



UNIVERSITI PUTRA MALAYSIA

**FINANCIAL LIBERALIZATION AND PRODUCTIVITY AMONG
COMMERCIAL BANKS AND REGIONAL DEVELOPMENT BANKS
IN INDONESIA**

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IN INDONESIA**

By

MA'MUN ZUBERI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science.

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Since the government of Indonesia liberalized the financial system in 1988, the number of banks and branch office networks grew rapidly, new financial products and services were introduced, electronics banking were developed, and 24-hour bank services were accessible. The financial liberalization has successfully brought about the financial market to be more competitive, which in turn exerts banks to improve their performance.

Prior to financial liberalization, state owned commercial banks and state owned regional development banks were both accorded certain privileges by the Bank of Indonesia (BI). Among the privileges were extensive branch networks, access to Bank Indonesia (BI) regarding to liquidity credit at subsidized rate, and the exclusive right to receive public enterprise deposits. These privileges were not extended to other group of banks even though they operate in the same market. Therefore, the liberalization of the financial system has mostly affected the state owned commercial banks and the state owned regional development banks compared to other groups of banks.



The objective of this study is to investigate the overall productivity of the state owned commercial banks and the state owned regional development banks in response to the financial liberalization over the period of 1987 to 1996. The research evaluates banks' technical efficiency, isolates the contributions of each component of productivity stemming from efficiency change, technical change, and return to scale of technology. For that purpose, this study used data envelopment analysis (DEA) to estimate the technical efficiency and Generalized Malmquist Productivity Index (GMPI) to measure productivity.

The result of study shows that the overall productivity of both state owned commercial banks and state owned regional development banks declined following financial liberalization. The state of decline in productivity of state owned commercial banks is mainly associated with the decline of technical efficiency change. On the other hand, state of decline in productivity of state owned regional development banks is particularly associated with technical regress. However, there is no clear deterioration pattern of productivity amongst the state owned regional development banks. In terms of efficiency, this group of banks experienced improvement following financial liberalization.

In general, the result weakly supports that financial liberalization brings about improvement of the performance of state owned commercial banks and state owned regional development banks. However, the outcomes of financial liberalization could possibly be better if its implementation was sequenced after the restructuring of the financial systems such as by enforcing prudential measures (capital adequacy ratio, CAR).



**Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
Sebagai memenuhi keperluan untuk ijazah Master Sains**

**LIBERALISASI KEWANGAN DAN PRODUKTIVITI BANK PERDAGANGAN
DAN BANK PEMBANGUNAN DAERAH DI INDONESIA**

Oleh

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Sejak kerajaan Indonesia meliberalisasikan sistem kewangan pada tahun 1988, jumlah bank serta cawangannya meningkat, banyak produk dan perkhidmatan kewangan baru telah diperkenalkan, kemudahan perbankan elektronik semakin meningkat dan hampir semua bank dapat memberikan perkhidmatan kewangan 24 jam. Liberalisasi kewangan telah berjaya membawa pasaran kewangan menjadi lebih dinamik dan kompetitif yang memaksa bank untuk meningkatkan kecekapan operasinya.

Sebelum liberalisasi kewangan, bank perdagangan dan bank pembangunan daerah milik kerajaan telah banyak mendapat kemudahan dari Bank Indonesia. Diantaranya adalah kemudahan dibidang perluasan cawangan, bantuan kredit yang berfaedah rendah, dan hak untuk menerima deposit dari syarikat kerajaan. Kemudahan-kemudahan tersebut tidak diberikan kepada bank bukan kerajaan meskipun mereka beroperasi di pasaran kewangan yang sama. Oleh kerana itu, liberalisasi kewangan ini dapat mempengaruhi kecekapan operasi bank perdagangan kerajaan dan juga bank pembangunan daerah.



Oleh itu, kajian ini telah dijalankan dengan tujuan untuk mengenal pasti kesan liberalisasi kewangan terhadap produktiviti bank perdagangan kerajaan dan bank pembangunan daerah antara tahun 1987 ke 1996. Kajian ini juga ingin menentukan kecekapan teknikal dan memisahkan peranan setiap komponen produktiviti yang disebabkan oleh perubahan kecekapan teknikal, perubahan teknikal dan skala pulangan teknologi di kalangan bank perdagangan kerajaan dan bank pembangunan daerah di Indonesia dengan menggunakan analisis data envelopment (DEA) dan Generalized Malmquist Productivity Index (GMPI).

