COMPETITIVE CONDITIONS AND MARKET POWER OF ISLAMIC AND CONVENTIONAL COMMERCIAL BANKS IN INDONESIA

BY

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ABSTRACT

The expansion of the Islamic banking industry seems to accentuate banking competition in Indonesia where conventional and Islamic banks coexist. In addition, the 2007/2008 global financial crisis and deregulation have effected the competitive conditions in the banking sector of Indonesia. In this context, this study aims at examining the competitive conditions and the market power of Islamic and conventional banks using firm level data over the period 2006-2013 in Indonesia. The study also attempts to identify the determinants of market power of banks in Indonesia. Using a sample of 27 Islamic banks and 106 conventional commercial banks, the study uses a variety of structural and non-structural measures related to the traditional approach and the new empirical approach of industrial organization. The methodology is based on a set of measures of competition and market power. The first measure is a set of concentration ratios (CR4) and the Herfindahl-Hirschman index (HHI).The second measures are the Panzar and Ross H statistic, the Boone indicator and the Lerner index based on econometric estimations with the aim of evaluating the structure of market and measuring its power in terms of price setting. The results of the competition analysis suggest that the banking markets of Indonesia cannot be characterized by the bipolar cases of either perfect competition or monopoly over 2006-2013. That is, banks earned their revenues as if operating under conditions of monopolistic competition in that period. Overall, Islamic banks in Indonesia operate in a relatively less competitive environment compared to conventional banks, or in other words, market power is higher in Islamic markets compared to conventional commercial markets. The study also show that profitability significantly increases with market power, but this does not warrant higher profitability levels for Islamic banks. The study is expected to serve as future reference for researchers on the subject of Islamic banking and finance. The study can also contribute to policy makers on how they should manage the financial system by avoiding financial distress and adjust successfully to the expected new competitive environment, on how they should design and implement the competitive policies, and appropriate supervisory and regulatory framework and how they should enforce market discipline to promote banking industry competition.

خلاصة البحث

إن توسع صناعة المصارف الإسلامية في إندونيسيا أدت إلى ازدياد التنافس المصرفي حيث تتواجد البنوك الإسلامية والتقليدية. كما أن الأزمة المالية العالمية ومراجعة القوانين أدت إلى التأثير على ظروف المنافسة في قطاع المصارف في إندونيسيا. وفي هذا السياق، فإن هذه الدراسة تهدف إلى دراسة الظروف التنافسية والقوة الاقتصادية للبنوك التقليدية والإسلامية باستخدام بيانات ذات مستوى صارم خلال الفترة الواقعة بين عامي ٢٠٠٦ و٢٠١٣م في إندونيسيا. كما أن هذه الدراسة تهدف إلى تعريف العوامل التي تعبر عن القوة في سوق المصارف للوصول إلى دراسة كافية عن مستوى التنافس في كل أسواق المصارف في إندونيسيا. سيتم استخدام ٢٧ مصرفا إسلاميا و١٠٦ مصارف تقليدية تجارية كعينات، وكذلك تستخدم الدراسة مقاييس بنيوية وغير بنيوية متنوعة والمتعلقة بالطريقة التقليدية بالإضافة إلى الطريقة التجريبية للمؤسسات الصناعية. المقياس الأول هو عبارة عن مجموعة من المعايير التركيزية (CR4) و HHI (Herfindahl-Hirschman Index). الزمرة الثانية من المقاييس هي إحصاءات Panzar و Ross H و The Boone Indicator و The Lerner Index والتي تعتمد على تقديرات اقتصادية بهدف تقييم بنية السوق وقياس قوتها فيما يخص أوضاع الأسعار. نتائج تحليل المنافسة أظهرت بأن أسواق المصارف في إندونيسيا لا يمكنها أن تتصف بحالات ثنائية القطبية والتي تتمثل بالمنافسة التامة أو السيطرة بين عامي ٢٠٠٦ و٢٠١٣م. بعبارة أخرى فإن البنوك حصلت على إيراداتها وكأنها كانت تعمل تحت ظروف التنافس الاحتكاري خلال تلك الفترة. بالإضافة إلى ذلك فإن المصارف الإسلامية في إندونيسيا عملت ضمن بيئة تنافسية أقل بالمقارنة مع البنوك التقليدية. أي أن قوة السوق كانت أعلى في البنوك الإسلامية مقارنة بالبنوك التقليدية الرسمية. وتظهر الدراسة أيضا أن نسبة الفائدة تزايدت مع قوة السوق، بيد أنها لم تعد بقوة ربحية كبيرة على البنوك الإسلامية. تضيف هذه الدراسة قيمة أخرى إلى المؤلفات الحالية عبر عرض دلائل تشغيلية على أثر الأزمة المالية المؤخرة ومراجعة القوانين في ظل تنافس البنوك الإسلامية والتقليدية في إندونيسيا. إن هذه الدراسة تفيد المنظمين وأصحاب البنوك والمستفيدين من المصارف الإسلامية والتقليدية في إندونيسيا في فهم العوامل التي تؤثر على درجة التنافسية وفي تقليل أثر أي أزمات مالية قد تحدث مستقبلا.

