THE ROLE OF ISLAMIC BANKING IN GROWTH AND DEVELOPMENT OF FINANCIAL MARKET: A CASE STUDY OF KUWAIT

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ABSTRACT

The main objective of the research study was to test the role of Islamic banks in the performance of the financial market in Kuwait. This aim has been attained by comparing Total Average Returns on stocks and risks of Islamic and conventional banks that form the financial market. According to the results of the dissertation, the hypothesized assumption of the dominant role of Islamic banks was proved empirically. In addition, the econometric tests such as the one-way ANOVA test or the one-sample T-test provided different outcomes. While the one-way ANOVA pointed at the absence of statistically significant differences in average returns, the results of the one-sample T-test allowed for concluding that Islamic banks were superior to other groups of banks in terms of their contribution to financial market performance.

KEYWORDS: Banks, Financial Market, ANOVA, Islamic Banking & Stock

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INTRODUCTION

The Global Financial Crisis (GFC) undermined the trust of investors and customers in the conventional banking system (Haas & Lelyveld, 2014; Vazquez & Federico, 2015; Bénétrix, Lane & Shambaugh, 2015). People started to seek alternative ways of investing where a protection of capital would be guaranteed (Lebdaoui & Wild, 2016). As a response to this demand, Western financial institutions began to introduce non-conventional products (Samad, 2016; Erol, Baklaci, Aydoğan & Tunç, 2014; Khediri, Charfeddine & Youssef, 2015). Eventually, some traditional banks were fully converted into Islamic banks (Shafii, Shahimi & Saaid, 2016; Abdalla, Aziz & Johari, 2015; Wilson, 2013). The rationale behind this choice was hidden in the structure of Islamic banks which proved to be immune to external shocks such as financial crises (Rosman, Wahab & Zainol, 2014; Bourkhis & Nabi, 2013; Farooq & Zaheer, 2015). On the one hand, the full compliance with Sharia law allows for mitigating problems associated with the mismatch of short-term demandable deposits with long-term loan contracts by incorporating risk-sharing and profit-sharing elements. Nevertheless, the advantages of Islamic banking became a topic of massive debates (Mallin, Farag & Ow-Yong, 2014; Lebdaoui & Wild, 2016; Riaz, Awad & Nadia, 2014). Beck, Demirgüç-Kunt, and Merrouche, (2013) argued that there were minor differences in performance of conventional banks and unconventional banks. The question mark under a superiority of Islamic Banking industry has been raised. Taking into account the contradictory evidence with regard to the benefits of Islamic banks coupled with the gap in existing literature, the need to perform a comprehensive analysis related to the effects of traditional banking, non-traditional banking, and mixed banking is difficult to overstate.

To bridge the gap, the research incorporates the analysis of listed banks in Kuwait. Nevertheless, it is performed in such manner that three separate groups of banks are compared. Thus, the reasonable conclusion with regard to the performance of Islamic Banks can be made.

The aim of the research study is to evaluate the role of Islamic Banking in the growth and development of financial markets in Kuwait. To achieve this goal, the following objectives are pursued. Firstly, the average returns of different stocks are compared in order to assess its individual contribution to the growth of financial markets. Secondly, total risks and systematic risks were estimated. Those are assumed to be a measure of development. In other words, stocks with lower risks are assumed to be greater contributors to the development of Kuwait's financial markets. Thirdly, the one-way ANOVA test and the one sample T-Test are performed to assess the role of Islamic Banks (Gamage & Weerahandi, 1998; Cuevas, Febrero & Fraiman, 2004; Cressie, 1980).

The research paper is organized as follows. Chapter 2 provides a comprehensive literature review. It describes the nature of Islamic Banks and its history. Furthermore, it provides an overview of empirical evidence which is available to date. Chapter 3 outlines the methodological framework that was selected for quantitative analysis. In this chapter, the description of data can also be found. Chapter 4 is represented by the analysis. It provides the results of all tests mentioned in the objectives. Chapter 5 summarizes all findings. It establishes the discussion of the results obtained. Moreover, it provides recommendations for prospective researchers while highlighting the limitations.

