A Comparative Study between the Islamic and Conventional Banking Systems and Its Implications

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Over the decade, serious banking problems have been a major issue in many countries, and more and more countries have been plagued by banking disasters. There are many reasons leading to the banking crisis. Islamic banking is one of the emerging fields in the global financial market and grows at a very fast pace. This study is primarily concerned with the theoretical foundations of Islamic banking and the practice in Malaysia, examines similarities and differences between the structures and practices of Islamic banking and conventional banking, and further seeks to investigate how the Islamic banking system could avoid the banking crisis. Unlike conventional banks, the operations of Islamic banks are not interest-based, which are primarily governed by the Sharia laws that prohibit interest transactions. Islamic banks mainly turn to the creation of equity through profit-loss-sharing (PLS) financial transactions. This study looks into the capital structure of Islamic banks and also addresses issues pertaining to the supervisory authorities in the conventional banking system and the implementation of the Islamic banking system in Asian countries.

Key words: Conventional financial system, Islamic financial system, banking crisis JEL Classification: G01, G21

INTRODUCTION

The banking system plays an important role in the economic development of a country. It is also related to the stability of the financial environment. However, because of some problems in the conventional banking system, a banking crisis occurs more frequently and seriously recently. The most recent crisis originated in the subprime mortgage market. The bursting of the U.S. housing bubble acted as a detonator that exploded a much larger super-bubble. The creed of market fundamentalism became dominant since the 1980s, which led to deregulation, globalization, and financial innovations based on the wrong assumption that markets tend toward equilibrium. With the bankruptcy of Lehman Brothers in September 2008, the financial system went into deep trouble. As the financial crisis has been affecting the whole world, an unconventional banking practice, Islamic finance, is introduced to reduce financial crises. As the global economic slowdown becomes more severe, many countries will be seeking alternatives and the Islamic finance can seize these new opportunities by offering standardized Islamic finance products with prudent regulations and supervisory arrangements. This paper examines the financial market experience with the aim of drawing lessons for preventing future disasters. Islamic finance and banking is an emerging sector. The Islamic financial system is totally different from the conventional system. A distinctive feature of the Islamic finance is that it does not allow the creation of debt through direct lending and borrowing of money or other financial assets. The debts can only be created through the sale or lease of real assets through lease-based financing schemes. The asset which is leased or sold must be real (building, property, or any other physical infrastructure) and the debt cannot be sold or transferred to someone else. The strengths of Islamic finance are derived from the Shariah (Islamic law) principle that requires financial transactions to be accompanied by an underlying productive economic activity. This requirement reduces the potential for excessive exposure to risks associated with leverage and...
risk taking. In some countries (such as Iran and Pakistan) Islamic banks are the only mainstream financial institutions, while in many other countries (such as Malaysia, Indonesia, Bangladesh, and United Kingdom) Sharia-Compliant Financing (SCF) exists alongside conventional banking. Fundamental to Islamic finance is the profit and risk sharing which ensures that the profit is proportional with the risks. The risk associated with the real investment activity is therefore explicitly integrated into the financial transaction. This is an important aspect of Islamic finance, which provides a mechanism to enhance the prospects for its soundness and stability.

The Islamic financial system operates in parallel with the conventional financial system in Malaysia. In this dual system, attention needs to be given to avoid the potential for regulatory arbitrage, which might result in distortions in the competing environment between conventional finance and Islamic finance. Therefore, the development of the legal and regulatory framework for the Islamic financial services industry should be based on the “neutrality” principle to ensure that conventional finance is not treated unfairly in terms of the taxation, laws and regulations. Equally important in laying the ground of the financial infrastructure is developing the Islamic financial markets. Malaysia has developed a comprehensive Islamic financial system, which includes the banking industry, other specialized financial institutions, and the Islamic money and capital markets, and this financial infrastructure is supported by a sound regulatory and supervisory framework. It is expected that the Islamic financial system is a good way to solve a banking crisis, and the Malaysian banking system reform can provide an insight into this issue. Given some problems in the conventional financial system, it is necessary to investigate alternative methods to compensate the problems in the conventional financial system. The purpose of this study is to examine the features of Islamic finance and its applicability at large scale even in non-Islamic countries. More specifically, we seek to answer the questions of whether Islamic banks have less risk than conventional banks and Islamic finance can replace or complement the conventional banking system as an attempt to prevent or reduce a banking crisis.

