigate the productivity of Malaysia's banking sector within pre and post merger. In this context, the study attempts to evaluate technical efficiency, efficiency change, technical change and productivity of commercial banks, finance companies and merchant banks using a non-parametric Data Envelopment Analysis (DEA) and Malmquist Index approach. The results of this study show that on average, productivity across banking institutions increased at annual rate of 5.8% over the study period 1993 to 2004. Besides, the analysis results also indicated that almost all of the productivity growth comes from technical change (or innovations in banking technology) rather than improvement in efficiency change, which contributing for 6.1% of productivity growth, while the latter accounted for 0.2% decline. Furthermore, it is observed that the productivity of Malaysia's banking sector has been improved (in terms of efficiency) after the implementation of merger program for domestic banking institutions in 1999. However, the productivity of banking institutions has been affected by certain economic conditions in year 2001 and 2004 (such as the September 11 tragedy and the process of capital rationalization that merged entities have undergone).

ABSTRAK

KAJIAN TENTANG PRODUKTIVITI SEKTOR PERBANKAN MALAYSIA: SEBELUM DAN SELEPAS PENGGABUNGAN

Oleh

Farhana binti Ismail

Kajian ini telah dijalankan untuk mengkaji produktiviti sektor perbankan di Malaysia (yang terdiri daripada bank perdagangan, syarikat kewangan dan bank saudagar) sebelum dan selepas penggabungan dijalankan. Kajian ini juga bertujuan untuk menaksir nilai kecekapan teknikal, perubahan kecekapan, perubahan teknikal dan produktiviti sektor perbankan dengan menggunakan kaedah *non-parametric Data Envelopment Analysis (DEA)* dan Indeks *Malmquist.* Keputusan kajian menunjukkan produktiviti sektor perbankan meningkat pada kadar 5.8% setahun (secara purata) dari tahun 1993 hingga 2004. Di samping itu, keputusan kajian mendapati hampir kesemua pertumbuhan produktiviti berpunca daripada perubahan teknikal (atau inovasi dalam teknologi perbankan) berbanding peningkatan dalam perubahan kecekapan. Seterusnya, kajian juga mendapati bahawa produktiviti sektor perbankan selepas program penggabungan (yang bermula pada tahun 1999) adalah cekap. Walau bagaimanapun, produktiviti sektor perbankan turut terjejas akibat daripada situasi ekonomi pada tahun 2001 dan 2004 (seperti tragedi 11 September dan proses penstrukturan modal yang telah dialami oleh entiti yang menjalani penggabungan).

ACKNOWLEDGEMENT

The author wishes to express her sincere appreciation and thoughtful gratitude to several persons who have provided vital comments with valuable suggestion to the success of this study.

Special thanks to the author's supervisor for her invaluable inputs and information, constructive advises, clear guidance, steady support and helpful comments throughout the course of this study. Beside that, author also grateful to her supervisor in patiently explanation about Data Envelopment Analysis (DEA) software to complete her study.

The author also would like to thankfulness to the author's family members and friends for their valuable recommendations and continuous moral support for this period.

Finally, the author wishes to thank all the lecturers and staffs of the Faculty of Economics and Business (FEB), Universiti Malaysia Sarawak, in the contribution to the success towards this study.

TABLE OF CONTENT

CHAPTER THREE: RESEARCH METHODOLOGY

CHAPTER FOUR: EMPIRICAL RESULTS

CHAPTER FIVE: DISCUSSION AND CONCLUSION

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1 Background

Malaysia banking system consists of Bank Negara Malaysia, banking institutions (commercial banks, merchant banks and finance companies) and other financial institutions (discount houses, foreign banks representative offices, and offshore bank in the International Offshore Financial Centre in Labuan) (Bank Negara Malaysia (BNM), 2001).

