A STUDY OF CAPITAL ADEQUACY FRAMEWORK FOR ISLAMIC BANKS WITH REFERENCE TO INDONESIA

BY

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ABSTRACT

Due to its important role for banking industry, Basel II Capital Standards have been developed by Basel Committee on Banking Supervision (BCBS) with a conventional bank's perspective. The balance sheet underlying the Basel II Capital Standards belongs to a conventional bank whose structure completely differs from that of an Islamic banks. Conventional bank is essentially based on the debtor-creditor relationship between the depositors and the bank on one hand, and between the borrowers and the bank on the other. Meanwhile, Islamic banks, due to the existence of partnership modes of funding and financing and other various contracts either in the form of contract of exchange (*Mu'awadat*), contract of *Ijarah*, etc. make the contractual relationship in Islamic banks can be in the form of partnership, investor and trader, as well as a buyer and seller relationship. Therefore, Islamic banks have different risk profile as compared to conventional banks. Realizing these differences, a number of institutions have tried to develop the capital adequacy standards for Islamic banks adopting Basel II approaches. The Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) has recommended to exclude the risk sharing account deposit in capital. In a similar vein, Islamic Financial Service Board (IFSB) has taken efforts to develop capital adequacy requirements for Islamic banks based on the Basel II Standards. This study, therefore, will be conducted to assess whether the existing capital adequacy standards developed by BCBS, IFSB as well as the standards applied in Indonesia are suitable with the risk profile of Islamic banks. This study will be conducted mainly by descriptive and comparative study to identify and establish the strengths and weaknesses of the existing capital adequacy standards. Based on the study, there are some weaknesses of those capital adequacy framework. The result of the study is expected to be beneficial for the development of the capital adequacy framework for Islamic banks particularly in Indonesia and will add to the literature of Islamic banking.

ملخّص البحث

لقد وضعت بازل للرقابة على المصارف (BCBS) بازل الثاني معايير رأس المال من منظور البنوك التقليدية. هذا نظرا لدورها المهم في الصناعة المصرفية. ولكن الميزانية العمومية التي يقوم عليها بازل الثاني في معايير رأس المال نتطبق على البنوك التقليدية التى تختلف تماما عن هيكل المصارف الإسلامية. وذلك لأن البنوك التقليدية تقوم على أساس العلاقة بين الدائن والمدين - أي بين المودع والبنك من جهة وبين المقترض والبنك من جهة أخرى. وهذه العلاقة تختلف تماما عن الواقع في المصارف الإسلامية، فإن هياكلها وصيغ تمويلها تبنى على عقود المعاوضة أو الإجارة أو المضاربة وما أشبهها حيث أن علاقة بين الأطراف المتعلقة تقوم علي أساس معين ; مثل أن تكون بين رب المال والمضارب في عقد المضاربة أو الإستثمار أو تكون بين البائع والمشتري في عقد البيع وهكذا. ولهذا تعرضت المصارف الإسلامية لعدة مخاطر التي تختلف عن مخاطر البنوك التقليدية. وأخذا بالاعتبارهذه الغروقات, فقد حاول عدد من المؤسسات المالية الإسلامية لتطوير معايير كفاية رأس المال للبنوك المتبعة في بازل الثاني. فقد أوصت هيئة المحاسبة والمراجعة للمؤسسات المالية الإسلامية باستبعاد ودائع حساب تقاسم المخاطر من رأس المال. وفي نفس الوقت، مجلس الخدمة المالية الإسلامية (IFSB) جهودا لتطوير متطلبات كفاية رأس المال على أساس معايير بازل الثاني للبنوك الإسلامية. يهدف هذا البحث الى تقييم معايير كفاية رأس المال التي وضعتها بازل للرقابة على المصارف و مجلس الخدمة المالية الإسلامية وكذلك المعايير المطبقة في إندونيسيا - من حيث تناسبها مع المخاطر للمصارف الإسلامية. وسيجري هذا البحث أساسا عن طريق دراسة الوصفية والمقارنة لتحديد ووضع نقاط القوة والضعف في المعايير الموجودة. ومن أهم نتائج البحث المتوقعة، أن نتيجتها ستكون مفيدة لتطوير معايير كفاية رأس المال للمصارف الإسلامية خصوصا في إندونيسيا، مع أن هذا البحث سيضيف إلي أدب المصرفية الإسلامية.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a research paper for the degree of Master of Science in Islamic Banking and Finance.