APPROVAL PAGE

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DECLARATION

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

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Signature …………………. Date ….........................

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LIST OF ABBREVIATION

AAOIFI	Accounting and Auditing Organization for Islamic Financial Institutions
ATM	Automated Teller Mechine
BMI	Bank Muamalat Indonesia
ESH	Efficient Structure Hypothesis
ES	Efficient Structure
FDR	Financing to Deposit Ratio
FEM	Fixed Effect Model
FSA	Financial Services Authority
GCC	Gulf Cooperation Council
IBA	Indonesian Banking Architecture
IFSB	Islamic Financial Services Board
IIBI	Institute of Islamic Banking and Insurance
IMF	International Monetary Fund
IOC	Islamic Organization Conference
LDR	Loan to Deposit Ratio
LLL	Legal Lending Limit violation
MENA	Middle East and Nort Africa
NPF	Non Performing Financing
OLS	Ordinary Least Square
PLS	Profit-and-Loss Sharing System
ROA	Return on Asset
ROE	Return on Equity
SCP	The Structure–Conduct–Performance
WIBCR	World Islamic Banking Competitiveness Report

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Competition in the banking sector has been growing since the last four decades. Large banks entered new markets and try to offer products and services with different types to strengthen their existence and earn higher profitability. Islamic banks contributed to financial and economic stability during the crisis, given that their credit and asset growth was at least twice as high as that of conventional banks (Hasan & Dridi, 2010). There is an evidence that the Islamic banking services industry can be a solid and powerful economic sector. It has been admitted as one of the important players of economic power in the new international financial order.

The Islamic banking industry is considered as a new shape of financial intermediary. Different from the conventional system, Islamic banking and finance are based on the concept of justice, which can be reached through risk sharing. Therefore, the main principle of Islamic banking is the share of profit and losses as an alternative to the conventional banking system based on interest. Many studies argue that the principles of Profit Sharing System (PLS) can help IBs to be more stable than interest based system that can lead to excessive fluctuations of return rates, inflation and other economic fundamentals (Chapra, 1995; Pervez, 1990; Turen, 1995).

The impact of global financial crisis on Indonesia has created a challenging competitive environment in the banking sector. The issues include high interest rates, which attract deposits, but banks are still reluctant to channel credit because of a high rate of non performing loans (NPLs) and slow sector restructuring. In such conditions, however, Islamic banks have maintained their performance. Their NPL level is lower, and they are improving faster than conventional banks. Moreover, conventional banks' Loan to Deposit Ratio (LDR) has declined to below 50%, while Islamic banks' Financing to Deposit Ratio (FDR) stays at around 100%. The Islamic banking system possesses several benefits not found in conventional banking. For example, Islamic banks offer products with interest-free mechanisms. This is especially beneficial in the current macroeconomic conditions. With a high interest rate, banking and other sectors are faced with managing high cost of funds, and hence a negative margin. The introduction of a non-interest-based system can, to some extent, alleviate this problem. While some argue that Islamic banking growth will pose a threat to the viability of conventional banking, on the contrary, this development will improve the quality of the overall system on at least two counts. An orderly development of both the conventional and Islamic systems will promote healthy competition, which, in turn, will promote market discipline, improve customer service and create value for customers (Siregar & Ilyas, 2011).