This study is organized as follows: Section 2 provides the overview of the Islamic financial system and the financial system in Malaysia; Section 3 develops the research hypotheses regarding any differences in risk and profitability variables between Islamic banks and conventional banks and presents the empirical results; Section 4 concludes the paper.

**ISLAMIC FINANCE AND THE MALAYSIAN FINANCIAL SYSTEM**

**Islamic Finance**

The starting of Islamic finance goes back to a small cottage industry in some Arab countries in the late 1970s (El-Gamal, 2006). Islamic finance is differentiated from conventional finance in that it explicitly complies with principles of the Islamic law, which is called Shariah. Islamic finance has since continued to grow, in terms of the number of countries adopting it, as well as the range of financial services that it has provided. Although it is frequently suggested that Islamic banking in its present form is a recent phenomenon, the basic practices and principles date back to the early part of the seventh century. The revival of Islamic banking coincided with the celebration of the advent of the 15th century of Islamic calendar in 1976 when the financial resources of Muslims, particularly those of the oil producing countries, received a boost due to the oil price hikes. The events led Muslims to try to model their lives in accordance with the ethics and philosophy of Islam (El-Gamal, 2006).

Islamic Finance is essentially interest-free and asset-based, where an investment is structured on exchange or ownership of assets and money is simply the payment mechanism to effect the transaction. The basic framework of an Islamic financial system is based on the elements of Shariah, the law of Islam, which governs Islamic societies. The strengths in Islamic finance are derived from the principles of Shariah that requires financial transactions to be accompanied by an underlying productive economic activity. This requirement reduces the potential for excessive exposure to risks associated with leverage and risk taking. The main principles of Islamic Finance include (Khan, 2009):

1) Prohibiting transactions at excessive interest rates (Riba)
2) risk sharing in any transaction between at least two parties so that the provider of capital and the entrepreneur share the business risk in return for a share in profit, namely, the profit and loss sharing (PLS) principle
3) Prohibiting speculative behavior based on uncertainty (Gharar)
4) Prohibiting investments that violate the rules of Shariah, or investments in businesses related to alcohol, pork related products, conventional financial services, and entertainment.

**Characteristics of Islamic Banks and the Banking System in Malaysia**

The prohibition of the receipt and payment of interest in Islamic banks means that they cannot enter into interest-bearing borrowing or lending contracts. As an alternative to the payment of interest, Islamic banks use two main types of accounts to manage funds: the investment accounts, based on the contract where the funds are managed on behalf of their providers, and the current accounts, investment accounts in limited duration.
The standard financial products of Islamic banking are including (Lee and Ullah, 2007; Wilson, 2007): first, Murabaha(h), meaning intermediation, is the purchase of commodities needed by clients and the subsequent resale at a higher price; second, Mudaraba(h), meaning sponsorship, is a profit-sharing investment contract between one party providing funds and another party managing the funds; third, Musharaka(h), meaning partnership, is a profit and loss-sharing investment contract between two or more parties; fourth, Ijara, meaning capital leasing, is an Islamic lease agreement allowing profits by charging rental, not by charging interest; fifth, Salam and Istisna, meaning a forward selling agreement and a contracting agreement, respectively, are similar in nature, where a bank provides funds for the future delivery of a product at a pre-determined price on a certain date.

An important feature of the Malaysian financial system is its dual banking system where the non-interest-based Islamic banking system operates together with the interest-based conventional banking system. The development of a wide range of funding options in the Malaysian Islamic Interbank Money Market has been instrumental in supporting the liquidity needs of Islamic banking institutions.

**EMPIRICAL ANALYSIS**

**Risk Indicators for the Banking Sector**

Commercial banks are the main players in the banking system. They are the largest and most significant providers of fund in the banking system. Therefore, in this study, commercial banks and Islamic banks are selected for our empirical analysis. Risks are usually defined as the adverse impact on profitability of several distinct sources of uncertainty. The comparative risk indicators are selected from Islamic banks and commercial banks. The capital adequacy ratio is a measure of the amount of a bank’s capital expressed as a percentage of its risk-weighted exposures. An international standard which recommends minimum capital adequacy ratios has been developed to ensure that banks can absorb a reasonable level of losses before becoming insolvent. Applying minimum capital adequacy ratios serves to protect depositors and promote the stability and efficiency of the financial system. The risk indicators for the banking sector are a composite of risk indicators that measures the intensity of systemic distress at a particular point in time. In this study, four ratios are used to evaluate the Islamic banks and commercial banks, which are the risk-weighted capital ratio (RWCR), the core capital ratio (CCR), the non-performing loans ratio (NPLR), and the rate of return (ROR). The RWCR, CCR and NPLR are used very often when assess the bank’s risk.