....

Mustapha Hamat
Supervisor

This research paper was submitted to the Institute of Islamic Banking and Finance and is accepted as a partial fulfilment of the requirements for the degree of Master of Science in Islamic Banking and Finance

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DECLARATION

I hereby declare that this research paper is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurently submitted as a whole for any other degrees at IIUM or other institutions.

Yono Haryono

Signature .... Date 30/12/2011

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Affirmed by Yono Haryono.

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Signature Date

To

My Wife and my children

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Bismillah,

This research paper is the result of nearly five months of work whereby I have been supported by many. Therefore, I would like to thank all people who have helped and inspired me during my Masters degree.

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Mont Kiara, 29th December, 2011

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1. BACKGROUND OF THE STUDY

Islamic bank is a bank whose principles underlying its activities and operations are based on Islamic or *Shariah* rules. Two basic principles behind Islamic banking are the sharing of profit and loss and, significantly, the prohibition of the collection and payment of interest, since interest is strongly prohibited under Islamic law (*Shariah*). The financial intermediation functions through collection of deposits and utilization of credits make Islamic banks similar to conventional banks. However the unique nature of products differentiates Islamic bank in many aspects. Exclusion of interest, prohibition of making money from money, implementation of profit and loss sharing system and prohibition against excessive uncertainty are main sources of differences associated with Islamic banks (Hassan and Dicle, n.d.).

Since the first establishment of Islamic bank in Egypt in 1963[1], Islamic bank is growing rapidly throughout the world and has been introduced in more than 60 countries of the world so far (Shaikh and Jalbani, 2008). Since then, a number of Islamic banks have been established under heterogeneous social and economic environments. Currently, Islamic banks are found not only in Muslim countries but also commonly found in non-Muslim countries.

Islamic banking and finance gained additional momentum when the current global financial crisis occured. The crisis that originated from the crisis in the US shows once again that the current financial system is not flawless. The current

[1] Mit Ghamr Saving Bank was established in Egypt in 1963 by Ahmad Al-Najjar and was widely considered to be the first modern Islamic bank.

financial crisis is widely considered as the most severe since the Great Depression (Ahmed, 2009). The current crisis has clearly shown up the weaknesses of the conventional banking and finance system and the resilience of the Islamic institutions to the current financial turmoil has led many analysts to come to a conclusion that Islamic finance and banking system could provide the solution to the weaknesses of the conventional financial system and could be a feasible alternative. In this sense, Islamic finance is considered as a viable alternative to interest based financing since Islamic banking and finance promotes the principles of sharing of profit and loss which is more linked to real sector activities. Moreover, according to Askari, Iqbal and Mirakhor (2010), the crisis provided the major lesson for Islamic finance which is the need for the design and development of a comprehensive and dynamic regulatory-prudential-supervisory framework, uniquely designed for an Islamic financial system.

Capital is critically important for a banking institution since the bank has unique characteristics that differ from other companies mainly in terms of the balance sheet structure. This unique characteristics especially refer to a relatively low capital-to-liabilities ratio (Greuning and Brotanovic, 2003; Greuning and Iqbal, 2008). The reason for this is because, in a bank, the liability side of the balance sheet does not exist purely to fund the activities of the bank, but is itself part of the activities of the bank. Banks do not require capital as a primary source of financing. They can borrow whatever they need as part of their normal daily activities, at much lower than they need to pay on their capital.