As of the end of 1997, the licensed banking system consists of 35 commercial banks, of which 22 are domestic banks and 13 are foreign-controlled (or 43.6 percent of total financial system assets), 39 finance companies (13.6 percent), 12 merchant banks (4.0 percent), 7 discount houses (1.9 percent), and Bank Negara Malaysia (9.8 percent). On the other hand, non-bank financial intermediaries accounting for 27.1 percent of total assets of the financial system at the end of 1997.

In 1999, number of financial institution was 58 which comprised of 21 domestic commercial bank, 25 finance companies and 12 merchant banks. Obviously, Malaysia was over-banked, leading to inefficient use of resources and duplication of resources and infrastructure of domestic market. As a result of liberalization and globalization, Malaysian banking system has undergone a lot of structural changes. In addition, Malaysia was affected by the currency crisis and financial crisis, started with descend of Thai Baht in July 1997, pushing a sharp impact of recession on Malaysia (BNM, 1999).

Due to globalization, the banking industry is expected to be more dynamic and competitive in their future operating environment. Thus, banking institutions are encouraged to increase their competitiveness in term of enhancing operational efficiency and become more innovative in developing competitively priced financial products. They also need to realize the need to serve the sophisticated needs of consumers and businesses nowadays. Before the financial turmoil, in late of 1997, Malaysian banking sector was stable and outstanding. However, finance companies have been over exposed to broad property and consumption credit. Besides, banks have also overextended themselves to politically well-connected corporate entities backed by volatile assets in the form of shares and real estate. The value of non-performing loans (NPLs) for the financial institutions also increased, with the increase for finance companies and merchant banks substantial compared to commercial banks (Soo Nam Oh, n.d.).

With response to the financial crisis, several policy measures were implemented to limit the amount of credit to the more volatile sectors of the economy, in order to reduce the high credit growth and to enhance financial disclosure by financial institutions. One of the policies that have been proposed by the government to promote economic recovery was the consolidation of banking system to resolve weaker bank institutions that had been badly affected during the financial crisis (refer to Figure 1 in page 6).

The merger program for domestic banking institutions was announced by Bank Negara Governor, Tan Sri Ali Abul Hassan Sulaiman on 29 July 1999. On 14 February 2000, Bank Negara Malaysia launched the consolidation program, where 58 institutions would be merged into ten anchors banking groups, comprising at least a commercial bank, a finance company and a merchant bank for each anchor bank group. In 2004, number of financial institution was 26 which comprised of 10 domestic commercial banks, 6 finance companies and 10 merchant banks. The 10 anchor banks are Maybank Bhd, Bumiputra-Commerce Bank Bhd, RHB Bank Bhd, Public Bank Bhd, Arab-Malaysian Bank Bhd, Hong Leong Bank Bhd, Perwira Affin Bank Bhd, Multi-Purpose Bank Bhd, Southern Bank Bhd and EON Bank Bhd (refer to Table 1 in page 4 and 5).