The Islamic finance industry in Indonesia has been in existence for 23 years. The Banking Act No. 7 year 1992 issued by the government and parliament was the green light for Islamic banking in Indonesia to officially operate. This regulation has enabled the banks to operate their business with the profit and loss sharing scheme. As a result, Indonesia started to implement a dual banking system, where conventional and Islamic banking could serve the economy side by side. Islamic banking activities increased after the Act No. 10 was enacted in 1998 as a stronger legal foundation. To improve Islamic banking services, Bank Indonesia issued a decree on the institution and office networks for Islamic Commercial Banking and Islamic Business Unit of

Conventional Banks. The number of Islamic banks across the country grew significantly as an impact of this policy (Siregar & Ilyas, 2011).

Indonesian Banking Architecture (IBA) which was launched on January 9, 2004 as a grand design stated the development of Islamic banking is part of the development of the national banking system. This strategic plan led to the positive implication on the development of Islamic banking due to receiving more serious attention from the Central Bank of Indonesia. The enactment of Act No. 21 of 2008 issued on July 16, 2008 has enabled Islamic banking in Indonesia to develop with a more adequate legal base, resulting in more rapid growth (Ismail, 2011).

After the implementation of some financial deregulation and the emergence of the IBA, which was supported by the process of strengthening the capital structure of banks, the banking sector was expected to be more stable and able to function as an intermediary institution. Stability would result in stronger national banks that would eventually become more powerful to compete with foreign banks in the global market. Competition, which encourages increased competitiveness, is the main foundation of the process of strengthening the national banking system (Ismail, 2011). In addition, competition contributes to economic growth not by producing real goods, but by providing the financial means to facilitate production in other industries. An efficient banking sector will make the largest contribution to economic growth. Greenwood and Smith (1997) explained that the impact of financial sector efficiency on economic growth is significantly positive for developing countries. They developed a model wherein financial markets promote specialization and reduce transaction costs, which lead to productivity gains that translate into higher growth. Financial institutions also reduce liquidity risk as they allow the transformation of liquid financial assets (that are desirable by the savers) into long-term capital investments. Furthermore financial markets modernize information costs on investment opportunities and thus improve capital allocation through credit supply. Two aspects are important in this regard: the quantity of credit supplied, and its efficient allocation. In a perfectly competitive market, banks are profit-maximizing price-takers such that costs and prices are minimized. The greatest quantity of credit will be supplied at the lowest price. A competitive industry is characterized by a large number of small banks and the potential benefits are similar to those of competition in other industries. Competition maximizes welfare by ensuring that the greatest quantity of credit is supplied at the lowest price. Competitive power in banking tends to increase capital accumulation. In a competitive system each bank would offer the same rate on credit; where credit rationing exists, a competitive bank will charge a lower interest rate on loans (Northcott, 2014).

The financial crises actually made an impact on both Islamic and conventional banks. Islamic banking fixes the rate rather than leave it fluctuating. This resulted in an increase and a high demand of Islamic banking services compared to conventional banking during the financial crisis (Donsyah, 2003; Thorsten, Asli, & Ouarda, 2010).

Saleh and Zeitun (2006) commented that Islamic banking can still survive during the global financial crisis; this indicates that the Islamic financial products are accepted by many, especially in the Muslim countries where the Islamic financial products have overtaken conventional banking system products. Even though both Islamic and conventional banks were impacted during the financial crisis, Islamic banking actually operated more efficiently. The reason being that Islamic banking is more liquified compared with conventional banking. It also shows that Islamic banking is less risky in terms of debt equity in comparison with conventional banking (Kabir & Rasem, 2009; Munawar, 2001).