Broadly speaking, the capital has dual role: as a means of funding earning-generating assets and as a buffer to absorb risks. Wesson (1985) states the capital role is related to capital resources and the maturity structure of assets and liabilities. Bank capital in general consists of equity capital, retained reserves and certain non-deposit liabilities (Grais and Kulathunga, 2007). The concept of capital applied in banking is capital adequacy different from non-financial firms. Archer and Karim (2007) asserted that the term "capital adequacy" is normally used in conjuction with financial firms (banks) rather than non-financial firms that usually use the term "solvency" to refer to the ability to meet financial obligations on time or immediately. Meanwhile capital adequacy refers to the condition where a bank has enough money in reserve to pay all financial obligations, even during economic downturns. Due to its importance, bank supervisors regard capital adequacy as a key element in the regulatory framework (Archer and Karim, 2007).

According to Chapra and Khan (2000), before 1988, there were no standard definitions of bank capital or minimum capital requirements across the countries. The first initiative to build the capital framework at the international level was taken by the G10 countries by setting up a committee under the auspices of the Bank for International Settlement in Basel to see what could be done. The Basel Committee on Banking Supervision (BCBS) issued its first Capital Accord (Basel I) in July 1988 which laid the framework for a "regulatory capital" and defined the guidelines to measure the risk exposures of different asset classes. The term "regulatory capital" refers to the amount of capital that the regulators require the banks to hold as a safety against risks. As opposed to regulatory capital, which is set by the regulators, "economic capital" is the capital level that bank shareholders would choose in absence of capital regulation (Akkizidis and Khandelwal, 2008). The focus of Basel I was on a cushion for credit risk. However, there have been five amendments[2] to the Accord since the first issuance and the most significant amendment was the fourth amendment

[2] Five amendments of Basel I: November 1991, July 1994, April 1995, January 1996 and April 1998 (Matten, 2000).

in 1996 to incorporate market risk to the Capital Accord (The five amandments of Basel I will be further described in appendix I).

Being intended to be adopted by internationally active banks of G10 countries. Basel I has been also adopted as the underlying structure of all bank capital adequacy regulations in some non-G10 countries. However, it was later found that Basel I was not sufficiently risk sensitive with the rapid development of the new financial instruments such as securitization and credit derivatives. Therefore, in order to rectify the shortcoming of Basel I. BCBS then proposed the new Capital Accord in June 2004 and is today referred to Basel II. According to Grais and Kulathunga (2007), an emphasis on taking better account of the risk profile of the intermediary and its ability to manage risks in reaching a sense of its capital requirement was a major thrust of the development of Basel II. Basel II framework gave attention to operational risk and a related requirement for a capital cushion[3]. However, the global financial crisis has revealed many shortcomings of this framework, which led to the development of new accords (Basel III) to further strengthen the resilience of the banking sector (Diaw. n.d.).

Basel II gives valuable contribution to the area of risk management in the banking industry especially in capital adequacy requirement. However, it does not adequately cater for the needs of Islamic banks. This is because the Basel framework was designed for the conventional banks which differ from Islamic banks in terms of underlying principles, the contracts used and the structure of the business (Diaw, n.d.). This differences are mainly reflected on the balance sheet of Islamic banks with the existence of profit and loss sharing (PLS) either in the assets or liabilities side. Hence

[3] Basel Committee on Banking Supervision (2004) International Convergence of Capital Measurement and Capital Standards: A Revised Framework.

the existence of profit and loss sharing will affect the capital adequacy calculation for Islamic banks.