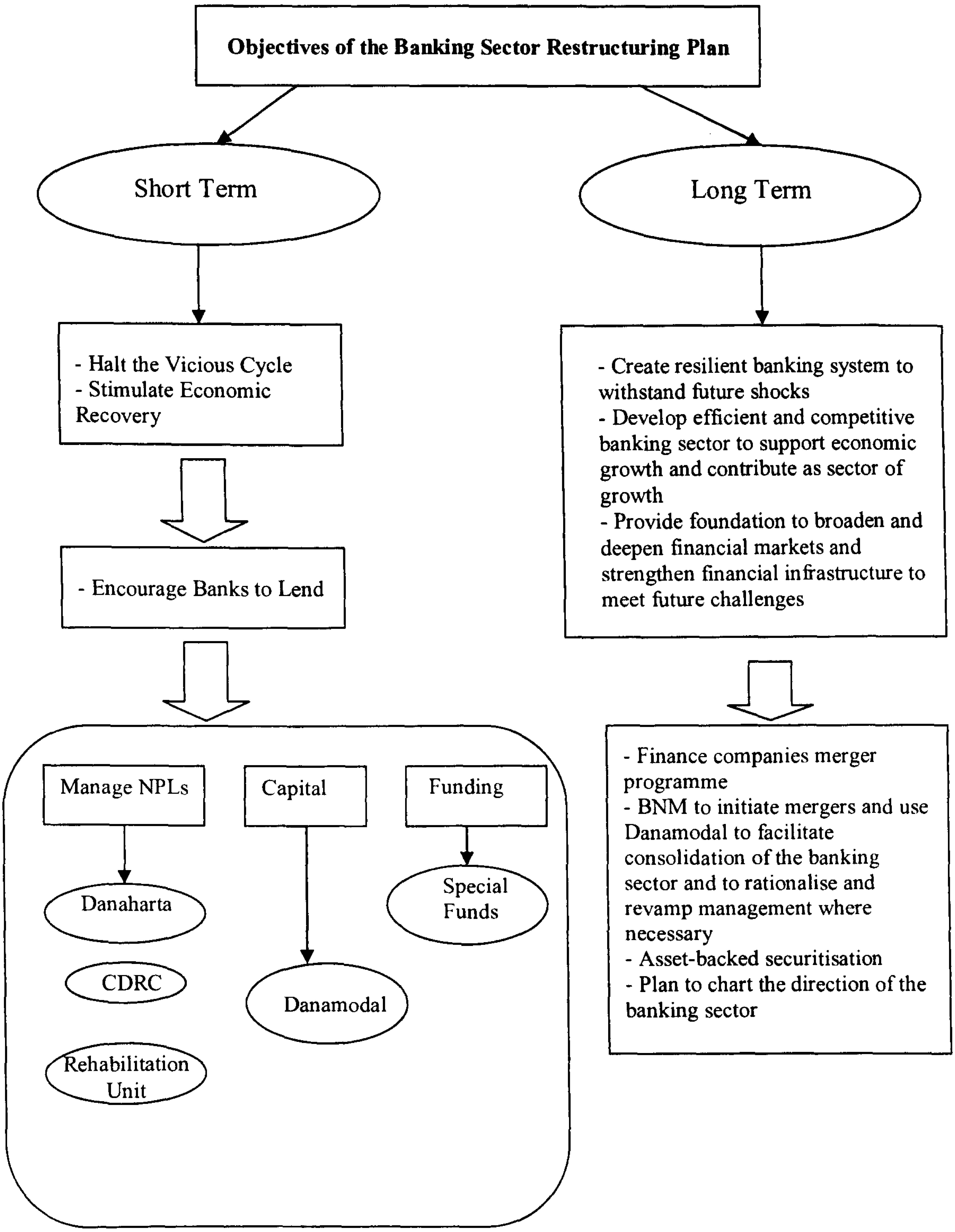
Table 1: The merging of local banks institution

Original Banking Group	Merged with	Entity after merging
1. Affin Bank Bhd Perwira Affin Bank Bhd Affin Finance Bhd Perwira Affin Merchant Bankers Bhd	BSN Commercial Bank Bhd BSN Finance Bhd BSN Merchant Bank Bhd.	Affin Bank Berhad Affin ACF Finance Berhad Affin Merchant Bank Bhd
2. Alliance Bank Bhd Multi-Purpose Bank Bhd	International Bank Malaysia Bhd Sabah Bank Berhad Bolton Finance Bhd Sabah Finance Bhd Bumiputra Merchant Bankers Bhd Amanah Merchant Bank Bhd	Alliance Bank Bhd Alliance Finance Bhd Alliance Merchant Bhd
3. Arab Malaysian Bank Bhd Arab-Malaysian Bank Bhd Arab-Malaysian Finance Bhd Arab-Malaysian Merchant Bank Bhd	MBf Finance Bhd	Arab-Malaysian Bank Bhd Arab-Malaysian Finance Bhd Arab-Malaysian Merchant Bank Bhd
4. Bumiputra-Commerce Bank Bhd Bumiputra-Commerce Bank Bhd Bumiputra-Commerce Finance Bhd Commerce International Merchant Bankers Bhd.		Bumiputra-Commerce Bank Bhd Bumiputra-Commerce Finance Bhd Commerce International Merchant Bankers Bhd.
5.EON Bank Bhd EON Bank Bhd EON Finance Bhd	Oriental Bank Bhd, City Finance Bhd Perkasa Finance Bhd Malaysian International	EON Bank Bhd EON Finance Bhd Malaysian International Merchant Bankers Bhd.

