ISLAMIC BANK EFFICIENCY AND PRODUCTIVITY IN MALAYSIA

BY

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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirement for the Degree of Doctor of Philosophy

February 2011
Abstract of thesis presented to the Senate of Universiti Putra Malaysia in the fulfillment of the requirement for the degree of Doctor of Philosophy

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Abstract

The present empirical study investigates the efficiency of full-fledged Islamic banks and Islamic window operations of domestic and foreign banks in Malaysia. This study measures the technical, Allocative, pure technical, scale and cost efficiency of these banks using the Data Envelopment Analysis (DEA) technique for the period 1997-2008. During this period, Islamic banking system in Malaysia has two phases of development. This is a pioneer study that analyzes the polices of central bank of Malaysia in both phases and compares the efficiency of Islamic banking industry in these phases. In general, the results show that on average, the efficiency of the Islamic banking industry increases in these phases which corresponds positively to their deposits, asset and financing growth. This could suggest that the entrance of
the second full fledge Islamic bank in the second phase and the entrance of foreign
full fledge banks in the third phase had given a positive impact on the efficiency of
Islamic banking industry as a whole. The findings also indicate that the full fledge
Islamic banks are more efficient than Islamic windows. In the comparison of
efficiency levels with respect to ownership, the foreign bank is found to be more
efficient than domestic banks in full fledge banking system, however in Islamic
windows, the domestic banks are found to be more efficient than foreign banks.

This study also investigates the productivity of full-fledged Islamic banks and
Islamic window operations of domestic and foreign banks in Malaysia. It measures
the efficiency change, technological change and total factor productivity of these
banks using the Malmquist Index for the period 1997-2008. This is a pioneer study
that has analyzes polices of central bank of Malaysia in both phases and has
compared the productivity of Islamic banking industry in these phases. In general,
the results show that on average, the productivity of the Islamic banking industry
has increased in these phases which correspond positively to their deposits, assets
and financing growth. This could suggest that the entrance of the second full fledge
Islamic bank in second phase and the entrance of foreign full fledge banks in third
phase made a positive impact on the productivity of Islamic banking industry as a
whole. The findings also indicate that the mean TFP for full fledge Islamic banks is
larger than the same figure for Islamic windows. The comparison of productivity
levels with respect to ownership, in both systems (full fledge and Islamic windows)
shows that the mean TFP for domestic banks is greater than the figure for foreign
banks. The sources of productivity growth in the Islamic banking industry as a whole show a gradual improvement in efficiency change. However, the increase in efficiency progress in the Islamic banking industry was marginally offset by the declined in technological change, which led to lower productivity growth.

The study about measurement of efficiency that describes and analyzes the determining factors of efficiency is useful. The recognition and utilization of the key factors which have significant influence on the efficiency of the firm are important. So, in this study a range of bank specific factors and regularity factors which may influence Islamic bank efficiency is considered. This study used three different methods to determine the impact of these factors on Islamic banks’ efficiency, namely, OLS, Tobit and Bootstrap methods. However, there is not any difference in the results derived from these three methods. The findings suggest that, bank size; capital adequacy and loan activity are positively related to the efficiency of Islamic banks. The findings also confirm that the proxy of Credit risk as measured by the ratio of loan loss provision to total loan has negative effects on the Islamic banking efficiency.
Abstrak tesis yang dikemukakan kepada Senate Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KECEKAPAN DAN PRODUKTIVITI BANK ISLAM DI MALAYSIA

Oleh

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Februari 2011

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dengan TFP bagi tetingkap Islam. Dalam perbandingan tahap produktiviti berdasarkan pemilikan bagi kedua-dua sistem (sepenuhnya dan tetingkap Islam), purata TFP bank tempatan adalah lebih tinggi daripada TFP bank asing. Sumber pertumbuhan produktiviti dalam industri secara keseluruhannya juga menunjukkan peningkatan dalam perubahan kecekapan. Walau bagaimanapun, peningkatan kemajuan kecekapan dalam industri perbankan Islam terjejas sedikit akibat penurunan perubahan teknologi yang menyumbang kepada pertumbuhan produktiviti yang lebih perlahan.

Kajian mengenai pengukuran kecekapan yang menerangkan dan mengkaji faktor penentuan kecekapan adalah sangat penting untuk pengenalpastian serta penggunaan faktor utama yang mempunyai pengaruh yang signifikan ke atas kecekapan firma. Selaras dengan itu, kajian ini telah mengenal pasti beberapa faktor khusus dan faktor kenalaran yang mungkin mempengaruhi kecekapan bank Islam di Malaysia. Kajian ini menggunakan tiga kaedah yang berbeza iaitu model OLS, Tobit dan Bootstrap untuk menentukan kesan faktor-faktor tersebut ke atas kecekapan bank Islam di mana keputusan empirikal mendapati bahawa ketiga-tiga kaedah memberikan keputusan yang sama. Dapatan mencadangkan bahawa saiz bank; kecukupan modal dan aktiviti pinjaman mempunyai hubungan positif dengan kecekapan bank Islam. Dapatan juga mengesahkan bahawa proksi untuk risiko kredit seperti yang diukur melalui nisbah peruntukan kerugian pinjaman kepada jumlah pinjaman menunjukkan kesan yang negatif ke atas kecekapan bank Islam.
AKNOWLEDGEMENTS

Foremost, I would like to thank my family members for their moral and emotional support during the course of my study. Deepest appreciation to my supervisors, in particular, Dr Normaz Wana BT Ismail, Dr Rusmawati Binti Said and Dr Suhaila BT Abdul Jalil for their guidance, assistance and critical comments.

Many thanks to the viva chairperson and examiners held on July 2011 for their comments and suggestions. Appreciations are also extend to the administrative staffs of Faculty of Economics and Management and Graduate School Office. Lastly, my deepest gratitude to my friends and those who have help me, directly or indirectly, in completing my study.
I certify that a Thesis Examination Committee has met on 2 August 2011 to conduct the final examination of Rezvan Torabi on his thesis entitled “Islamic Bank Efficiency and Productivity in Malaysia” in accordance with the 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 student be awarded the Doctor or Philosophy.

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DECLARATION

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

REZVAN TORABI ZIARATGAHI
Date: 22 February 2011
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