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NON-PERFORMING LOANS AND BANK EFFICIENCY OF CONVENTIONAL AND ISLAMIC BANKS IN OIC COUNTRIES

CHANDRA SETIAWAN

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ABSTRACT

NON-PERFORMING LOANS AND BANK EFFICIENCY
OF CONVENTIONAL AND ISLAMIC BANKS IN OIC COUNTRIES

By

Chandra Setiawan

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Chairman: Professor Shamsher Mohamad Ramadili, Ph.D
Faculty: Graduate School of Management, UPM

Banks are important sources of financing in most developing countries as other sources of financing (i.e., stocks and bond markets) are relatively less developed to cater for the financing required for economic growth. For example, if we were to look into the GCC (the cooperation council for the Arab States of the Gulf) countries: Bahrain, Kuwait, Oman, Saudi Arabia, and United Arab Emirates the amount of domestic credit provided by banking sector (% of Gross Domestic Product) ranges from 36 to 88 percent in the periods from 1995 to 2005 (WDI, World Bank). This is common among most developing countries globally where banks play a dominant role (more than 70% of the financing on average) in the
financial system. This applies to both the conventional banks and the Islamic banking sector that is growing competitively in these countries. Therefore, to discharge their responsibilities effectively, the banking sector must be cost, profit and revenue efficient. Furthermore it has to have an effective mechanism to avoid adverse selection and minimize the amount of non-performing loans (NPL) for the conventional banks and nonperforming financing (NPF) for the Islamic banks. This will consequently help the banking sector to perform better and contribute towards the nation’s economic growth.

This thesis addresses the issue of the relationship between efficiency and NPL/NPF of conventional and Islamic banks and the determinants of the NPL and NPF. Despite the numerous evidences documented so far mainly on the efficiency of conventional banks, there is no comprehensive evidence on the inter-temporal relationships between efficiencies and NPL/NPF of conventional and Islamic banks in OIC countries.

The Data Envelopment Analysis (DEA) approach is used to measure cost, revenue and profit efficiencies of conventional and Islamic banks for the period of 1993 – 2007 for OIC countries (denoted as Middle-East region and Turkey in this study), the Asian, and African.

Overall, the results on efficiencies show that cost efficiency of conventional banks outperform their Islamic banking counterparts for the regions selected: Asian, African, Middle East and Turkey. However, no significant differences were observed for profit efficiency of Islamic banks and profit efficiency of conventional banks in the Asian and the Middle East region and Turkey. The efficiency time lines
show that the cost efficiency behavior is more stable over the sample period in the
different regions and years and dominates the revenue and profit efficiency.
Alongside, the efficiency time lines show that the financial crisis in 1997-1998 had
affected both the conventional and Islamic banks. Overall, both banking streams
have an opportunity to further improve their cost, revenue and profit efficiency.
An analysis on the determinants of cost, revenue and profit efficiencies revealed that
the cost efficiency of both banking streams in all regions is more affected by the
internal determinants (bank-specific variables) than the external factors
(macroeconomic variables). This is due to the fact that cost is under the control of
the management and they have the prerogative to manage cost in the best way
possible.

The revenue efficiency of conventional banks and Islamic banks for total sample is
affected by internal variables. However, revenue efficiency of conventional banks is
more sensitive to external variables compared to their Islamic banks counterparts.
The profit efficiency of conventional banks is more affected by internal variables
compared to external variables compared to profit efficiency of Islamic banks in the
total sample.

The results on the determinants of NPL/NPF of conventional and Islamic banks
support the view that both bank-specific and macroeconomic variables determine the
level of NPL/NPF of conventional and Islamic banks. Therefore, investors could use
these findings to examine the assets quality of banks and the Central Bank could use
this information to develop a framework for measuring and assessing assets quality
– an important element of study on financial stability. The management of banks
should pay attention to some factors that have significant relationships with
NPL/NPF for conventional and Islamic banks when providing loans/financing in order to control the level of impaired loans/financing.

The test results on the inter-temporal relation between bank efficiency (cost and profit), capital and problem loans/financing, as proposed by Berger and DeYoung (1997) support the “bad management” hypothesis for all regions for both conventional and Islamic banks, except for Asian region. This finding indicates that the internal management problem tend to precede the problem loans/financing. The result rejects the ‘bad luck’ hypothesis for conventional banks in all regions. However, the result supports ‘bad luck’ hypothesis for Islamic banks in Asian region and Middle East region and Turkey. This finding implies an increase in NPF precedes the decrease in cost efficiency of Islamic banks, problem financing of Islamic banks may be driven by uncontrollable external or exogenous factors. The ‘skimping’ behavior also supported by the findings for all regions for both Islamic and conventional banks except for both stream of banks in the African region.

The findings also support the ‘moral hazard’ hypothesis for both the conventional and Islamic banks in all regions except Africa. This implies that there is a possibility that the incidence of high volume of problem loan/financing in these regions is not involuntary but rather the management trade-off decision between short-term operating costs and long-run profitability. The management might rationally decide to reduce short-term expenses by skimping resources allocated to loan origination and monitoring.
ABSTRAK

PINJAMAN TIDAK BERBAYAR DAN KECEKAPAN DARI BANK KONVENSIONAL DAN ISLAM DI NEGARA-NEGARA OIC

Oleh

Chandra Setiawan

April 2012

Pengerusi: Profesor Shamsher Mohamad Ramadili, PhD
Fakulti: Sekolah Pengajian Siswazah Pengurusan