	Merchant Bankers Bhd.	
6. **Hong Leong Bank Bhd** Hong Leong Bank Bhd Hong Leong Finance Bhd	Wah Tat Bank Bhd Credit Corporation Malaysia Bhd.	Hong Leong Bank Bhd Hong Leong Finance Bhd
7. Malayan Banking Bhd Malayan Banking Bhd Mayban Finance Bhd Aseambankers Malaysia Bhd	PhileoAllied Bank Bhd Pacific Bank Bhd Sime Finance Bhd Kewangan Bersatu Bhd.	Malayan Banking Bhd Mayban Finance Bhd Aseambankers Malaysia Bhd
8. Public Bank Berhad Public Bank Bhd Public Finance Bhd	Hock Hua Bank Bhd Advance Finance Bhd Sime Merchant Bankers Bhd.	Public Bank Bhd Public Finance Bhd Public Merchant Bank Bhd
9. Utama Bank Bhd (now known as RHB Bank Bhd) RHB Bank Bhd RHB Sakura Merchant Bankers Bhd	Delta Finance Bhd Interfinance Bhd	RHB Bank Bhd RHB Delta Finance Bhd RHB Sakura Merchant Bankers Bhd
10. Southern Bank Bhd Southern Bank Bhd	Ban Hin Lee Bank Bhd Cempaka Finance Bhd United Merchant Finance Bhd Perdana Finance Bhd Perdana Merchant Bankers Bhd.	Southern Bank Bhd Southern Finance Bhd Southern Investment Bank Bhd

(Source: Bank Negara Malaysia Annual Report, 2001)

Figure 1: Objectives of the Banking Sector Restructuring Plan



(Source: Bank Negara Malaysia Annual Report, 1998)

1.2 Malaysia Banking System

Malaysia banking system consists of Bank Negara Malaysia, banking institutions and other financial institutions. Banking institutions consists of commercial banks, merchant banks and finance companies.

1.2.1 Bank Negara Malaysia

Bank Negara Malaysia (Central Bank of Malaysia) was established in January 1959, in line with the Banking Ordinance 1958 (revised to the Central Bank of Malaysia Act in 1994). Its main function is to supervise and regulate banking and related activities in Malaysia. Bank Negara Malaysia also helps to develop the institutions and infrastructure that are the foundations of a modern and solid financial system.

Objectives of Bank Negara Malaysia are;

i. to ensure monetary stability and a stable financial structure
ii. to function as the Government's banker and financial adviser
iii. to be the sole authority issuing currency in the country and to maintain appropriate currency reserves
iv. to affect the general credit situation so as to benefit the country's economy.

Over the years, the roles and responsibilities of Bank Negara Malaysia have evolved and expanded. Today, Bank Negara Malaysia focuses on the three pillars of central banking, namely monetary stability, financial stability and the payments system. In addition, the developmental role of Bank Negara Malaysia has been emphasized with respect to economic management, institutional building and the development of the financial system (Source: www.bnm.com.my).

1.2.2 Commercial Banks

A commercial bank is a type of financial intermediary and a type of bank. It raises funds by collecting deposits from businesses and consumers via checkable deposits, savings deposits, and time (or term) deposits. It makes loans to businesses and consumers. It also buys corporate bonds and government bonds. Its primary liabilities are deposits and primary assets are loans and bonds. The examples of commercial banks in Malaysia are Bumiputra-Commerce Bank Bhd, Public Bank Bhd and RHB Bank Bhd.