Business growth has been used to measure the potential growth between Islamic and conventional banking. This is important because it will determine the sustainability and competitiveness of the banks. Rima (2009) and Kabir and Rasem (2009) found that Islamic banking has shown growth and competitiveness in the business. The study was done by investigating the competitive condition in Islamic and conventional banks on the global level. Evaluation method was used to compare efficiency between Islamic and conventional banking. Ariff (1988) stated that Islamic banking will expand and grow because of the essential feature of Islamic banking and that is being interest-free. According to Pawlowska (2014), before the financial crisis, increased competition within the banking sector of the new EU member states could be noticed. According to the quantitative research on the Polish banking sector, increasing competition between Polish banks was a related to privatization and consolidation of Polish banks globally. In 2008 decline of competition was a result of the financial crisis. These same channels (acquisitions and deregulation) caused changes in banking sector competitiveness in the Eurozone, had impact on Polish banking sector due to FDI in Poland. The level of competitiveness of the banking sector in the EU declined due to the financial crisis. After the collapse of Lehman Brothers many banks such as Royal Bank of Scotland, have been bailed out and others such as ABN AMRO, or Hypo Verein Bank have been nationalized. Some experts claim that too much competition, financial innovations and inadequate regulations caused the financial crisis in 2008, because increase in competition results in more risky decisions and has negative impact on stability. On the other hand, it is claimed that greater competition eliminates the weakest banks. According to Pawlowska, it is crucial to keep competition on adequate level in order to ensure banking sector stability. It is also important to monitor changes in competitiveness and its determinants.

Groszek (2012) claimed that regulatory policies always affect competition between banks, due to size of the sector and scope of its activity always being framed by law. However, the financial crisis caused increased credit risk, just as market climate has changed affecting competition. In Groszek's view, competitiveness can be measured not only by the banking services market concentration but also by the change in income structure. Among the consequences of the financial crisis were both the decline of interest income, and simultaneous increase in the income from provisions and fixed administration fees. The reason for that tendency were banking regulations designed to limit risk. The global financial crisis indicated importance of regulatory and competition policies in the banking sector, which were under appreciated before the crisis.

Previous studies on the issue of competitive condition for Islamic banking are still rare. Among others the existing studies on this topic were done by Abdul Majid and Sufian (2007), with a study on market conditions of the Islamic financial industry in Malaysia. Al-Muharrami, Matthews, and Khabari (2006) have performed research on competitive conditions in the banking industry across the Gulf Cooperation Council (GCC) countries. Other studies on competitiveness and market involving Islamic and conventional banks were performed by Turk-Ariss (2009), Sahut, Mili, and Ben Krir (2012), and Hamza and Katctouli (2014). Their researches were using samples from different countries. However, for case of Indonesian banking system, most of studies only focused on conventional banking, hence taking both types of banks in a study of competitive condition becomes an important topic.

Accordingly, this study tries to investigate market structure and competitive condition within the Indonesian banking industry comprising Islamic and conventional banks. This research differs from previous work in several ways. Firstly, Islamic financial services are assumed to be different from conventional banking due to their specific market and principles. The banking industry still serves as the main source of financing in Indonesia which later on has developed two types of banks. Indonesia is selected in this study because it applies a dual banking system where Islamic bank and conventional banks could serve bank customers across the country (Siregar & Ilyas, 2000). Furthermore, previous studies investigating competitive conditions and market power in both banking markets in Indonesia are still rare. Secondly, this study evaluates competitive conditions and market power of Islamic and conventional banks in Indonesia using various prominent approaches, including the structural approach (Concentration Ratio and Herfindahl-Hirschman index/HHI) and the non structural approach (the Panzar and Rosse Model, the relative profit differences (RPD) method /The Boone indicator and the Lerner index). Therefore, this research is conducted with a more comprehensive approach as compared to previous works used sample of either a single country or a cross-country context using traditional measures and the PR H-statistic. The PR model and the Lerner index in this study will be used to directly examine the effects of competition of conventional and Islamic banks operating in the same country. The study also attempts to expand previous works in the area by identifying the determinants of market power which may influence banking competition in Indonesia.