Realizing its important role for Islamic banking, capital adequacy requirements have been developed adapting conventional Basel approaches. A first attempt was made by the Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) recommending not to include the risk-sharing account deposits in capital (Grais and Kulathunga, 20017). Moreover, in December 2005 the Islamic Financial Services Board (IFSB) issued the "Capital Adequacy Standards for Institutions (other than insurance institutions) offering only Islamic Financial Services". The standard covers minimum capital adequacy requirements based predominantly on the standardized approach in respect of credit risk and the basic indicator approach for operational risks of the institutions offering only Islamic financial services (IIFS), with respect to Pillar 1 of Basel II, and the various amendments. Necessary modifications and adaptations have been done to cater for the specificities and characteristics of the *Sharī`ah* compliant products and services offered by the IIFS[4].

In the contex of the development of capital adequacy framework in Indonesia, prior to 2005, Islamic banks applied the same capital adequacy framework used by conventional banks. This is because Indonesia operates a dual banking system where an Islamic financial system operating-side-by-side with a conventional banking system. However, from a regulatory point of view, it was the issuance of new Bank Indonesia Regulation No.7/13/2005[5] and its amendmend in 2006 that gave the new framework for capital adequacy framework for Islamic bank. Under this regulation, capital adequacy requirement is tailored with the characteristics of Islamic banking

[4] Islamic Financial Services Board (2005) Capital Adequacy Standard for Institutions (Other than Insurance Institutions) Offering Only Islamic Financial Services.

[5] Bank Indonesia (Central Bank) has the authority to issue provision in the form of Bank Indonesia Regulation to regulate and supervise over banks.

operations. The regulation is primarily based on the Capital Adequacy Standards issued by IFSB, with the necessary modifications and adaptations but without including operational risk for the capital calculation.

1.2. PROBLEM STATEMENT

The Basel Committee has developed capital adequacy requirements for conventional banks either in the form of Basel I or Basel II (Recently, Basel III has been introduced to be implemented on 1 January 2013). Despite its valuable contribution to the area of risk management in the banking industry especially in the development of capital adequacy framework, Basel II does not adequately cater for the needs of Islamic banks. The Basel II standards have been developed with a conventional bank's perspective and hence do not apply to the Islamic banks without suitable modifications. It is therefore needed to adjust with the unique nature of products and the different contractual relationship between parties of Islamic banks. The existence of profit and loss sharing (PLS) method of financing and particular contractual relationships should be taken into consideration in developing capital adequacy requirements for Islamic banks. There are implications for the Islamic bank's capital adequacy by including some proportions of the assets financed by PLS accounts on a risk-weighted basis. For instance, customer deposit accounts under PLS *mudarabah* contract, in principle bear the risk of the proportion of assets that they finance. Therefore, this could imply that Islamic banks do not need as much as capital in relation to balance sheet assets as conventional banks (Moore, 2007).

Islamic banks have different risk profile as compared to conventional banks due to the differences in underlying principles, the contractual relationship and the structure of the business nature. Realizing these differences, a number of institutions have tried to develop the capital adequacy standards for Islamic banks adopting Basel II approaches. The Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) has recommended capital adequacy standard adopting Basel Capital Accord by not including the PLS account deposit in capital. In a similar vein, Islamic Financial Service Board (IFSB) has taken similar efforts to develop capital adequacy requirements for Islamic banks based on the Basel II Standards. Given that capital adequacy requirements for Islamic banks is developed based on the conventional Basel approach, some issues may arise in its implementation which may be seen to inhibit the development of Islamic banks.

This study is therefore conducted to identify and establish the strengths and weaknesses of the existing capital adequacy requirements either for conventional banks or Islamic banks with specific reference to capital adequacy standard for Islamic banks in Indonesia. We will show in this study that many issues still need to be clarified and addressed, given the specific nature of financing techniques developed by Islamic banks. In addition, the study will try to propose some addditional measurements to the existing capital adequacy requirements to better align with the risk profile of Islamic banks.