Commercial banks are the largest banking system in terms of total assets, total loans and total pre-tax profits. A commercial bank's objective is to make a profit by intermediating between depositors (savers) and borrowers (investors), and this requires management of their different liquidity, maturity, and risk preferences.

The roles of commercial banks are;

i. Commercial banks must be able to evaluate a borrower's creditworthiness and monitor performance.

ii. Commercial banks are fundamental to a developed economy, and are unintentional agents of monetary policy.

iii. Because of moral hazard and the risk of contagion, banks also exist in a much regulated environment.

iv. Banks must be able to forecast the effects of government policy on overall economic activity, interest rates, and risk in order to best manage their depositors' money.

(Sources: Bank Negara Malaysia and www.wikipidea.org)

1.2.3 Finance Companies

Finance companies are the second largest financial institutions in Malaysia in term of deposits and total assets. The examples of finance companies in Malaysia are EON Finance Bhd, Hong Leong Finance Bhd and Arab-Malaysian Finance Bhd.

Finance companies businesses are defined as below;

i. To accept deposits on deposit account, saving account or similar account with it

ii. Loans

iii. Lease business or trade business; and

iv. Other business that arrange by Bank Negara Malaysia with the permission from Finance Minister.

1.2.4 Merchant Banks

Merchant banks begin to emerge in Malaysia banking system in 1970's. Merchant banks involved in the short-term money market and capital raising activities including underwriting, loans syndication, corporate finance and management advisory services, arranging for the issue and listing of shares, as well as investment portfolio management.

Merchant banks are established specially to meet the needs of corporate sector. Thus, most of its operation depends on the consultant service and management offered to the corporate bodies, in addition with giving loans and receives deposits in whole. The examples of merchant banks in Malaysia are Alliance Merchant Bank Bhd and Arab-Malaysian Merchant Bank Bhd.

1.3 Problem Statement

Malaysian financial system can be structured into two broad groups namely the banking system and the non-bank financial intermediaries. Malaysia banking system consists of Bank Negara Malaysia, banking institutions (commercial banks, merchant banks and finance companies) and other financial intermediaries. On the other hand, non-bank financial intermediaries comprises of 5 groups of institutions, which are provident and pension funds, insurance companies, development finance companies, savings institutions and other non-bank financial intermediaries.

Initially, when Bank Negara Malaysia announced the consolidation of banks, the shareholders of banking institutions were not interested with the idea as they more focused in protecting their interest. These institutions were also badly hit by the 1985-1986 recession as they were burdened with high levels of non-performing loans (NPLs). In addition, they were also affected by the impact of over-lending to the property sector and exposure to share-based lending during the earlier boom years.

Due to the losses, Bank Negara Malaysia had come out with a rescue scheme to maintain integrity of public savings and the stability of the financial system. In this rescue scheme, Bank Negara Malaysia acquires shares in some of the ailing commercial banks, while the stronger finance companies absorbed the assets and liabilities of the inefficient finance companies. The number of finance companies was reduced from 47 to 40 as a result of the rescue scheme. The merger of one commercial bank and the consolidation of the finance company industry were driven by the rescue scheme in order to restore stability in the banking sector. The implementation of the rescue scheme was a costly experience to the nation. There are 71 banking institutions in the country and 2,712 branches located all over the country. Obviously, Malaysia was over-banked and caused wasting of some resources due to duplication of branches in the same locality (BNM, 2001).

In July 1997, Malaysia was affected by the currency and financial crisis which was caused by the currency speculators. It began with the decreased of Thai Baht, and further on pushing a sharp impact of recession in Malaysia. Against this matter, a comprehensive restructuring plan was implemented during the second half of 1998. One of the policies that had been proposed by the government to promote economic recovery was the consolidation of banking system to resolve weaker bank institutions during the financial crisis.