Based on the aforementioned explanations, this study intends to examine the competitive condition and market power of the Islamic and commercial conventional banks in Indonesia for the period 2006-2013. The worldwide financial crisis and deregulation undertaken by the Indonesian Government in mitigating that crisis are believed to influence the Indonesian banking competition. In terms of the recent financial crisis this study investigates how Islamic and conventional banking reacted to changes in the competitive environment after the crisis. Therefore, this research tries to assess the evolution in the competitive environment of Islamic and conventional banking system.

1.2 PROBLEM STATEMENT

In the last two decades, Islamic banks have played an important role in the national financial system of Indonesia. The Islamic banking services industry has proved that it is a solid and powerful industry especially in the banking sector. The financial system in this country is currently passing through radical changes in its essence and infrastructure because of the growing Islamic based economy. Failure expressed by conventional banks, mainly due to their systems of governance or their funding procedures, is the main reason for the transition of a very large category of customers toward Islamic finance. Despite these impressive achievements, Islamic banking in Indonesia has been experiencing slower growth in the past five years. Many factors could account for this. One of these factors is the competitiveness of Islamic Banks within the banking system, since, in the dual banking system, they have to compete head to head with conventional banks. In this framework, the factors of competitiveness of Islamic banks and their productivity was the main issue of studies devoted to investigating the development of Islamic banks that operated side by side with conventional banks. One important aspect of competitiveness is efficiency. Inefficiency would become a great disadvantage to face a fierce competition in the banking industry. To win the competition, Islamic banks should know their strengths and weaknesses as well as that of their competitors. Know yourself and know your competitor is a halfway point to success.

The low level as well as inefficient financial intermediation in Indonesia can also be accounted for by the absence of competitive structure (Buchs & Mathisen, 2005). According to Buchs and Mathisen (2005), there is still no one-to-one relationship between concentration and competition in the banking sector. They explained that monopolistic or oligopolistic behavior has tended to result in a higher intermediation cost and diseconomies of management than would be the case under a competitive structure.

Other factors impacting upon the banking system competitiveness in the country are the global financial crisis and financial services deregulation. In terms of the recent financial crisis this study investigates how Islamic and conventional banking reacted to changes in the competitive environment post crisis. The worldwide financial crisis and deregulation enforced by the Indonesian Government in mitigating that crisis are believed to have an impact on the Indonesian banking competition. Regulatory policies always affect competition between banks, due to size of the sector and scope of its activity always being framed by law. However, the financial crisis caused increased credit risk, just as market climate has changed affecting competition.

The economic development of Indonesia largely rests on a sound financial system. Therefore, anything that affects the sector greatly affects the economy because of its central role in the payment system and financial resources allocation. The role of the banking sector has received increasing attention in recent years, reflecting a growing awareness among regulators and policy makers that the problems of economic development cannot be solved without a solution by the banking sector.

The banking industry continues to dominate the business segment of the economy as the ratio of the total banking system assets to the GDP. There is a general agreement that the banking industry in Indonesia for many years has been a crucial industry. At the microeconomic level, most households and businesses engage in transactions with banks, for deposits, loans and other financial services. At the macroeconomic level, banks perform a vital economic function in channeling funds from savers to borrowers, and in the monetary policy transmission mechanism. By performing these functions, therefore, a financial intermediary can re-channel idle balances into productive sectors where they are most needed. In addition the banks also help the government to provide a stable macro environment, by extending credit to the private sector nurturing small and medium enterprises (SMEs) and informal sector operators into viable entities. One begins to see the vital role the banks play in the economic development of Indonesia. Despite the great contributions by the banking sector to the Indonesian economy, a number of critical factors have underpinned the banking operations for its success in the economy: the provision of better quality products and services, lack of competition which has reduced incentives to each bank to innovate in their deposit-taking and direct lending, and operational efficiency. Competition in banking is important because any form of market failure or anticompetitive behavior on the part of banks has far-reaching implications for productive efficiency, consumer welfare and economic growth. Claessens (2009) analyzed the need for competition in the financial sector in developing countries. He emphasized that financial sector competition plays a significant role in the process of allocation, production and dynamic efficiency. He concluded that practices today have fallen far short of the need for better competitive policies in the financial sector. Therefore, there is a need to