**Awareness of Operational Risk Management Procedures in Islamic Banks**

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**Abstract**

Non-financial risk management in Islamic banks is considered very important. The source of non-financial risk is varied in Islamic banks. The objective of this paper is to investigate the extent of awareness of Islamic banks staff about the non-financial risk of different aspects. To accomplish this objective a questionnaire was design composed of two parts. The first part was concerned of demographic characteristics, while the second part was concerned with measuring the awareness of eight constraints of managing non-financial risk in Islamic banks. The results showed that the general awareness of non-financial risk in Islamic bank is moderate in all its aspects. It was recommended to improve the awareness through the training and the application of risk management systems modified to meet the banks requirements.

Keywords: Non-financial risk, Islamic bank, NFORM.

JEL Codes: G20,G23, G32.

**Introduction**

Operation risk management in banks became very crucial. The awareness of operational risk management has increased among banks’ boards (Basle Committee on Banking Supervision, 1998). Success banks used to build their own measures of operational risk and harmonize these measures with the international ones. In Islamic banks, the low financial risk resulted of applying the Islamic financial procedures raised the other side the care of the non-financial risk management in these banks.

The non-financial risk in the Islamic banks could raise from the opening of new branches, misinform customers, technology wise, shari’a risk and withdrawals (Van Greuning and Iqbal, 2008). Abdel-Rahman (2015) classified the sources of non-financial risk in Islamic banks differently. The sources of non-financial risk has been classified internally and externally. The internal risks include fraud, products, system failures, assets damages and the practices related to business, while the external risks are related to customers and business disruption. Others (Archer and Haron, 2007; Fiennes (2007); Sundarjan (2005) and Chapra and Khan (2000) used other classification of risk related to operational, legal, and fiduciary.

The comprehensive management procedure for risk should include the identification of risk, measuring it, monitoring it, report, how to control and mitigation (Guide Principles of Risk Management for Institutions, 2005). These control systems are related directly to human resources professionalism. Human resources are considered very important in managing and dealing with non-financial risk in Islamic banks (Mariutha et al. 2009). The training of the staff is considered one of the elements that contribute to managing and control the financial risk in Islamic banks.

Abdul-Rahman and Yazid (2015) find out that the training is considered very crucial to train the staff about the systems that can be used to control non-financial risk management. The training of the staff would increase the awareness and experience to manage. The objective of this paper is to study the awareness of the Islamic bank staff about the different causes as well as the training as tool to manage the risk.

**Methodology**

The objective of this research is to examine employees’ awareness for the implementation of operational risk management in Islamic banks. This research will investigate the readiness for non-financial operational risk management (NFORM). Quantitative research followed as a method of data collection (Robson, 2002). Questionnaire used as a tool for data collection. Different personal characteristics used to measure the perspectives of banks’ staff of NFORM. Age, gender, education, experience in risk management, and work position were the major characteristics used to evaluate the employees’ perspectives of NFORM in banks.

The second part of the questionnaire was design to answer many questions: What is the employees’ awareness of NFORM in Islamic banks? What is the level of understanding of non-financial risk management? To answer these two questions eight major variables introduced as follow:

V1: The realization of source of risks in bank

V2: The ability to classify the NFORM in banks

V3: Realizing risk management model used in banks

V4: Management of NFORM

V5: Realizing operational control and mitigation plans of NFORM

V6: Reviewing operational risk controls of banks

V7: Impact of using standardized models to manage NFORM

V8: Training and awareness of staff for NFORM

Five scale answers used to measure the attitudes of employees of understanding the NFORM. Strongly agree took the rank five, while strongly disagree took rank one. The second part of the questionnaire measured the awareness of employees’ for NFORM in banks. Pilot sample taken to test the questionnaire. The results of the pilot sample used to modify and correct the language of the questionnaire and to measure the reliability of the data collection tool.

The collected data entered to SPSS (Ver. 22). Descriptive statistics used to measure the distribution of demographic characteristics of respondents and it used to measure the trends of employees for the implementation of NFORM parameters in banks.