LITERATURE REVIEW

Development of Islamic Banking

The rapid development of Islamic banking began in the second half of the 20th century (Bashir, 1984; Lai & Samers, 2017; Abedifar, Ebrahim, Molyneux & Tarazi, 2015). The very first Islamic bank that opened its doors to a general public was founded in Egypt in 1963. Although the newly emerged industry lacked recognition, it quickly identified its key customer. In a relatively short period of time, it materialized into a self-sufficient industry (Chachi, 2005). In 2016, the number of countries where Islamic banking was successfully integrated into a financial system exceeded 50. It is worth mentioning that among those countries, examples of Pakistan and Iran were prominent. This is because there were no banking sectors allowed other than Islamic (Lebdaoui & Wild, 2016). Nevertheless, the review of relevant sources provides a strong evidence of existing seamless relationships between conventional and unconventional banking. To be more specific, the cases of Jordan, Indonesia, and Egypt are all good examples of co-existence (Bashir, 2003; Erol, Kaynak & Radi, 1990; Hutapea & Kasri, 2010).

Several aspects of Islamic banking require deeper understanding. Firstly, the association between Islamic banking and conventional banking is not obvious at the first glance. However, the direct linkage can always be found in the products offered by traditional banks. The Islamic Bank of Britain was among the pioneers who began to offer non-conventional products in the United Kingdom (UK) (Sadek, Zainal & Jusoff, 2010; Mansoor Khan & Ishaq Bhatti, 2008). The range of Islamic banking services was developed by Islamic Bank of Britain in 2004. Considering the United States (US), University Bank and Devon bank located in Chicago became the ambassadors of non-conventional services in this region (Zinser, 2014). In accordance with the most recent forecasts, the non-conventional banking sector is expected to grow at the constant pace of 15-20% (Uppal & Mangla, 2014). Moreover, Iqbal and Molyneux (2016) implied that the newly emerged industry was in charge of 250 billion US dollars in 2015 approximately. Secondly, the differences between traditional and non-traditional banking is dramatic, and must be explained in more details. The first difference is the

attitude towards interest charged. Islamic banks cannot offer financial products based on fixed rates because it does not comply with Sharia laws (Abdul-Rahman, 2014). Interest or *riba* itself is not allowed because it might put one market participant into beneficial position at the expense of another (Naqvi, 2016). By applying similar logic, the interest on the loan is also prohibited. Another difference of Islamic banking from its conventional counterpart is the paradigm of Profit and Loss Sharing (PLS) (Samad, 2016). This concept completely destroys the traditional view of the banking system which pertains to many individuals. Among notable examples of PLS are *Mudarabah* and *Musharakah* (Azmat, Skully & Brown, 2015; Subky, Liu, Abdullah, Mokhtar & Faizrahman, 2017; Ahmed, 2014). *Mudarabah* is directly associated with profit sharing while *Musharakah* is the concept which is relevant for joint ventures. The further explanation implies that the losses and profits are typically shared in borrower-bank relationships. However, on the bank side, all sharing regarding gains and losses relates to depositors. Therefore, it can be argued that Islamic banks have a better protection against external shocks such as global economic or political crises (Athari, Adaoglu & Bektas, 2016; Johnes, Izzeldin & Pappas, 2014). The reasoning behind its advantageous position is a proportional distribution of losses to depositors. In addition, the nature of Islamic banks allows for financing projects with longer terms and the higher level of risk. In turn, the constant flow of investment capital spurs economic growth.

Although the concept of PLS is beneficial in many instances, it only makes sense if the strongest discipline is maintained by Islamic banks. The evidence shows that more effort needs to be put into the investigation. In other words, the detailed background checks are vital in order to distinguish bad clients from good clients. The motivation for Islamic banks is unprecedented due to the fact that any reputational threat might materialize into severe damage extrapolated to the whole industry. Furthermore, the PLS compliance contributes to the atmosphere of strict discipline. Islamic banks focus more on the monitoring of borrowers and investments which ensures that financial statements of banks do not contain material misstatements and represent the true and fair view. Therefore, the advantage that logically flows from the assumptions made above is efficient capital allocation (Wanke, Azad & Barros, 2016).