Keputusan kajian menunjukkan bahawa pertumbuhan produktiviti di kalangan bank perdagangan kerajaan dan bank pembangunan daerah mengalami penurunan setelah liberalisasi kewangan. Punca utama kepada penurunan ini adalah disebabkan oleh turunya perubahan kecekapan teknikal untuk bank perdagangan kerajaan dan penurunan perubahan teknikal untuk bank pembangunan daerah. Bagaimanapun, pola penurunan produktiviti pada kelompok bank pembangunan daerah ini tidak jelas. Dari segi kecekapan teknikal, kelompok bank pembangunan daerah ini mengalami peningkatan yang nyata setelah liberalisasi kewangan.

Secara umum, keputusan kajian kurang menyokong bahawa liberalisasi kewangan membawa peningkatan kecekapan bank perdagangan kerajaan dan bank pembangunan daerah. Namun demikian, kesan liberalisasi kewangan ini kemungkinan lebih baik kalau ianya diwujudkan setelah penstrukturan semula kewangan seperti penguatan prinsip kehati-hatian bank (nisbah kecukupan modal, CAR).

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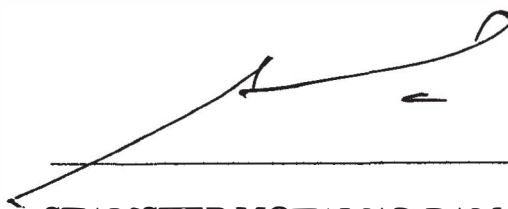
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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.



MA'MUN ZUBERI

Date: **28-02-2003**

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CHAPTER I

INTRODUCTION

The rigid financial regulations often cause the financial systems to be unresponsive to the needs of national economies especially in times and situations when market conditions change rapidly (or are volatile). The changes in the already dynamic market condition due to the change of development in the technological communications, electronic banking, and massive capital flows (as a result of opening up of capital accounts), globalization in the financial system, innovation in the financial instruments have exerted pressure for a more liberal financial system.

Most developed and developing countries undergo such lagging between the rigid financial regulation and the dynamic market conditions, including Indonesia. Consequently, such regulation could not adapt to the rapidly changing dynamic market conditions and ultimately create distortion and was counter productive to the development of the financial system. In response to such changes in market conditions, Indonesia has made some gradual adjustments in macroeconomic policies particularly relating to the development in the financial system, namely financial liberalization.



1.1 The Circumstances and Factors Pressuring for Financial Reform

In the early 1980s, Indonesia experienced some pressures from external shocks, among others, the downward adjustments of the oil price and the worldwide recession, which in turn brought about unfavorable effect to Indonesia's balance of payments and fiscal balance. The current account deficit reached 7.8 per cent of GDP, while oil-tax receipts fell to 13 percent in real terms during the fiscal year April to March 1982/83.

In response to these shocks, the government undertook a series of macroeconomic adjustment. The government devaluated rupiah by 38 percent and subsequently brought the real exchange rate back to its 1978 level to spur non-oil exports. However, in the effort to increase rupiah revenues in the budget, the government cut down on current expenditure and domestic subsidies to oil, public enterprise and food. In addition, the banking sector considered reducing liquidity credit (Hanna, 1994).

In 1986, the price of oil went downward again and this coupled with the appreciation of the yen, created a severe effect on current account and pushed it into the red. To cope with the current account deficit, the government responded with a combination of exchange rate and fiscal policies to restore the balance of payment as it did in 1983. The sharp devaluation was announced in September 1986, lowering the rupiah by 50 percent. At the same time, the real current government expenditures were cut through freezing salary, reducing subsidies and slowing capital spending.

The fall in oil revenue had exacerbated the old structure of the financial system, which relied on significant recycling of the government's oil revenue through the banking system. As a result, the policy makers were concerned about the need to promote the mobilization of domestic saving/fund to maintain investment in the face of tightening external constraint. Coincided with the fall in oil revenue, the need for restructuring in the financial sector increased due to the pressure of external factors such as the unprecedented ease of international capital flows, the proliferation of new and more sophisticated financial instruments, and the globalization of the financial system. Hence, Indonesia was no longer able to conduct policies independently, thereby exposing their financial sector to external development.