**Results and Discussion**

The demographic characteristics of the personnel responsible for NFORM reflects the bank readiness to deal and manage non-financial risk. This section aims to introduce details about the selected sample concerning age, gender, banking experience, working Sector/Department, education. The age groups used were 20-29 years, 30-39 years, 40-49 years, 50–59 years and >60. Figure (1) represents the percentage of age distribution. The highest occurrence was for the age group (40-49) years representing a percentage of 49.6%, the second group (30-39) representing a percentage of 35.0% while the smallest group of participants was the (20-29) years with percentage of 15.3%.

The second demographic characteristic of the sample is gender. Figure (1) shows that males represents percentage of 73.7 (98 participants) of the sample, while the female is 26.3 percent with (39 participants). The educational level (Figure 1) was highest for bachelor's and master holders represent the majority of the participants with 52.6% and 37.2% and 62 & 56 participants respectively, while the PhD/Doctorate degree holders represent 7.3% with ten participants, high school and diploma holders represent the smallest group of the participants with less than five and four participants.

Concerning experience, the majority of the sample falls in three groups (5-10,11-15 years, and 16-20 years) with percentages of 14.6, 35.8 and 27.7 respectively, with (20), (49) and (38) participants respectively, while the rest of the groups represent percentages of 12.4 and 9.5.

|  |  |
| --- | --- |
|  |  |
|  |  |

Figure 1: The percentage of demographic constraints

**Working Section/Department:** The working sector/department within the bank, represent the last classification characteristic of the sample, Table (1) elaborates few facts about the sample, such as the Corporate Finance department was the major contributor (respondents) to the study with 40.9 and 56 participants. The second rank was the Operation department with 24 respondents with percentage of 17.5.

Table 1: The distribution of sample according to their working section in Islamic banks

|  |  |  |
| --- | --- | --- |
| **Working Section** | **Frequency** | **Percentage** |
| Administration support | 9 | 6.6 |
| Branches | 4 | 2.9 |
| Corporate Finance | 61 | 44.5 |
| Credit | 1 | .7 |
| Customer Services | 1 | .7 |
| Deposits | 5 | 3.6 |
| Financial Audit | 4 | 2.9 |
| HR | 17 | 12.4 |
| Internal Audit | 1 | .7 |
| IT | 5 | 3.6 |
| Operations | 24 | 17.5 |
| Personal Finance | 5 | 3.6 |
| Total | 137 | 100.0 |

**The trend of realizing NFR in Islamic bank of Study Variables**

Evaluation of overall understanding of NFR in Islamic Banks

As it is clear from Table (7), the overall mean is 3.8564, which indicates that the Islamic banks in Jordan are ready to implement any international standards of NFORM. However, further analysis is required to validate this result, which will be in the coming sections.

Table 2: Mean and std dev. of the evaluation of understanding of NFROM in Islamic Banks in Jordan

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
|  | N | Mean | Std. Deviation |
| T\_All | 137 | 3.8564 | .22357 |
| Valid N (listwise) | 137 |  |  |

**Evaluation of trends of study constraints**

As part of the analysis, calculating the means for the dependent variables to find out, which is the most variable has the highest trend, which is for variable number eight with (3.9069) and SD of (0.26604), table 8 shows the means for each theme of the study.

Table 8: The sample trends for the study variables using means and standard deviation

|  | N | Mean | Std. Deviation |
| --- | --- | --- | --- |
| V1 | 137 | 3.5706 | .47215 |
| V2 | 137 | 3.8777 | .36395 |
| V3 | 137 | 3.8234 | .34816 |
| V4 | 137 | 3.8684 | .22858 |
| V5 | 137 | 3.8858 | .27217 |
| V6 | 137 | 3.8942 | .28929 |
| V7 | 137 | 3.9015 | .28977 |
| V8 | 137 | 3.9069 | .26604 |
| Valid N (listwise) | 137 |  |  |

All variables’ mean are greater than 3.5, which indicates that the Islamic banks in Jordan are ready for implementation of international standards of NFORM, which is in line with the overall findings.