Bank adalah sumber penting pembiayaan di kebanyakan negara-negara membangun, karena sumber pembiayaan lain (iaitu stok dan pasaran bon) yang agak kurang dikembangkan bagi memenuhi pembiayaan yang diperlukan untuk pembangunan ekonomi. Sebagai contoh, jika kita melihat di negara-negara GCC (dewan kerja sama negara-negara Arab Teluk: Bahrain, Kuwait, Oman, Arab Saudi, dan Uni Arab Emirates) jumlah kredit domestik sahaja yang disediakan oleh sektor perbankan (% Dari Produk Domestik Kasar) berkisar antara 36-88 peratus pada tempoh tahun 1995 hingga tahun 2005 (WDI, Bank Dunia). Ini adalah biasa di kalangan kebanyakan negara membangun di seluruh dunia di mana perbankan memainkan peranan yang dominan (secara purata lebih dari 70% dari total pembiayaan) dalam sistem kewangan. Ini terpakai kepada kedua-dua bank konvensional maupun Islam yang semakin berkembang kompetitif di negara-negara ini. Oleh kerana itu, untuk menunaikan tanggung jawab mereka secara berkesan, sektor perbankan mestilah
kos, keuntungan dan pendapatan yang cekap. Selain itu ia perlu mempunyai satu mekanisme yang berkesan untuk mengelakkan pemilihan buruk dan meminimumkan pinjaman tidak berbayar (NPL) bagi bank konvensional dan pembiayaan tidak berbayar (NPF) bagi bank Islam. Ini akan membantu sektor perbankan guna melaksanakan yang lebih baik dan menyumbang ke arah pertumbuhan ekonomi negara.

Tesis ini menangani isu hubungan antara kecekapan dan Pinjaman tidak berbayar/ pembiayaan tidak berbayar dari bank konvensional dan Islam. Walaupun terdapat banyak bukti yang didokumenkan setakat ini terutamanya pada kecekapan bank konvensional, tetapi tidak ada bukti menyeluruh mengenai hubungan antara kecekapan dan pinjaman yang tidak berbayar maupun pembiayaan yang mendatangkan masalah di bank konvensional dan Islam di negara-negara OIC. Pendekatan Data Envelopment Analysis (DEA) yang digunakan untuk mengukur kecekapan kos, pendapatan dan keuntungan bank konvensional dan bank Islam selama tempoh 1993 – 2007 untuk negara-negara OIC (ditandakan sebagai kawasan Timur Tengah dan Turki dalam kajian ini), Asia dan Africa.

Secara keseluruhannya, keputusan pada kecekapan menunjukkan bahawa kecekapan kos bank konvensional mengungguli berbanding rakan bank-bank Islam bagi kawasan yang dipilih: Asia, Afrika, Timur Tengah dan Turki. Bagaimanapun, tiada perbezaan yang signifikan telah diperhatikan untuk kecekapan keuntungan bank-bank Islam dan kecekapan keuntungan bank-bank konvensional di kawasan Asia, dan Timur Tengah dan Turki. Garis kecekapan waktu menunjukkan bahawa tingkah laku kecekapan kos lebih stabil sepanjang tempoh sampel di kawasan yang berbeza

Analisis penentu kecekapan kos, pendapatan dan keuntungan mendedahkan bahawa kecekapan kos kedua-dua aliran perbankan di semua kawasan lebih dipengaruhi oleh penentu dalaman (pembolehubah khusus bank) daripada faktor-faktor luaran (pembolehubah ekonomi makro). Ini adalah disebabkan oleh hakikat bahawa kos adalah di bawah kawalan pihak pengurusan dan mereka mempunyai prerogatif untuk menguruskannya dengan cara yang terbaik.


faktor yang mempunyai hubungan yang signifikan dengan NPL/NPF untuk bank-bank konvensional dan Islam apabila menyediakan pinjaman/pembiayaan untuk mengawal tahap pinjaman/pembiayaan tidak berbayar.

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APPROVAL

I certify that an Examination Committee met on 09 December 2011 to conduct the final examination of Chandra Setiawan on his thesis entitled “Non-performing Loans and Bank Efficiency of Conventional and Islamic Banks in OIC Countries” in accordance with Universities and University College Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the candidate be awarded the Doctor of Philosophy.

Members of the examination Committee are as follows:

Prof. Dr. Foong Soon Yau
Graduate School of Management
Universiti Putra Malaysia
(Chairman)

Prof. Dr. Michael Skully
Department of Accounting and Finance
Monash University
(External examiner)

Prof. Dr. Abdul Ghafar Ismail
School of Economics
Universiti Kebangsaan Malaysia
(Internal Examiner)

Prof. Dr. Catherine Ho Soke Fun
Faculty of Business Management
Universiti Teknologi MARA
(Internal Examiner)

Prof. Dr. Shamsher Mohamad Ramadili
Graduate School of Management
Universiti Putra Malaysia
(Representative of Supervisory Committee/Observer)

Prof. Dr. Foong Soon Yau
Deputy Dean
Graduate School of Management
Universiti Putra Malaysia

Date:
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 another degree at UPM or any other institutions.


........................................

CHANDRA SETIAWAN

Date:
This thesis is submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the Degree of Doctor of Philosophy. The members of Supervisory Committee are as follows:

**Shamsheer Mohamed Ramadili, PhD**  
Professor  
Graduate School of Management  
Universiti Putra Malaysia  
(Chairman)

**Anuar Mohamed Nassir, PhD**  
Professor  
Faculty of Economics and Management  
Universiti Putra Malaysia  
(Member)

**Taufiq Hassan Shah Chowdury, PhD**  
Associate Professor/ Lecturer  
Faculty of Economics and Management  
Universiti Putra Malaysia  
(Member)

**ARFAH SALEH, PhD**  
Professor and Dean  
Graduate School of Management  
Universiti Putra Malaysia

Date:
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