UNIVERSITI PUTRA MALAYSIA

PRODUCTIVITY GROWTH
AMONGST MALAYSIAN FINANCE COMPANIES, 1988-1996

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By

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Productivity measures are indicators of success, by which the performance of any individual finance company as well as the industry can be gauged. There have been rapid changes in financial industry structure occurring around the world since 1970's. In Asia, countries are restructuring banking regulations and encouraging financial liberalization, in an attempt to increase financial industry efficiency. The financial industry has also undergone multiple growth in new products and facilities in recent years as a result of advances in technology and telecommunications. These developments would have an impact on the competitiveness and hence on the performances of any financial institutions, particularly the Malaysian finance companies.

The aim of this study is to investigate the productivity growth amongst the finance companies in Malaysia from 1988 to 1996. In this context, the study attempts to evaluate the technical efficiency, efficiency change, technical change and productivity of finance companies using the Malmquist index approach and Data Envelopment Analysis. The study of this kind is particularly important to the producers, depositors or customers, investors as well as legislators.

The results indicate that during the period of this study, there is an improvement in productivity of Malaysian finance companies. The productivity growth is mainly associated with the technical change effect rather then technical efficiency change. It also appears that the trend rate of productivity growth accelerated significantly after 1991, following the earlier recession. The results support the Central Bank's call for the financial consolidation of the finance companies.

Abstrak tesis yang telah dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains.

PERTUMBUHAN PRODUKTIVITI DI KALANGAN SYARIKAT KEWANGAN DI MALAYSIA, 1988-1996

OLEH

HAZLINA ABD KADIR

July 2001

Pengerusi : **Profesor Madya Muzafar Shah Habibullah, Ph.D**

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Pengiraan produktiviti merupakan salah satu daripada cara untuk mengukur sejauh mana prestasi sesebuah syarikat kewangan. Selain daripada itu, perkembangan industri kewangan keseluruhannya boleh juga diperolehi melalui pengiraan produktiviti. Semenjak tahun 1970an, perubahan pesat telah berlaku di dalam industri kewangan di seluruh dunia. Di Asia, contohnya, banyak negara yang telah menggubal struktur undang-undang perbankan mereka dan telah menggalakkan liberalisasi kewangan di dalam usaha untuk meningkatkan kecekapan sistem kewangan negara masing-masing. Kebelakangan ini pula, didapati industri perbankan telah mempelbagaikan produk bank masing-masing disamping peningkatan kemudahan perbankan rentetan penggunaan teknologi dan sistem telekomunikasi yang terkini. Perkembangan tersebut mungkin mempunyai kesan kepada daya saing dan juga prestasi mana-mana institusi kewangan, termasuklah syarikat kewangan di Malaysia.

Oleh itu, kajian ini telah dijalankan dengan tujuan untuk mengenalpasti tahap pertumbuhan produktiviti di kalangan syarikat kewangan di Malaysia. Di dalam konteks ini, kajian ini ingin menentukan tahap kecekapan teknikal, perubahan kecekapan, perubahan teknikal, dan produktiviti di kalangan syarikat kewangan di Malaysia menggunakan indeks Malmquist dan "Data Envelopment Analysis". Kajian seperti ini adalah penting kepada pengeluar, pendeposit atau pelanggan, pelabur dan juga penggubal undang-undang.

Keputusan kajian menunjukkan tahap produktiviti di kalangan syarikat kewangan di Malaysia telah meningkat di antara tahun 1988 ke 1996. Punca utama kepada peningkatan ini adalah disebabkan oleh peningkatan perubahan teknologi. Keputusan kajian ini juga mendapati, aliran kadar pertumbuhan daya pengeluaran syarikat kewangan di Malaysia telah meningkat dengan ketara selepas tahun 1991 apabila berakhirnya kemelesetan ekonomi yang bermula pada tahun 1985 . Keputusan kajian ini menyokong langkah Bank Negara Malaysia menggalakkan penggabungan syarikat kewangan di Malaysia.