**Correlation analysis**

The researcher performed a correlation test between the themes, with including the overall (T\_All) table 4-10. The following table 4-10 summarize the output of the correlation test.

Based on the results of the study, T\_all (overall) is strongly related to T1, T2, T3, T4, T5, T6, T7 & T8 with r*1* = .256, *r2* = 710, *r3* = .789, *r4* = .550, *r5* = .721, *r6* = .324, *r7* = .245, and *r8* = .621, *p* < .01

Table 3: Correlations of different study constraints

| Correlations | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | V1 | V2 | V3 | V4 | V5 | V6 | V7 | V8 | V |
| V1 | Pearson Correlation | 1 | -.124 | .258\*\* | .126 | .025 | .036 | .320\*\* | .104 | .256\*\* |
| Sig. (2-tailed) |  | .148 | .002 | .143 | .776 | .679 | .000 | .227 | .003 |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| V2 | Pearson Correlation | -.124 | 1 | .748\*\* | .547\*\* | .671\*\* | .225\*\* | .016 | .522\*\* | .710\*\* |
| Sig. (2-tailed) | .148 |  | .000 | .000 | .000 | .008 | .856 | .000 | .000 |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| V3 | Pearson Correlation | .258\*\* | .748\*\* | 1 | .453\*\* | .602\*\* | .232\*\* | .052 | .571\*\* | .780\*\* |
| Sig. (2-tailed) | .002 | .000 |  | .000 | .000 | .006 | .545 | .000 | .000 |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| V4 | Pearson Correlation | .126 | .547\*\* | .453\*\* | 1 | .548\*\* | .050 | .115 | .397\*\* | .550\*\* |
| Sig. (2-tailed) | .143 | .000 | .000 |  | .000 | .562 | .182 | .000 | .000 |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| V5 | Pearson Correlation | .025 | .671\*\* | .602\*\* | .548\*\* | 1 | .337\*\* | .080 | .522\*\* | .721\*\* |
| Sig. (2-tailed) | .776 | .000 | .000 | .000 |  | .000 | .353 | .000 | .000 |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| V6 | Pearson Correlation | .036 | .225\*\* | .232\*\* | .050 | .337\*\* | 1 | .043 | .054 | .324\*\* |
| Sig. (2-tailed) | .679 | .008 | .006 | .562 | .000 |  | .620 | .529 | .000 |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| V7 | Pearson Correlation | .320\*\* | .016 | .052 | .115 | .080 | .043 | 1 | .202\* | .245\*\* |
| Sig. (2-tailed) | .000 | .856 | .545 | .182 | .353 | .620 |  | .018 | .004 |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| V8 | Pearson Correlation | .104 | .522\*\* | .571\*\* | .397\*\* | .522\*\* | .054 | .202\* | 1 | .621\*\* |
| Sig. (2-tailed) | .227 | .000 | .000 | .000 | .000 | .529 | .018 |  | .000 |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| V\_All | Pearson Correlation | .256\*\* | .710\*\* | .780\*\* | .550\*\* | .721\*\* | .324\*\* | .245\*\* | .621\*\* | 1 |
| Sig. (2-tailed) | .003 | .000 | .000 | .000 | .000 | .000 | .004 | .000 |  |
| N | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 | 137 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | | |
| \*. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | | | |

**Awareness of NFORM in each constraint**

Understanding NFR Sources : Figure 2 shows the awareness of NFROM sources in bank. The items have scored 3.53, 3.49 and 3.61for questions one to three respectively. This indicates that the banks are in mid-range of the scale (between three and four), which means that the banks need more efforts in defining the sub-categories for their NFROM to have better understanding of NFROM sources, and the same for the integration between risks.

**Figure 2: Awareness of NFROM sources**

**Identification of NFROM**

Figure 2 shows the results of the awareness of identification of NFROM in Islamic banks. Impact matrix, risk registers have scored 3.78, 3.93, 3.91 and 3.85 for questions four to seven respectively. By subjecting the scores to NFR Readiness Scale, the banks are in mid-range of the scale (between three and four), which means that the banks need to review their current practices for NFR assessments and its related tools (for example the PIM).