The definition of the RWCR is as follows:

\[
RWCR = \frac{\text{Capital Base}}{\text{Total Risk-Weighted Assets}}
\]

For banking institutions with conventional and Islamic banking operations, the RWCR is computed in the following manner:

\[
RWCR_{\text{Conventional}} = \frac{\text{Capital Base}_{\text{Conventional}}}{\text{Total Risk-Weighted Assets}_{\text{Conventional}}}
\]

\[
RWCR_{\text{Islamic}} = \frac{\text{Capital Base}_{\text{Islamic}}}{\text{Total Risk-Weighted Assets}_{\text{Islamic}}}
\]

\[
RWCR_{\text{Overall}} = \frac{\text{Capital Base}_{\text{Overall}}}{\text{Total Risk-Weighted Assets}_{\text{Conventional}} + \text{Total Risk-Weighted Assets}_{\text{Islamic}}}
\]

The CCR is computed using the following formula:

\[
CCR = \frac{\text{Core Capital}}{\text{Total Risk-Weighted Assets}}
\]

The NPLR is a ratio between non-performing loans and total loans. One of the proxies that can be used to illustrate banking sector stability is the amount of non-performing loans at a given time. The higher the NPLR at a given time, the greater the possibility for banks to perform as financial intermediaries ineffectively, thus the higher their instability becomes. On the other hand, a Malaysian bank conducted a review on the framework of the ROR in order to standardize the methodology on the calculation of distributable profits and the derivation of the ROR to depositors in Islamic banks. The standardization of the ROR was aimed at addressing the information asymmetry between the Islamic banking institutions and the depositors by enhancing the level of transparency and ensuring that the depositors would receive fair returns on their investment. For banking institutions with Islamic banking operations, Mudaraba (h)-based deposit funds placed by clients may be recognized as a buffer for credit risk and market risk inherent in the assets funded by the profit-sharing investment accounts. In Malaysia, the Islamic financial system operates in parallel with the conventional financial system. Consequently, the indicators can be gotten from the different banking system. In this paper, the indicators are obtained for
Figure 1. Hypotheses Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Type of bank</th>
<th>Mean (%)</th>
<th>Standard Deviation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWCR</td>
<td>CB</td>
<td>12.7889</td>
<td>0.95968</td>
</tr>
<tr>
<td></td>
<td>IB</td>
<td>15.6405</td>
<td>1.29879</td>
</tr>
<tr>
<td>CCR</td>
<td>CB</td>
<td>10.4516</td>
<td>0.97002</td>
</tr>
<tr>
<td></td>
<td>IB</td>
<td>12.7868</td>
<td>0.54879</td>
</tr>
<tr>
<td>NPLR</td>
<td>CB</td>
<td>4.6792</td>
<td>1.29581</td>
</tr>
<tr>
<td></td>
<td>IB</td>
<td>4.0917</td>
<td>1.54380</td>
</tr>
<tr>
<td>ROR</td>
<td>CB</td>
<td>2.6542</td>
<td>0.26297</td>
</tr>
<tr>
<td></td>
<td>IB</td>
<td>4.7550</td>
<td>0.57391</td>
</tr>
</tbody>
</table>

*) CB stands for conventional commercial banks, and IB stands for Islamic banks.

Islamic banks and conventional commercial banks.

RESEARCH HYPOTHESES

This paper aims to examine the relationship between Islamic banks and conventional commercial banks in the RWCR, CCR, NPLR and ROR. The risk ratios are evaluated by analyzing the RWCR, CCR and NPLR, while the profit ratio is measured by the ROR. The structure of the hypotheses adopted in this paper is provided in Figure 1.

In order to test whether or not there are differences in risk appraisal and ROR between Islamic banks and conventional commercial banks in the Malaysian banking system, the one-tailed statistical test method is used in the SPSS program. Due to the different principles and regulations between Islamic banks and conventional commercial banks, we expect that the RWCR, CCR and ROR of Islamic banks are higher than those of conventional commercial banks. Also, the NPLR of Islamic banks is expected to be lower than that of conventional commercial banks.

The following four hypotheses are proposed to test whether the level of risk and the profitability are different between Islamic banks and conventional commercial banks.