All these factors and circumstances address to one policy prescription to formulate a more competitive financial sector to stimulate the performance of commercial banks and other financial intermediaries in order to be more capable in providing and allocating the financial resources which in turn promote economic growth. To achieve this goal, Indonesia implemented a set of significant financial liberalization and reforms that inevitably affect the conduct of monetary policy. They are June Package of 1983, October Package of 1988, December Package of 1989, and March Package of 1991.

Since then, the financial liberalization has been one of the leading issues and has been subjected to a long-standing debate among economists in Indonesia, especially

regarding its effects on commercial banks and more specifically on the Indonesian state owned banks, which have grown through protected regulation.

1.3 Financial Liberalization in Indonesia

To proactively adjust the institutional environment and regulation to the dynamic market condition, there was a set of financial reforms introduced by the government, namely the June Package of 1983 that particularly emphasized on eliminating credit ceiling and freeing (liberalizing) interest rate. The second stage was the October Package that was put in place in 1988, and considered the opening of market entry restrictions and fostering competitions among commercial banks and financial intermediaries¹. These policy packages were followed by the 1991 Package that strengthened prudential regulations, a process that had first begun with some reforms in 1989. The main features of those financial liberalizations and its impact to the financial structure were as follows:

1.3.1 Freeing Interest Rate and Removing Credit Ceiling (June 1983 Package)

In 1970s, some policy packages were introduced in the financial system of Indonesia. Among the policy packages were the level and structure of deposit and lending rates of state banks, which were controlled by the central bank. The access of rediscount credits at subsidized rates from the central bank among bank ownership groups were

¹ In the literature, these two policy packages (freeing interest rate and opening market entry restriction) are also popularly called the financial liberalization.

different from each other and state banks were favored most. Foreign banks were allowed to lend only to enterprises based in the Jakarta area otherwise, they would have to syndicate with the domestic private banks. In short, starting from 1974 to 1 June 1983, the major instruments of monetary policy implemented in Indonesia were the system of credit ceilings. The main purpose of this policy package was to control the movement of highly volatile inflation rate.

As a result, these policies had succeeded in boosting development efforts and had led to the increase in bank reserves. On the contrary, it has also brought about undesirable effects such as excessive bank liquidity, and discouraged banks especially state-owned banks, to mobilize fund from the public. The banks were heavily dependent on liquidity credit from the central bank. The excessive banks liquidities in the banking system induced capital flight and in turn burdened the balance of payments (Adhikary, 1995).

To cope with such unfavorable consequences, the financial authority introduced a series of basic policies, known as the June 1, 1983 Monetary Policy or June Package. The major feature of this policy was deregulation in the banking sector involving both credit activities and fund mobilization. This policy reduced dependence of state banks on Bank Indonesia's refinancing facility (liquidity credit), provided freedom to state banks to set their own credit policies and removed credit ceilings (Annual Report of Bank Indonesia, 1983).



There were two objectives of the June 1983 package, namely to stimulate banks to maximize fund mobilization from the public, and to reduce the dependence of banks on the central bank for low cost funds in their lending activities. Consequently, the major financial reforms in 1983 had caused significant change in saving mobility as well as financial deepening.

After the reforms in 1983, most of the financial indicators increased significantly. The interest rate increased to the true level, which reflected the true cost of fund for borrowers and attracted more depositors. The interest rate on deposit jumped up to 16 percent level, where prior to freeing interest rate, was only 6 percent. The ratio of quasi-money to gross domestic product (GDP) rose from 6.8 percent in 1982 to 11.35 percent in 1983. This increase, in turn, have stepped up financial deepening as indicated by the increase in the ratio of M2 to GDP from 19.05 percent in 1982 to 23.48 percent in 1984 (Adhikary, 1995).

The financial assets of banks and non-bank financial institutions (NBFI), also increased significantly after the elimination of credit and interest rate ceiling in 1983. Overall financial assets growth in real terms were more than double to 13.2 per cent between 1982 and 1988 compared to its rate between 1978 and 1982 which was only 6.2 per cent. This growth tend continued through out the subsequent periods up to early 2000 (See Table 1.1).

1.3.2 Opening Market Entry Restrictions (October Package 1988)

The October Package of 1988 constituted a further step from the June Package 1983. This package was aimed at encouraging banks to expand their operational network, enhance the services, improve efficiency, and pursue sound banking practices. The contents of this package were the opening of bank offices and the establishment of new banks, which included simplifying the procedures to obtain licenses for the opening of private bank offices, allowing foreign banks to open sub-branch offices, and permitting the establishment of new private national banks, joint-venture banks, and rural banks.