The concept of Islamic Finance is not limited to the PLS paradigm and incorporates other important aspects. It is worth noting, that the religion of Islam is deeply integrated into a business life. Thus, religion plays an important role in both business and personal relationships. The religion of Islam prohibits all non-halal activities. The synonym of halal is permissible meaning that it is Koran accepted. Non-permissible activities are gambling and prostitution to name a few. Another requirement of Sharia Law is proper documentation of all the contractual relationships. The aspects of contract which are not clearly defined should be removed or rewritten. This is mainly driven by the desire to eliminate the risks associated with intentional exploitation of one person by another (Mohamed & Hachicha, 2016).

Taking into account a commercial perspective, there are two types of Islamic banking products that are worth mentioning. *Musyarakah* is a contract or venture agreement where investments are made jointly to finance a specific project and eventually engage into the profit-sharing scheme. This scheme is determined in advance and basically, cannot be altered. It is worth noting that contractual obligations are not legally binding. Nevertheless, banks carry the right to terminate such contract if obligations are not fulfilled by one of the parties or let it expire. *Mudarabah* products are slightly different in a sense that the whole amount to be invested is provided by banks. Despite the fact that all investments belong to them, they are not allowed to participate in the management of their funds. The concept is straightforward: banks support projects financially while financial managers agree to share their expertise in exchange for some profit (Sapuan, 2016). However, there are some products which do not fully match the PLS. For instance, *Murabaha* is a mark-up based

product. It allows banks to buy goods at retail price and resell it at cost plus a profit margin. This type of product is typical for trade financing. Ijarah is equivalent of a finance lease. The contractual obligations come into force when a specific purchase is made by a bank on behalf of a client. Once purchased, the object is recorded in client books as a lease where fixed charge is paid over specified period of time. Nevertheless, rental charges are the burden of banks technically (Schoon, 2016).

To sum up, Islamic banking represents a phenomenon of the 21st century. The rapid development of this sector over the past 40 years became a topic of increased interest. Nevertheless, the role of Islamic banking in growth and development of financial markets is surrounded by uncertainty. Therefore, current research attempts to shed some light on these relationships.

Empirical Evidence

The contribution of Islamic banking to financial markets and the economy was thoroughly scrutinized. The review of the available literature provided interesting evidence with regard to members of the Gulf Cooperation Council (GFC). Alqahtani, Mayes and Brown (2016) conducted a detailed analysis of performance of conventional and unconventional banks during the Global Financial Crisis (GFC). The outcome of the bank performance model (CAMEL) proved the superiority of Islamic banks during the GFC (Kumar & Sayani, 2015). Moreover, this trend remained intact over the whole observation period from 1998 to 2012. In terms of efficiency, they were better capitalized and more liquid. Conversely, their performance significantly worsened when the peak of the crisis was over. This was especially sharp in the areas of efficiency, profitability, and capitalization. Taking into account conventional banks, their performance was better in terms of Return on Equity (ROE) and fee income. However, the main limitation of their research is the focus on predominantly accounting measures of performance.

Imam and Kpodar (2016) used fixed effects model and Generalized Method of Moments (GMM) model to assess the extent to which Islamic Banking contributes to financial development at national level. To provide reasonable estimates, the dataset of 52 countries was used. The observation period was stretched from 1990 to 2010. Overall results proved that countries experienced faster economic growth when the Islamic banking industry was rapidly developing. Therefore, the scholars implied that the legislative barriers for Islamic banks should be loosened so the development can be encouraged. Furthermore, unconventional banking can help to re-energize growth in non-Islamic countries. While the results imply positive economic effects of Islamic banks, the study is limited by the fact that in some of the analyzed countries Islamic banking holds a very small share in the total banking system.

Favorable effects of Islamic banking were also evaluated by Gheeraert and Weill (2015). By means of the stochastic frontier approach, the scholars established reasonable relationships (Kumbhakar & Lovell, 2003). On the one hand, the outcome of the financial model showed that the unconventional banking enhanced macroeconomic efficiency. On the other hand, there was a breakeven point where the expansion of Islamic banking became detrimental. It is worth noting that the research findings can be relied upon due to the fact that it was based on the data from 70 countries. However, the main limitation of the study is a rather short sample period spanning from 2002 to 2005.

Apart from overall economic development some researchers targeted specific sectors. Gheeraert (2014) stressed that the performance of the banking industry of South-East Asia and Middle-East was boosted by the rapid development of the non-conventional banks. The assessment was based on the amount of bank deposits in total GDP as well as a share of

private credit. Moreover, the scholar defined Islamic Banking as a compliment to traditional banking. With co-existence of both sectors, the unconventional banking reaches its medium penetration.