Hypothesis 1: In the Malaysian banking system, the RWCR of Islamic banks is higher than that of conventional commercial banks.

Hypothesis 2: In the Malaysian banking system, the CCR of Islamic banks is higher than that of conventional commercial banks.

Hypothesis 3: In the Malaysian banking system, the NPLR of Islamic banks is lower than that of conventional commercial banks.

Hypothesis 4: In the Malaysian banking system, the ROR of Islamic banks is higher than that of conventional commercial banks.

Data Collection and Empirical Results

The sample for this study consists of the monthly data for Islamic banks and conventional commercial banks in Malaysia from 2006 to 2010, subject to data availability. In Malaysia, the data in Islamic banks’ performance is available just from 2006. So this study limits the sample to the period from 2006 to 2010. The data is collected from the monthly statistical bulletin of Bank Negara Malaysia (Bank Negara Malaysia, 2006-2010), which is the central bank of Malaysia. This publication is a
standard source for monthly monetary and banking developments. It contains reports on the monetary, banking, liquidity, capital market and macroeconomic situations. The statistical section reports the data such as the consolidated balance sheet of the Malaysian banking system, the statement of assets and liabilities of the central bank, commercial banks, finance companies and merchant banks, the interest rates, the exchange rates, the consumer price index and the trade figures. Consequently the comprehensive data could be obtained in this study from the publication.

To describe whether or not there are differences between Islamic banks and conventional commercial banks, this study constructed four hypotheses and uses the one-tailed test method. Table 1 provides the descriptive statistics for the average risk performance and the profitability performance of Islamic banks (IB) and conventional commercial banks (CB) over the period from 2006 to 2010.

From Table 1, it can be seen that the average performance of the variables is better for Islamic banks than for conventional commercial banks, but the volatility of some variables in Islamic banks, which is measured by the standard deviation, is larger than in conventional commercial banks. Specifically, during the period, the average RWCR of Islamic banks is 15.6%, which is better than 12.8% of conventional commercial banks, while the standard deviation is larger for Islamic banks. The CCR and the ROR are also higher for Islamic banks than for conventional commercial banks. Finally, the NPLR of Islamic banks is lower than that of conventional commercial banks.

Table 2 presents the results from the one-tailed test of the average risk and profitability performance of both Islamic and conventional commercial banks, reporting F-statistics, t-ratio and p-value. To determine whether the differences in the means are significant, the p-value must be, for example, less than 0.025 at the 97.5 percent level. If the p-value is less than 0.025, the null hypotheses (i.e. no difference in the means among the groups) are rejected at the 97.5% level.

Again, as shown in Table 1, the first risk ratio, the RWCR, shows a higher value for Islamic banks when compared with conventional commercial banks. The RWCR for conventional commercial banks is 12.8% while the RWCR for Islamic banks is 15.6%. The difference is statistically significant with the t-ratio of -15.725 (p-value = 0.000) as can be seen in Table 2. As mentioned earlier, the RWCR is the operating capital base divided by the total risk-weighted assets. It reflects the bank management's ability to utilize the bank's capital and risk-weighted assets to assess the degree of the bank's risk.

To most analysts, the RWCR is the best measure of bank risk. For banking institutions with Islamic banking operations, the minimum RWCR of 8% has to comply at the conventional level. For banking institutions with Islamic banking operations, Mudaraba (h)-based deposit funds placed by customers, which are also known as profit-sharing investment accounts (PSIA) in the form of either the General Investment Accounts (GIA) or specific investment Accounts (SIA), may be eligible for recognition as an absorbent for credit risk and market risk inherent in the assets funded by the PSIA.

The CCRs for conventional commercial banks and Islamic banks are 10.5% and 12.8%, respectively. The difference between these two means is statistically significant with the t-ratio of -14.265 (p-value = 0.000). The Islamic banks’ CCR is higher than conventional commercial banks’ CCR, and the result of the one-tailed test on the CCR is statistically significant. In other words, there is a statistically significant difference between conventional commercial banks and Islamic banks in the CCR, which means that the CCR of Islamic banks is higher than that of conventional commercial banks.

