



## **Comparison of Risk Management in Non-profit Banks and Financial Institutions versus Other Conventional Banks and Financial Institutions in Iran**

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### **ABSTRACT**

This present study has been done to compare risk management differences in banks and interest-free loan financial institutes with other conventional banks and financial institutes of Iran. This study is descriptive-comparative and cross-sectional in terms of time criteria (longitudinal - cross sectional). The questionnaire by Javadi and Qouchifard (2009), which translated and validated by researcher, was used to collect data. Population consisted of all banks, interest-free loan financial institutes and other conventional and financial institutes of Iran. Due to limited number of population (100 institutes and banks), it was divided in two groups (banks and interest-free loan financial institutes) as samples. Research results based on U Mann-Whitney Test showed that there were remarkable differences in using credit risk management, capital investment on stocks and liquidity risk management in banks, interest-free loan financial institutes and other conventional banks and financial institutes. But there were no significant differences in using market risk management, return risk rate, and methods of operational risk management in banks, interest-free loan financial institutes and other conventional banks and financial institutes of Iran.

**Keywords:** Risk Management, Banks, Interest-free Loan Financial Institutes

**JEL Classifications:** E37, E32

### **1. INTRODUCTION**

Banks face with various risks but the most dangerous one is credit risk in financial and banking area which means losing profit due to non-committed borrowers to its contract. The risk happens when the borrower is not able to pay principal and interest of Debt regularly or avoid to pay debts (Tejarat Bank Control Risk Administration, 2006). Excessive loan with no assessment and predictions have been led to increasing non-credit worthy customers and deferred loans. Financial crisis (2007-2008) made it clear that for banks capabilities and increasing their new capitals, it is very important and vital to understand the risk through financial markets (Seltman, 2007). Islamic banking has cooperative nature. In this financial system (Islamic banking), all risks which a trader or a commercial entity will be faced with, are considered and loss and profit will be distributed between bank and customer regardless of its cost or amount. Investment return is not pre-determined and is depended

on time. Islamic banking models are based on bailment of tools (mutual investment) and cooperation (cooperation via stocks) to remove profit from economic and financial section (Abolhassani and Hassani, 2007). Other interest-free tools are sales with time payment or capital-plus- interest sale (leasing), prepayment and bilateral commitments to increase activity domain, operations variety and risk management capacity in Islamic banking. In spite of numerous advantages which Islamic banking has for banks and investors, it is less common in comparison with non-Islamic banking (conventional), because it has no appropriate legal sub-structures and those risks that banks facing with, as well (Khan and Ahmed, 2007).

Pedram (2013) declared the importance of risk management in Islamic banking, so risk management methods were studied on the basis of Islamic banking, after enumerating banking activities risks. Therefore, the study explained Islamic banking traits and its

differences with conventional banking on the basis of management perspective, and classified common risks between Islamic banking and conventional banking, and special banking risks. Shabani and Rastkhiz (2012), declared that the conventional banking risks and Iran interest-free banking risks had no significant differences except two cases: Liquidity and operational risks. Javadi and Qouchifard (2009), studied banks and Islamic financial institutes (an approach on legal risk) risks. They reported that Islamic banking is a part of extent concept for Islamic economy which it combines morality system. With economic structure.

Islamic financial system is designed to implement borrowing, lending and investment operations in an environment with sharing risks between the parties. Despite Islamic banking includes merits in comparison with traditional banking, this banking type is less common in Islamic countries and has no proper position in these countries. One of the important reasons is that Islamic banks face with legal risks and their structure is not in accordance with financial structure of conventional banking that is common in all over the world.

As the article studied the Islamic banking structure, it tried to study legal risk and the reasons to observe such a risk in Islamic banking, and the reasons for Islamic financial tools inefficiency (that is sharing loss and profit between bank and investors) have been studied, as well. It is hoped that experts and Islamic banking authorities will solve and moderate the risks to promote and develop Islamic banking as much as possible and help to make easier Islamic banking globalization. According to the articles seven to seventeen in interest-free banking law, deposits resources are specified as: Interest-free loan, exchange contracts, cooperative contracts and direct investments, and the most common and important risks between interest-free banking and conventional banks are totally classified in four areas on the basis of financial experts point of view: Credit risk, liquidity, market and operational (Shabani and Rastkhiz, 2012).