Interesting evidence was gathered in Turkey, where the impact of Islamic Banking development was tested in the context of Small and Medium Enterprises (SME) in Turkey (Aysan, Disli & Ozturk, 2016). The results of pooled Ordinary Least Squares regression (OLS) and fixed-effect model showed that SME's obtained more financing than conventional banks. As a result, their development was enhanced due to higher inflow of capital. Furthermore, the quality of portfolio holdings of Islamic banks was comparable with the holdings of their traditional counterparts. The results were robust for different ownership forms as well as changing model specifications. Yet, the limitation of the study is that the findings cannot be generalized for all companies in the country as non-random sampling was used.

The research conducted by Gregoriou et al., (2016) focused on the Kingdom of Bahrain which is a mecca of Islamic finance. The scholars concentrated on the liquidity effect which arose because of the merger between Al Salam Bank of Bahrain and a conventional bank after the GFC. After a series of econometric tests based on linear regressions, it was determined that the switch from the conventional system to the unconventional system boosted the liquidity of the company's stocks. The result was consistent with the cost/liquidity hypothesis. The hypothesis implies that investors might ask for a lower premium regarding their shareholdings if the availability of information increases. Finally, all tests were robust in proving that both trading and growth were stimulated by Islamic Banking in the event of a financial downturn.

The Indonesian experience is also prominent. Abduh and Azmi-Omar (2012) found a strong relationship between the development of Islamic Banking industry and economic growth over both short term and long term. Furthermore, the association was found to be bi-directional. To arrive at these results, the scholars utilized quarterly data over the period of 2003-2010 and integrated it into a Vector Error Correction Model (VECM) (Liao & Phillips, 2015). One of the practical implications of this analysis was filled up of an existing gap in the empirical literature devoted to the topic of Islamic Banking but the result is limited by the focus on a single economy.

METHODOLOGY

Sample Specification

The analysis incorporates publicly available data on all listed banks in Kuwait. Therefore, there were no issues associated with the breach of confidentiality. To estimate the role of Islamic Banks in the development of the financial market in Kuwait, all listed banks in Kuwait were identified. In total, there were ten banks included in the sample. Daily stock prices were obtained from the website of Boursa Kuwait stock exchange. The daily quotes of the Kuwait Stock Exchange Index (KSEI) were obtained from the same source. The data set was based on the observation period from 2000 to 2016. Significant outliers or missing values were identified and removed from the sample to lower the degree of bias.

Theoretical Framework

The quantitative part aims to determine the role of Islamic Banks in development of financial sector through calculation of risks and returns.

The returns on stocks are calculated using the following formula:

$$\text{Return on Stock} = (\text{Stock Price}_{\text{current}} - \text{Stock Price}_{\text{previous}}) / \text{Stock Price}_{\text{previous}}$$

From an econometric perspective, it is vital to compare the significance of returns. Therefore, the Analysis of

Variance (ANOVA) test is performed.

The one-way ANOVA helps to identify the existence of statistically significant differences between means of the sampled groups (Tamhane, 1977). Those groups are unrelated. Furthermore, they might have the endless number of members. In terms of analysis performed, the three groups were determined namely conventional banks, Islamic banks and mixed banks where both conventional and non-conventional products are offered. The null hypothesis of the ANOVA test are identified as follows:

$$H_0: \mu_1 = \mu_2 = \mu_3 = \dots = \mu_k$$

Where μ is a mean of specific groups and k is a number of those groups.

If the ANOVA test delivers statistically significant results, the alternative hypothesis is accepted which assumes that there are at least two groups of means where differences between their values are statistically significant.

Despite its simplicity, there are six assumptions that must be satisfied. Otherwise, the results of ANOVA tests would not be valid (Scariano & Davenport, 1987).