1.3. OBJECTIVES

The general aim of this study is to propose additional measurements to capital adequacy framework that better account for Islamic banks with specific reference to the capital adequacy framework for Islamic banks in Indonesia. In specific, the study would like to achieve the following objective:

i. To identify and establish the strengths and weaknesses of capital adequacy framework issued by Basel and IFSB as well as the capital adequacy requirements applied in Indonesia in mitigating the risks of Islamic banks.

ii. To identify the differences in the approaches to capital adequacy framework taken by Basel II, IFSB and Indonesia.

iii. To assess the extent of quantitative impact from IFSB Capital standard on capital ratios in some Islamic banks in Indonesia by conducting quantitative impact study.

1.4. SIGNIFICANCE OF THE STUDY

The study is expected to contribute to the development of the capital adequacy framework for Islamic banks in general and specifically in Indonesia in the following ways; first the capital plays an important role and contribute to the safety and soundness of a bank, since an adequate capital base serves as a safety net for a variety of exposures, it is important to examine the existing capital adequacy framework and determine whether the framework provide base to address the specific structure and contents of the Sharī`ah compliant products and services offered by the Islamic banks that are not specifically addressed by the currently adopted and proposed international capital adequacy standards (Basel Capital Accord), and Sharī`ah-compliant mitigation, so that further initiave can be taken by the central bank to improve the framework to better align regulatory capital requirements.

Second, this study will add the literature of Islamic banking. The related parties either individually or institutionally can benefit from this study and help to intensify further studies on the possibility and sustainability of developing a better capital adequacy framework for Islamic banks particularly in Indonesia.

1.5. STRUCTURE OF THE STUDY

This paper will be divided into five chapters as follow:

Chapter one outlines the scope and contribution of the study. The thesis makes, mainly, a study on capital adequacy framework for Islamic banks. The paper also demonstrates the relevance of the conventional banking regulatory framework (Basel Capital Accord) to Islamic banking.

Chapter two discusses the need for capital adequacy framework for Islamic banks. The paper also discusses the current development of western banking regulation, referring in particular, to the Basel regulatory standards as well as the development of capital adequacy framework for Islamic banks issued by AAOIFI and IFSB and the current development in Indonesia. In this chapter, the literature on capital adequacy of Islamic banks is reviewed.

Chapter three describes the research methodology. Basically this study will be conducted by descriptive analysis.

Chapter four consists of analytical result by identfying and establishing the strengths and weaknesses of the Basel Capital Accord, IFSB and the framework applied in Indonesia. In this chapter, we also identify the difference approaches to capital adequacy requirements taken by Basel II, IFSB and Indonesia. The quantitative impact study is also made to determine the effect of the inclusion of operational risk in the capital calculation in Indonesia. And Finally, we propose additional measurements to the existing capital adequacy framework to better align with risk profiles of Islamic banks.

Chapter five comprises of the conclusion, main findings of the study and suggestion for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1. ISLAMIC BANKING

Islamic banks are established to carry out the financial transactions in compliance with the principle of *Shariah.* The existence of Islamic banking is relatively new compared to conventional banking which came into existence nearly 420 years ago with the establishment of Banco Della Pizza at Rialto in Venice in 1587 (Haron and Wan Azmi, 2009). The emergence of Islamic banking nowadays is related to the revival of Islam and the desire of Muslims to live all aspects of their lives in accordance with *Shariah.* It is basically a response to the need of Muslim societies to have an economic and financial system that is free from *riba* (interest). Given that *riba* is strongly prohibited in all economic activities, some efforts have been made by Muslim scholars to propose the alternative to the conventional banking. The prohibition of *riba* is clearly stated in Al-Qur'an verse 275, Allah SWT mentions the prohibition of Riba (usury) and the permissibility of trading:

> "Those who eat on Riba (usury) will not stand (on the Day of Resurrection) except like the standing of a person beaten by shaitan leading him to insanity. That is because they say:"Trading is only like Riba (usury)", whereas Allah has permitted trading and forbidden Riba (usury)..."