Researches by Abolhassani and Hassani (2008) reported that some common risk management methods such as assets exchange to securities are suitable for interest-free banking and they mentioned methods and techniques to be implemented in interest-free banking. Soroush and Sadeqi (2007) believed that securities rent are the most common Islamic financial tools using in Islamic countries. Different dimensions including juridical, legal, risk management, accounting and tax are considered to design each Islamic financial tools. Today, risk and fluctuations take policymakers, investors and even government authority's attention.

Risks must be identified, calculated and managed due to its high importance and effectiveness. Abzari et al. (2012), studied financial engineering tools for risk management in investment system to give several financial tools in Islamic financial system such as direct investments, cooperation, installment plan, hire-purchase, written promise, and their usages in risk management. The research results by Abdallah et al. (2015) represented the comparisons between rate of risk disclosure in large companies, Islamic financial institutes, conventional financial institutes and companies with high governance quality. Results showed that risk disclosure in large companies of countries in Persian Gulf

Cooperation Council was different in spite of supervising and cultural similarities. Khediri et al. (2015), showed that Islamic banks had less credit risk and more profit in average. Classification models results show that these two banks are maybe different in terms of credit, bankrupting risk, operational leverage, liquidity and profitability. Abdallah et al. (2015) believed that according to the data results both financial institutes face with several risks in Pakistan which are credit risk, investment risk in stocks, market risk, liquidity risk, bankruptcy risk rate and operational risk management methods. Olson, Zoubi (2008), examined under various principles including risk sharing and profit prohibition. However, both banks have similar competitive conditions. 26 banks were under data assessment with legit regression that it showed there is close rate for financial ratio in both banks.

Risk management in interest-free banking is different from conventional banking, because there are certain legal frameworks such as usury sanction and void of hazardous transactions. In western countries there are moral investment funds which are similar to interest-free banking based on their purposes. It means that they grant loan to prevent capital inflows in undesirable economic sections. According to the fundamental differences in financial tools using by conventional and Islamic banking and the most different one that is a legal system named Islamic contracts, the question is that are there any differences between risk management methods in banks and interest-free loan institutes and other conventional banks and institutes?

## 2. METHODOLOGY

The study is descriptive-comparative one and cross sectional in terms of time criteria. Population consisted of all banks and other conventional financial institutes in Iran and because the population is limited to 100, so it is divided in two groups. (1) Interest-free loan financial institutes and banks, (2) other banks and conventional financial institutes) as the samples. A questionnaire made by Javadi and Qouchifard (2009) and validated by researcher was used to examine, collect data and achieve six methods of risk management (credit risk, stock investment risk, market risk, liquidity risk, return risk rate, operational risk management methods). Grading method was based on 1-5 (not common in business sample, not implemented, under assessment to be applied, sometimes implemented and continuously implemented) that is 1 for not common in business sample and 5 for continuously implemented. The questionnaire has 63 items. Its validity and reliability was calculated by Javadi and Qouchifard (2009) which was 0.87. Finally, data were analyzed by statistical tests such as descriptive statistics (frequency, frequency percentage, average and standard deviation) and deductive statistics (U Mann-Whitney Test). Also, data analysis was done with spss software (version 23).

## 3. RESULTS

Table 1 shows descriptions for the sample education and gender.

Before research theories assessment, first the single-sample Kolmogorov-Smirnov test was used to examine normality of

main variables (motivational factors and social factors) and their dimensions (health motives, family support motives, reward motives, appreciation motives and entertainment motives) and results showed that normality was rejected for all variables ( $P < 0.05$ ).

Findings analysis (with U Mann-Whitney Test) showed that average rate for credit risk management was equal to ( $m = 52.88$ ,  $u = 2310.5$ ,  $P < 0.05$ ) in banks and it was equal to ( $m = 48.12$ ,  $u = 2310.5$ ,  $P < 0.05$ ) in interest-free loan financial institutes (Table 2). The average rate for stocks investments was equal to ( $m = 49.33$ ,  $u = 119.5$ ,  $P < 0.05$ ) in banks and it was equal to ( $m = 56.67$ ,  $u = 1191.5$ ,  $P < 0.05$ ) in interest-free loan financial institutes. Because p rate is  $< 0.05$ , so theory zero is rejected and there are significant differences between stocks investments and credit risk management in banks and interest-free loan financial institutes with other banks and conventional banking institutes of Iran. Also, average rate for market risk management was equal to ( $m = 49.17$ ,  $u = 1183.5$ ,  $P > 0.05$ ) in banks and it was equal to