The merger program for domestic banking institutions was announced by Bank Negara Governor, Tan Sri Ali Abul Hassan Sulaiman on 29 July 1999. He emphasized that merger exercise will not weaken the financial strength of the merged entities. Moreover, the creation of 10 anchor banks will ensure that the domestic banking institutions will be able to handle pressures and challenges arising from an increasingly competitive global environment and globalization. These supported the government's policy to rationalize businesses towards higher productivity. Business consolidation through merger is a common practice globally to achieve economies of scale and higher productivity. This is because banks must merge to survive and faced of greater competition, especially in this era of globalization.

Moreover, World Trade Organization (WTO) had encouraged countries to open up their financial markets to allow entry of foreign banks. Malaysia cannot be excepted as all countries are now moving towards consolidating their banking system. In fact, Malaysia cannot be seen to fall backward in the consolidation of the banking industry. The process of getting the banks to merge in Malaysia started in mid-1980s as a result of economic recession. Table 2 shows the slow reduction in the number of banking institutions.

Table 2: The number of banking institutions

	1980	1990	1997	1999
Commercial banks:				
• **Domestic**	21	22	22	21
• **Foreign**	17	16	13	13
Finance Companies	47	45	39	25
Merchant banks	12	12	12	12
TOTAL	**97**	**95**	**86**	**71**

(Source: Bank Negara Malaysia, 1999)

In addition, IMF too has forced countries under their programmes (Indonesia, Thailand and South Korea) to reduce the number of banking institutions by effectively closed them down. However, Malaysia does not believe with IMF prescription to shut down the problem banks, as the social costs involved in terms of dislocation of resources are high. Thus, Malaysia came out with a more reasonable approach, guided merger, with the central bank playing a proactive role in solving the issues involved and the principle of fairness will be strictly applied to all parties in the merger. This is because, without the merger, the small non-Bumiputra financial institutions are likely to disappear as a result of globalization and increased competition. As at 31 December, 2000, 50 out of 54 domestic banking institutions were consolidated into 10 banking groups (BNM, 2001).

With the government initiative to merge all banks into 10 anchor banks, it will be very interesting to investigate on the issue of productivity, effectiveness of the banking sector after the program being introduced. This study is to see whether the effectiveness of the banking sector increase or decrease after merger. However, it will focus on productivity of commercial banks, merchant banks and finance companies (1993-2004) as it are the main components of the banking sector.

1.4 Objectives

The general objective of this study is to investigate the productivity of Malaysia's banking sector within pre and post merger.

The specific objectives are;

i. to examine the productivity efficiency of commercial banks, merchant banks and finance companies in Malaysia before and after merger (1993-2004).

ii. to study the implications of merger on Malaysia's banking sector.

iii. to identify sources of productivity efficiency (efficiency changes or technical changes).

1.5 Rational of the Study

Merger can be defined as a transaction in which the assets of one or more firms are combined in a new firm. Bank Negara Malaysia (BNM) proposed merger programme for the domestic banking on July 29, 1999. One of the reasons for the bank merger was to promote economic recovery and resolve weaker bank institutions that had been badly affected during the financial crisis. Consequently, it also ensures that the domestic banking institutions will be able to handle pressures and challenges arising from an increasingly competitive global environment and globalization. These supported the government's policy to rationalize businesses towards higher productivity.

Generally, productivity of bank is important to generate the economy. Hence, the merger policy gives big impact towards the future of Malaysia's banking sector. Thus, this study is carried out to analyze the bank merger effectiveness in Malaysia's banking sector (as this merger had been implemented for almost five years). Besides, this study is attempt to investigate whether the productivity of banking sector increase or decrease after the bank merger (through efficiency score and changes in total assets, interest expenses, operation cost, number of branches, number of workers, etc). In addition, the purpose of this research is to investigate to what extent the restructuring of banking system affects the productivity of Malaysia's banking sector in facing the global challenges.