The requirement of opening branch offices was simplified to only operational license, compared to the previous requirement of principle and operational license; the financial authority set the criteria of sound banking practices and minimum capital adequacy. Banks that apply to open a branch should have sound banking practices and operation for at least 20 months during the past 24 months, including meeting the capital adequacy requirement. In addition, the private national banks that wish to open branches are no longer required to merge with another bank.

However, even though all banks operated in the same market, each of the ownership group faced slightly different regulations. Foreign banks that wish to open sub-branch offices have requirement similar to those of national private banks. However, to promote non-oil/gas export, foreign banks were required to fulfill at least 50 percent of

their total outstanding credit as outstanding export credits 12 months after they were granted operational license. In addition, they were allowed to open a branch-office in certain regional province only.

To establish new private national banks and cooperatives banks, the government stipulated the minimum paid-up capital. Each bank was fixed at Rp10 billion where 30 percent must be paid upon the submission of the application for the principle license and the rest must be paid upon the submission of the application for the operational license. To ensure prudential management, the respective's banks were required to pick out the executive personnel who were qualified, experienced in banking practices as well as have a clean record in the banking industry.

To encourage a more competitive market, the government also permits foreign investors to establish joint-venture banks. To establish such banks, foreign banks were required to have representative offices in Indonesia and must be categorized as a major bank in the country of origin. In addition, the country of origin must adopt the reciprocal relationship with the government of Indonesia. The minimum paid-up capital was Rp50 billion. In terms of ownership, the foreign partners were only allowed to own a maximum of 85 percent of the capital investment with the rest 15 percent ownership share to domestic banks.

Having acquired the operational license, joint-venture banks were allowed to serve customers throughout Indonesia and conduct business as foreign exchange banks.

Nevertheless, to support the non-oil/gas export, joint venture banks were also required to extend the share of export credit of at least 50 percent of the total outstanding credit 12 months after the issuance of license for operation (Annual Report of Bank Indonesia, 1988).

As a result of removing market entry restrictions from the banking sector in 1988, the number of banks and the expansion of the offices networks increase rapidly. The expansion has not only occurred within Indonesia but has also reached overseas, especially the world's financial centers. In addition, the policy package has reduced the domination of state banks in Indonesia's financial system.

Prior to the financial liberalization conducted in 1988 the number of banks declined, starting from 1984 until 1988 the number of banks underwent growth of -1.26 per cent, conversely having the Indonesian financial authority conducted opening market entry restrictions in 1988 the number of banks grew rapidly, the average growth from 1989 – 1993 was 17.47 per cent. The peak of growth of the number of banks achieved was one year after financial liberalization conducted that was 34.91 per cent.

However starting from 1994 – 1995 the growth of the number of banks decrease again, the average growth in those years was 1.28 per cent and in 1996 started to decline drastically, the growth of banks reached to the negative level and getting worse having been exacerbated by the financial and currency crises in 1997. Ultimately, the average growth of the number of banks dropped dramatically until -7.17 per cent during 1996 - 2000.

As a result of financial liberalization, the growth in number of branch office networks of banks increased dramatically, the peak of the growth trend was achieved in 1989, 1990, and 1991 or starting one year after financial liberalization, was 48.22 per cent, 38.31 per cent, and 19.52 percent respectively. In the subsequent periods, the growth of branch office networks moved up and down moderately in the range between 4.8 percent and 11.9 percent. However, the growth average of 1992 to 1997 was still high at 7.64 percent, which is higher compared to 5.8 percent during the period of pre-financial liberalizations.

Unfortunately, due to the financial and currency crises spilled over to most of the Asian countries including Indonesia in 1997, the expansion of branch office networks decreased dramatically and even got worse. The growth of branch office networks hit to the negative level again, the growth average in the period of 1998 – 2000 was –5.12 per cent (see Table 1.2).

The financial reforms conducted in 1980s also brought about an increase in economic growth. Starting from 1987, economic growth increased significantly, the GDP growth of this year was 4.9 percent followed by the subsequent periods of 1988 and 1989, the GDP growth were 5.8 percent and 7.5 percent respectively. Up to the early 1990s, Indonesia was enjoying about 7 percent of GDP growth annually and reached the highest level at 8.9 percent in the 1991 (see Table 1.3). Nevertheless, the trend of growth declined in the range of 4.7 percent to 8.8 percent where one year after the