( $m = 51.83$ ,  $u = 1183.5$ ,  $P > 0.05$ ) in interest-free loan financial institutes. The average rate for liquidity risk management was equal to ( $m = 55.51$ ,  $u = 999.5$ ,  $P < 0.05$ ) in banks and it was equal to ( $m = 52.77$ ,  $u = 1136.50$ ,  $P > 0.05$ ) in interest-free loan financial institutes. The average rate for return risk rate was equal to ( $m = 52.77$ ,  $u = 1136.50$ ,  $P > 0.05$ ) in banks and it was equal to ( $m = 48.23$ ,  $u = 1136.5$ ,  $P > 0.05$ ) in interest-free loan financial institutes. The average rate for operational risk management methods were equal to ( $m = 49.28$ ,  $u = 1189.00$ ,  $P > 0.05$ ) in banks and it was equal to ( $m = 51.72$ ,  $u = 1189.5$ ,  $P > 0.05$ ) in interest-free loan financial institutes. Therefore, because P rate is  $> 0.05$ , so theory zero is rejected and there are significant differences among using market risk management, liquidity risk management, return risk rate and operational risk management methods in banks and interest-free loan financial institutes with other banks and conventional financial institutes.

#### 4. DISCUSSION AND CONCLUSION

The present study has been done to compare the differences between risk management in banks and interest-free loan financial institutes with other banks and conventional financial institutes of Iran. The results of research theories showed that there is significant difference between credit risk management in banks and interest-free loan financial institutes and other banks and conventional financial institutes of Iran. The result is similar to the previous research results by Shabani and Rastkhiz (2012) that have been analyzed the risks of conventional banking

**Table 1: Frequency distribution for individuals on the basis of demographic traits**

Variables	Levels	Frequency (%)
Education	Associated diploma	10 (10.0)
	Bachelor	29 (29.0)
	Master	51 (51.0)
	Ph.D.	10 (10.0)
Gender	Male	77 (77.0)
	Female	23 (23.0)

**Table 2: U Mann-Whitney index differences between banks and interest-free loan institutes with other conventional banks and financial institutes in terms of the research variables**

Variable	Group	Numbers	Average	U Mann-Whitney	Wilkinson	z	Significant level
Credit risk management	Interest-free banks and financial institutes	50	52.88	2310.5	4263.5	2	0.03
	Other conventional banks and financial institutes	50	59.12				
Stocks investments risk	Interest-free banks and financial institutes	50	49.33	1191.5	4263.5	2	0.04
	Other conventional banks and financial institutes	50	56.67				
Market risk management	Interest-free banks and financial institutes	50	49.17	118.53	2458.5	-0.461	0.64
	Other conventional banks and financial institutes	50	51.83				
Liquidity risk management	Interest-free banks and financial institutes	50	49.17	118.53	2458.5	-0.461	0.64
	Other conventional banks and financial institutes	50	51.83				
Return risk rate	Interest-free banks and financial institutes	50	52.77	1136.50	2411.5	-0.797	0.42
	Other conventional banks and financial institutes	50	48.23				
Operational risk	Interest-free banks and financial institutes	50	49.28	1189.00	2464.00	-0.423	0.67
	Other conventional banks and financial institutes	50	51.72				

and interest-free banking based on Islamic contracts, and they reported no significant difference in conventional banking risks and interest-free banking risks, except two cases: Liquidity risk and operational risk. Qaderi, Charfedin and Youssef (2015), studied about Islamic banking and traditional banking in countries of Persian Gulf Cooperation Council and showed that Islamic banking has more profit and less credit risk in average. Results of classified models showed that both banks may be different in terms of credit, bankruptcy risk, operational leverage, profitability and liquidity. Also, there is significant difference between using stocks investments in banks and interest-free loan financial institutes and other banks and conventional financial institutes. This result and previous research results by Abzari et al. (2012), studied the effective factors on risk and investment return in financial products. They studied about financial products and uneconomic factors on total risk of financial products investment and reported that risk perception tended to investment risk had negative correlation, date return rate tended to risk had positive correlation and there was negative correlation between risk perception and expected return rate, there was positive correlation between past performance data and expected return rate, and there was significant correlation in capital market decision-makers return rate, accepted companies by stock bourse, financial institutes, and personal investors. Banks financial resources are provided by capitalistic and non-capitalistic with various risks and costs. Capital resource plays an important role to keep and stabilize financial health. Generally, capital risk is defined as the possibility of no essential capital as the last coverage and resources against losses or no possible repayments of loans, and capital risk is very important for banks owners and stockholders and especially it is regarded by bank supervisors.