The NPLRs for conventional commercial banks and Islamic banks are 4.7% and 4.1%, respectively. The difference between these two means is statistically significant with the t-ratio of 2.019 (p-value = 0.016). Therefore, it can be concluded that there is a difference between conventional commercial banks and Islamic banks in the NPL, which suggests that the NPL of Islamic banks is statistically significantly lower than that of conventional commercial banks. The better performance of Islamic banks holds as with the ROR. There is again a statistically significant difference between conventional commercial banks and Islamic banks. The average ROR of conventional commercial banks is 2.7% and the average ROR of Islamic banks is 4.8%. Islamic banks’ ROR is statistically significantly higher than conventional commercial banks’, which can be seen from the t-ratio of -30.861 (p-value = 0.000) from the table. In summary, since the p-values of all the ratios are lower than 0.025, it can be concluded that all the hypotheses are accepted. Therefore, in the banking system of Malaysia, there are differences.

Table 2. One-Tailed Test Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>F-statistic</th>
<th>t-ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWCR</td>
<td>11.101</td>
<td>-15.725***</td>
<td>.000</td>
</tr>
<tr>
<td>CCR</td>
<td>9.246</td>
<td>-14.265***</td>
<td>.000</td>
</tr>
<tr>
<td>NPLR</td>
<td>6.004</td>
<td>2.019 **</td>
<td>.016</td>
</tr>
<tr>
<td>ROR</td>
<td>58.013</td>
<td>-30.861***</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: ** and *** indicates significant at the 97.5% and 99% levels, respectively.
between Islamic banks and conventional commercial banks in the RWCR, CCR, NPLR and ROR. In other words, the level of risk in Islamic banks is lower than in conventional commercial banks, and the profitability of Islamic banks is better than that of conventional commercial banks. This suggests that the Islamic banking system is more stable and sound and has lower risks than the conventional banking system, and there is also greater profitability in Islamic banks than in conventional commercial banks.

DISCUSSION

This study investigates the risks and profitability between Islamic banks and conventional commercial banks in the Malaysian banking sector. In the wake of the global financial crisis, it has been pointed out that Islamic finance might hold Malaysian banking sector. In the wake of the global financial crisis, it has been pointed out that Islamic finance might hold greater appeal given the perception that it takes a prudent approach to risk management.

According to the statistical results, we can assure that the Islamic banking system is more stable and sound. Indeed, the risk management and prudence are embedded in Islamic finance because of its focus on the need for transactions to be supported by underlying economic activity. It was pointed out that, compare with conventional finance, Islamic finance has fewer risk mitigation and liquidity management tools at its disposal. The Islamic finance sector has been largely immune to the ravages of the global financial crisis, thanks to a combination of the prudent risk management and the avoidance of leverage and complex structured finance. As regulators turn their attention to fixing global finance, the experiences and approach of Islamic financial institutions could provide valuable lessons for the broader financial community. Islamic finance should be seen as a way of offering investors and borrower choices. In countries such as Malaysia, Islamic and conventional models already exist together for both corporate and retail customers. Since there are so many advantages in the Islamic financial system, it is worth to continue studying on the reasons of why it has low risk ratios. Simultaneously, according to the experience of Malaysia, the future studies should focus on the problems when the two systems operate in the same country.

CONCLUSION

This study has attempted to provide an overview of Islamic finance, including its features and its growing importance in today’s financially integrated and interdependent world economy. The situation which is going through the global financial crisis has compelled regulators and economists all over the world to question the existing financial system. Here comes the role of Islamic finance which can act as an alternative to the conventional financial system. In this study, the Malaysian banking system is examined as an example of the experience of how the Islamic banking system would be adopted. The major features of Islamic finance, including asset-based banking, a ban on uncertainty (Gharar) and interest or usury (Riba), and profit-sharing and risk-bearing, would be likely to provide a more resilient financial system.

According to the statistical test results of this study, the Islamic financial system is less risky and more profitable than the conventional financial system. The Islamic financial system has been used, together with the conventional financial system in Malaysia, so if it can be adopted in other Asian countries would be a good practical question. In the long-term perspective, Islamic finance may replace the conventional financial system in many Islamic countries, but in the global financial system it will rather complement the conventional financial system.

For further research, the limitations of this study are discussed: first, because the data of this study is mainly collected from 2006 to 2010, which is not a very long period, the results might not represent all of the Islamic banks and conventional commercial banks; second, the data is obtained only for Malaysian banks. Whether the results can be generalized in other countries is still an open question. Therefore, further studies are needed to be conducted for other countries.

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The total liabilities and stockholders’ equity section of the balance sheet for Islamic banks is composed of liabilities, equity of PSIA and owners’ equity, while the section for (conventional) commercial banks is composed of liabilities, including deposits, and owners’ equity.