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LIST OF ABBREVIATIONS

ADV	Advance Finance Berhad
AFFIN	Affin Finance Berhad
ARAB	Arab-Malaysian Finance Berhad
ASIA	Asia Commercial Finance (M) Berhad
BNM	Bank Negara Malaysia
BUMI	BBMB Kewangan Berhad
BOLTON	Bolton Finance Berhad
BSF	Boon Siew Finance Berhad
CCM	Credit Corporation (M) Berhad
CEMPAKA	Cempaka Finance Berhad
CGL	Chew Geok Lin Finance Berhad
CITY	City Finance Berhad
DEA	Data Envelopment Analysis
DELTA	Delta Finance Company Berhad
DFA	Distribution Free Approach
EON	EON Finance Berhad
FDH	Free Disposal Hull
HHF	Hock Hua Finance Berhad
HLF	Hong Leong Finance Berhad
HSBC	HSBC Finance (M) Berhad
INTERF	Interfinance Berhad
KBB	Kewangan Bersatu Berhad
KYF	Kwong Yik Finance
MAYBAN	Mayban Finance Berhad
MULTI	Multi Purpose Finance Berhad
OCBC	OCBC Finance Berhad
ORIENTAL	Oriental Finance Berhad
OUB	Overseas Union Trust (M) Berhad
PERDANA	Perdana Finance Berhad
PHILLEO	Philleo Allied Finance Berhad
PUBLIC	Public Finance Berhad
RHB	RHB Finance Berhad
SFA	Stochastic Frontier Approach
SIME	Sime Finance Berhad
SOUTHERN	Southern Finance Company Berhad
TFA	Thick Frontier Approach
UMF	UMBC Finance Berhad
UOF	United Overseas Finance (M) Berhad

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The purpose of this chapter is to introduce the central theme of this study. This study aims to investigate the productivity growth amongst finance companies in Malaysia. In this context, the study attempts to evaluate if there are any differences in the productivity of finance companies from 1988 to 1996. This study will also identify the sources of productivity changes, is it due to technical change or is it due to efficiency change? These will be accessed using the Malmquist productivity index.

This chapter is divided into four sections. Section 1.2 presents the problem statement, highlighting a brief background to the research. This is followed by Section 1.3, the statement of the intended research objectives. The conceptual framework and general hypotheses are introduced in sections 1.4 and 1.5 respectively. The justification of the study is discussed in section 1.6; while, section 1.7 provides the significance of the study. The last section of this chapter highlights the limitation of the study.

1.2 Problem Statement

The financial industry in most economies is so critical that it attracts much attention from the public as well as regulatory authorities. According to Yue (1992), financial institutions perform intermediation functions and consequently influence the level of money stock through their ability to create deposits liabilities. It is critical for depositors, regulators and the public at large to have vested interest in the performance of financial institutions. The study of productivity helps to appraise their performance and provide some insights to which area their productivity and efficiency can be improved.

The banking industry has undergone multiple growth in new products and facilities in these recent years as a result of advances in technology and telecommunications. Technology has contributed to redefining and enhancing bank products so that the banks become more efficient in their daily operations. Starting with the introduction of Automated Teller machine, (ATM), more new bank services such as telephone banking centers, PC banking, direct debit Visa or MasterCard, and Internet Banking are now widely used by many banks. PC banking and Internet banking, provides enormous advantages for the financial institutions, in particular, to reduce cost, increase speed and improve flexibility of business transactions. In addition, the advent of electronic-banking and e-commerce are reshaping the financial institutions by altering their internal operations and their interactions with the customers (Guru and Shamnugam, 1998). These rapid developments would surely have implications on the performance in general and productivity in particular, of Malaysian finance companies.

Bank Negara Malaysia has stressed to the banking industry, the need for management to play a more effective role in ensuring the financial health of their respective banking institutions. To this extent, recently, BNM has been encouraging the consolidation of the finance industry so that these financial institutions can be highly concentrated and reap the rewards of franchise strengths. The main rationale for change is that the globalization of markets and liberalization of the Malaysian financial sector are inevitable trends. Malaysian financial institutions will face unfettered competition from large foreign multinational banking institutions when our country fully liberalizes the domestic financial services sector (Phuah, 1997).

Mergers and acquisitions may not only leads rise to economies of scale or diversification, but would also benefit bank consumers due to newly merged finance companies being able to take advantage of new technologies or better management and hence providing better products and services at lower costs. In the United States, many of the recent mergers have occurred between profitable banks and bank(s) that are struggling. If the more profitable bank is more efficient and imposes its production structure on the less efficient bank(s), then not only does the consumer gain, but so would the bank owners (English *et al.*, 1993).

In addition, the banking crisis in the mid-1980s had clearly highlighted the vulnerabilities of the weaker banking institutions which are not adequately capitalized to withstand shocks. Against this backdrop, BNM has always recognized the importance of and the need for consolidation in the banking sector in order to attain the critical mass to meet the demands of the changing domestic economic structure, future challenges from globalization and liberalization as well as to contribute towards sustainable economic growth.