Figure 3: Awareness of identification of NFROM in Islamic banks

**Current risk management system(s), models and framework(s) implemented**

Figure 4 shows the results of awareness of current risk management system and models and frameworks implemented. The components have scored 3.91, 3.77, 3.71, 3.43 and 3.82 for questions eight to twelve respectively. By subjecting the scores to NFR Readiness Scale, the banks are in mid-range of the scale (between three and four), which means that the banks have an ERM in place, but the scores showed a lack of utilization and integration with banks processes. It is recommended to review the ERM modules and enhance it to be aligned with standard requirements.

***Figure ‎4* Current risk management system(s), models and framework(s) implemented**

**Awareness of Managing NFR**

Figure 5 shows the results of awareness of managing NFR in Islamic banks. The components have scored 3.91, 3.78, 3.81, 3.79, 3.80, 3.85 and 3.93 for questions 13 to 19 respectively. By subjecting the scores to NFR Readiness Scale, the banks are in mid-range of the scale (between three and four), which means that the banks need to review their risk amendment processes and add few controls / components to be aligned with standards requirements.

Figure 5 Awareness of managing NFR in Islamic Banks

**Awareness of the available operational controls and mitigation plans (risk response)**

Figure 6 shows the results of awareness of the available operational controls and mitigation plans in Islamic banks. The components have scored 3.87, 3.94, 3.82, 3.91 and 3.84 for questions 20 to 24 respectively. By subjecting the scores to NFR Readiness Scale, the banks are in mid-range of the scale (between three and four), which means that the banks need to they need to review and enhance risk treatment process and to develop prioritization matrices.

Figure 6 The available operational controls and mitigation plans (risk response

**Awareness of reviewing NFR management controls and procedures.**

Figure 7 shows the results of awareness of reviewing NFR management controls and procedures. The components have scored 3.94, 3.83 and 3.91 for questions 25 to 27 respectively. By subjecting the scores to NFR Readiness Scale, the banks are in mid-range of the scale (between three and four), which means that needs to enhance the methods of risk performance monitoring and risk plans in addition to utilize the learnt lessons more effectively.

**Figure 7 reviewing NFORs management controls and procedures**

**Awareness of the impact of using standardized model on managing NFR.**

Figure 8 shows the results of awareness of the impact of using standardized model on managing NFR. The components have scored 3.96 and 3.96 for questions 28 to 29 respectively. By subjecting the scores to NFR Readiness Scale, the banks are in mid-range of the scale (between three and four) but near grade four, which means that the banks need little to enhance the integration between the implemented standards.

**Figure 8 Awareness of the impact of using standardized model on managing NFR**

**Awareness of training and awareness of staff about NFR management system.**

Figure 9 shows the results of awareness of training and awareness of staff about NFR management system. The components have scored 3.87, 3.82, 3.78 and 3.94 for questions 30 to 33 respectively. By subjecting the scores to NFR Readiness Scale, the banks are in mid-range of the scale (between three and four), which means that the banks need to provide more special training on risk management, increase the effectiveness of the internal and external communication about the risks.

**Figure 9 Awareness of training and awareness of staff about NFR management system**

**Conclusions**

The objective of this research is to investigate the realization of non-financial risk in Islamic banks in Jordan. The quantitative research using questionnaire was used as a tool to collect data. The results showed that the banks realized the extent of non-financial risk. The results showed that the grade for the evaluation increased over three indicating the positive attitudes of Islamic banks employees to understand, deal and manage NFR. The positive attitudes were for the realization of source of risk in the bank, the ability to classify the NFR in the bank, the management systems of risks, the overall management of NFR, the realization of operational control and mitigation plans of NFR, the reviewing of operational control plans of the bank, the impact of using standardized international models to manage NFR and the training and awareness of staff for NFR.

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