Next finding showed that there is no significant difference in using market risk management between banks and interest-free loan financial institutes and other conventional banks and financial institutes. This result and the research results by Javadi and Qouchifard (2009), that compared bank risks and Islamic financial institutes (an approach on legal risk), reported that one of the main reasons is that Islamic banks face with legal risk their financial structure is not consistent with conventional banking structure that is common in all over the world. In this research, Islamic banking structure and its financial tools are studied and tried to investigate legal risk and the reasons to observe such a risk in Islamic banking and assess inefficiency reasons of Islamic financial tools (sharing loss and profit between bank and investors) in the contemporary world. Abdallah et al. (2015) studied the differences in risk management methods of Islamic institutes and conventional financial institutes in Pakistan. They showed that both financial institutes face with various risks in Pakistan which are in six classifications: Credit risk, stocks investment risk, market risk, liquidity risk, return risk rate and operational risk management methods. Fluctuations of various rates in market including inflation rate and bank loans profit rate, currency rate (in banks with cross border activities), and assets prices (in banks allowed to have stocks investments and other physical assets or giving financial facilities to buy or sale special goods), will increase predictions of assets, debts, income and their costs. Totally, market risk is defined as the errors happen in predictions caused by fluctuations of market rates.

There is significant difference in using liquidity risk management between banks and interest-free loan financial institutes and other conventional financial institutes. This finding and previous research results by Abolhassani and Hassani (2008), that studied about risk types and their management methods in interest-free banking, examined related risks to methods of resource allocation in Iran interest-free banking and provided methods and special tools based on Islamic jurisprudence manage the risks. They believed that some common risk management methods such as assets exchange to securities are suitable to be used for interest-free banking and mentioned methods and techniques to use for interest-free banking. Soroush and Sadeqi (2007), in their research about securities rent risk management, reported that it is essential to consider dimensions including financial, juridical, legal, risk management, accounting and tax due to design Islamic financial tools. Today, risks and fluctuations have been regarded by policy makers, investors and even government authorities. Due to the importance and high effectiveness of risks, they must be identified, calculated and managed. Because of some cases such as costs increase, efficiency decrease, no punctual service provision, and no punctual payments for their services, organizations have liquidity problems for their services. Every organizations use liquidity risk management methods on the basis of its size and specialty. There is no significant difference for return risk rate between banks and interest-free loan financial institutes and other banks and conventional financial institutes. The finding and previous research results by Abzari et al. (2012) that studied about risk management in interest-free banking concluded that there is no fixed rate for interest-free banking, so risk management is more important than conventional banking. They, also, investigated financial engineering tools for risk management in capitalistic system and provided several financial tools in Islamic financial system: Direct investments, cooperation investment plan, hire-purchase, written promise and their usages for risk management. Khan and Ahmed (2007) studied financial tools role for making credit risk and pointed out the necessity of using new financial tools for credit risk management in Islamic banking. Changes in market currency rate have been done based on demand and supply balance and it always fluctuate due to other changes, and currency rate risk is made for this reason. Effective factors on currency rate are: Commercial flows, rational inflation rate and rational profit rate.

Finally, there is no significant difference for using operational risk management methods between banks and interest-free loan financial institutes and other conventional banks and financial institutes. This result and previous research results by Abdallah et al. (2015) studied about financial Islamic entities, corporate governance, large companies risk disclosure in Persian Gulf Cooperation Council countries and concluded that making comparisons for risk disclosure rate in large companies, Islamic financial institutes, conventional financial institutes and companies with high governance quality showed that large companies risk disclosure in all countries of Persian Gulf Cooperation Council was different, though it had similarities in terms of culture, social and supervision. Abdallah et al. (2015) studied about the differences between methods of risk management in Islamic institutes and conventional financial institutes of Pakistan and showed that both financial institutes face with various types of risks which

is included in six classifications: Credit risk, stock investment risk, market risk, liquidity risk, return risk rate, operational risk management methods.

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