A major prerequisite to be able to adjust and adapt to this changing environment is the development of a sound and strong financial system and institutions. For the banking institutions, in rising to this challenge, greater focus on improving efficiency and competitiveness need to be accorded. The importance of achieving critical size, through merger and consolidation of the banking sector, would assume greater significance in order for banking institutions to be able to reap the gains from economies of scale and reduce costs and excess capacity to remain efficient and competitive.

There is yet a comprehensive study on the performance of financial services industry especially in Malaysia, despite the many changes occurred in the banking industry lately. A few studies conducted so far in the Malaysian financial sector tended to subsume industry under the heading of the banking sector as a whole. Therefore, this study is carried out due to the increasing importance of finance industry to Malaysian economy. This study is also useful as a basis for future research in Malaysian finance companies.

1.3 Objectives of the Study

The main objective of this study is to investigate the performance of the finance companies in Malaysia from 1988 to 1996 using the Malmquist productivity index.

The specific objectives of this study are as follows:

i. to access the productivity growth amongst finance companies from 1988 to 1996;
ii. to investigate the source of productivity changes amongst Malaysian finance companies;
iii. to evaluate yearly performance of finances companies in terms of their efficiency, technical efficiency change, technical change as well as productivity change;
iv. to identify best practice finance companies in relations to their efficiency, technological progress, technical efficiency change and productivity, and
v. to compare the productivity, technical change and technical efficiency of finance companies with different asset sizes.

1.4 Significance of the Study

Realizing the multiplicity of financial institution products and in line with the strategic thrust of enhancing competitiveness to meet the challenges of globalization, it is crucial to access and monitor the performance of the financial institutions. The quest for greater efficiency and productivity is never ending as finance companies top management is always under pressure to improve the performance of their companies. Efficiency and productivity study can provide a benchmark of the performance of any individual finance companies in Malaysia as well as the industry as a whole.

The analysis done can compare the relative efficiency, technical efficiency change, technical change and productivity of individual finance companies. There can be considerable differences in the way which individual finance companies combine inputs to produce outputs. In addition there may be differences in potential between finance companies caused by the technology which they have available with them. Using selected variables, this study will identify the best, average and less performers amongst the finance companies. Thus, the efficient and productive finance companies can maintain same level of production, while the less efficient and less productive need to strive for better allocation of resources.

The result obtained can also give an insight on the area that the finance companies need to enhance in order to increase the productivity. Should the finance companies adjust the level of resources such as cutting the operating costs and hiring fewer staff to be more efficient? In terms of technology, this study will access the progress in technology growth. As such, we can identify which finance companies has successfully implemented and used the technology that later lead to increase productivity.

The lesson that has been learnt from the current economic turbulence is that only the fit will survive. In the context of finance companies fitness certainly refers to efficiency and productivity. Thus, the findings of this study would certainly be useful for both finance companies management and policy makers. The result obtained may assist the finance companies and Bank Negara Malaysia, in its efforts to provide the necessary policies to maintain profitability and competitiveness in addition to solvency of finance companies in Malaysia.

1.5 Limitations of The Study

Data from banking sources are difficult to procure. Bankers are guided by legislation to maintain secrecy, and they normally do not dispense freely with information regarding their banking activities. In addition, there is no serious move made by any institutional body or individual to capture data relating to financial institutions in Malaysia. When any finance companies merged, data of earlier finance companies are no longer be available and attainable. The sample for this study includes only 32 finance companies because of limited data available. The data was extracted mainly from annual reports of respective finance companies. Some of the companies may has merged, or resolved during the period of study, thus dropped from the analysis. The accuracy and reliability of the data are highly dependent of the credibility of individual finance companies' reporting.

This study used balance sheet data. Consequently, off-balance sheet activities were ignored. The measures of output do not take quality into account. In particular, neglecting the risk factor, especially for loans (Carlo and Luca, 1995). In addition, financial institutions differ in their definition of financial year-end. Some close their year in March and others in June, October or December. Since this study based on cross-sectional data, such time-lag differences will create a built-in overlap in the data set. To certain extant, this has been minimized, by applying the 'rule of proximity', that is the month of March is considered to be December of the previous year while June and September are considered December of the current year.

In addition, operations and focus of any finance companies may be different. Some finance companies may have their own captive market, for instance, EON Finance, which mainly cater for hire purchase of Malaysian car, which highly differentiate one finance companies to another. Meanwhile, the definition of inputs and output of financial institutions has continued to be a controversial debate. Clark (1984) noted that there is no general consensus regarding the appropriate definition of bank output. This lack of consensus reflected in diversity measures of output employed in