The first experiments in introducing the principles of Islamic banking was made in Egypt by establishing of the Mit Ghamr Savings Bank in 1963 by Ahmad al Najjar. It is widely considered to be the first modern Islamic bank. The bank provided basic banking services such as deposit accounts, loan accounts, equity participation, direct investment and social services. Unfortunately, this experiment lasted for four years only due to political unrest in Egypt (Haron and Azmi, 2009). Around the same time, there were parallel efforts in Malaysia to develop a saving scheme for Muslims to perform the Pilgrimage by establishing of Pilgrims' Saving Corporation (Tabung Haji) in 1963. In 1971, the Nasir Social Bank was established in Egypt and was considered as the first example of state sponsorship in the establishment of an interest-free institutions. Then, in 1975, the Islamic Development Bank (IDB) was established with the objective of promoting economic development in member countries. The above experiments proved to Muslim societies that Islamic principles were applicable to modern business. Therefore, it inspired the Muslim in other countries to take similar steps to develop Islamic bank in their own countries. In Indonesia, the first experiment in introducing the principles of Islamic banking was made in early 1980s by establishing Baitul Mal wa Tamwil (BMT) in Bandung Institute of Technology and cooperative institution Ridho Gusti in Jakarta[6]. However, the establishment of Bank Muamalat Indonesia in 1992 was considered as the starting point of Islamic banking history in Indonesia.

2.1.1. Differences Between Conventional and Islamic Banking

Islamic banking differs from conventional banking in some major areas. It includes the prohibition against payment and receipt of a fixed and predetermined rate of interest, prohibition of *gharar* (risk and uncertainty) in economic transactions, prohibition of gambling and games of chance and prohibition of conducting investment activities in morally disapproved projects (Muljawan. 2002). Some of these differences between conventional banking and Islamic banking are summarized in Table 2.1.

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[6] http://ib.eramuslim.com/2008/12/01/sejarah-perkembangan-industri-perbankan-syariah-di-indonesia/ retrieved December 2, 2011.

In the absence of interest as a basis of funding and financing, the Islamic banks use various contracts in the course of their business, such as *Mudharabah*, *Musharakah*, *Murabahah*, *Salam*, *Istisna*, *Ijarah*, etc. which have different risk profile as compared to funding/lending with interest which is the main contract used in the conventional. Chapra and Khan (2000) argued that due to its specific nature, Islamic banks should be dominated by equity-based funds in their capital bases. Moreover, in term of relationship between bank and customers/depositors, conventional bank is essentially based on the debtor-creditor relationship. Meanwhile, Islamic bank can be in the form of partnership, investor and trader as well as buyer and seller relationship.

Table 2.1.
Differences Between Conventional and Islamic Banking

Conventional Banks	**Islamic Banks**
The investor is assured of a predetermined rate of interest.	In contrast, it promotes risk sharing between provider of capital (investor) and the user of funds (entrepreneur).
It aims at maximizing profit without any restriction.	It also aims at maximizing profit but subject to *Shariah* restrictions.
Lending money and getting it back with compounding interest is the fundamental function of the conventional banks.	Participation in partnership business is the fundamental function of the Islamic banks.
Highly systematized in term of risk management, accounting and other standard.	Standards for risk management, accounting and other activities are still developing.
Highly developed banking and financial product market.	Developing banking and financial product market.
The conventional banks give greater emphasis on credit-worthiness of the clients.	The Islamic banks give greater emphasis on the viability of the projects.
The status of a conventional bank, in relation to its clients, is that of creditor and debtors.	The status of Islamic bank in relation to its clients is that of partners, investors and trader, buyer and seller.
A conventional bank has to guarantee all its deposits.	Islamic bank can only guarantee deposits for deposit account, which is based on the principle of *al-wadiah*, thus the depositors are guaranteed repayment of their funds, however if the account is based on the mudarabah concept, client have to share in a loss position..

Source: Ionnis Akkizidis and Sunil Khandelwal; Zaharuddin Hj Abd Rahma