- The dependent variable must be represented by a ratio or interval. In other words, they must be continuous
- Time series must be based on two or more groups being independent of each other. In general, the ANOVA test is used with at least three groups.
- The observations must also be independent. In other words, the assumption suggests that participants should belong to one group exclusively
- Significant outliers must be removed. Those are data points which do not line up with the traditional pattern.
- The distribution of dependent variable must be normal in relation to each explanatory variable included in the sample. This assumption can be checked by performing the Shapiro-Wilk test of normality.
- Variances must be homogeneous. To check whether the assumption is violated or not, Levene's test is usually conducted (Schultz, 1985). Albeit, the violation of this assumption implies that the alternative the Welch ANOVA test must be undertaken. Moreover, it requires a different post-hoc test.

Taking into account the estimation of risks, the process is broken down into two components. Firstly, Total Risk and Systematic Risk of each individual stock are determined. Total Risk is represented by the standard deviation of stock returns while systematic risk is measured by beta coefficient.

ANALYSIS

Descriptive Statistics

The quantitative part starts off with the analysis of descriptive statistics on the financial market performance in Kuwait. The financial market is represented by the performance of all public banks listed in Kuwait, including Islamic and non-Islamic. Descriptive statistics include the mean, standard deviation and minimum/maximum values. These statistics have been estimated in SPSS. The output with descriptive statistics can be found in the table below.

Table 1: Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ALAHLIBANKOFKUWAITKSCP	1908.00	0.30	1.40	0.65	0.25
BURGANBANKSAK	1908.00	0.29	1.36	0.59	0.24
COMMERCIALBANKOFKUWAITKPSC	1908.00	0.30	1.72	0.97	0.31
BOUBYANBANKKSC	1578.00	0.24	0.81	0.54	0.11
KUWAITFINANCEHOUSE	1907.00	0.44	3.96	1.55	0.82
WARBABANKKSC	396.00	0.16	0.37	0.24	0.05
AHLIUNITEDBANKKSCP	1807.00	0.36	0.99	0.65	0.14
GULFBANKOFKUWAIT	1791.00	0.20	2.00	0.89	0.58
KUWAITINTERNATIONALBANKKSCP	1886.00	0.16	0.74	0.42	0.18
NATIONALBANKOFKUWAITSAKP	1908.00	0.56	2.48	1.45	0.52
Valid N (listwise)	368.00				

Source: Own estimates based on the data from Kuwait Stock Exchange website

Table 1 provides average returns for all ten listed banks in the country that comprise both Islamic and conventional institutions. The division of the sample by the type of bank is provided in the Appendix. Based on the table presented above, it can be concluded immediately that the largest deviation relates to the stocks of Kuwait Finance House bank equal to 0.82. It is worth noting that this bank is Islamic. Stock prices of other Islamic banks such as Warba bank and Boubyan bank had two of the lowest deviations with 0.05 and 0.11 respectively. The minimum values are 0.16 and 0.20 while the largest are 0.56 and 0.44. Moreover, the dataset includes 368 valid observations which can be used in the analysis. It must be mentioned that the adjustments were made to remove the disturbances in the dataset. This allows for keeping the degree of bias as low as possible. Considering the statement made above, the series of adjustments were based on the removal of significant outliers and investigation of blank values. Those deviations were mainly attributable to the data collection problems. To be more specific, the stock prices of several banks were not available for a significant period of time and were removed from the calculation of average stock returns.

Preparation and ANOVA test

Returns

It is worth mentioning that before the analysis was launched there were several calculations performed. On the one hand, the average stock returns were calculated for each group of stocks. It was made by firstly deriving returns for each individual stock from daily stock prices.

By comparing average returns of conventional, Islamic and mixed banks, it was concluded that Islamic banks were superior to other groups. The Total Average Return (TAR) was equal to 0.56%. Conversely, the TAR's for conventional and mixed banks was 0.12% and 0.15%. Therefore, it can be argued that Islamic banks contributed to the development of financial markets in Kuwait to the larger extent.

However, it is important to compare these returns in terms of statistical significance. For that purpose, the one-way ANOVA test was undertaken. The results of this test are presented below.

Firstly, the descriptive statistics of tested variables were obtained.

Table 2: Descriptive Statistics (ANOVA)

Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	1907.00	0.00	0.02	0.00	0.00	0.00	-0.07	0.08
2	1908.00	0.00	0.02	0.00	0.00	0.00	-0.24	0.12
3	1906.00	0.00	0.01	0.00	0.00	0.00	-0.11	0.05
Total	5721.00	0.00	0.02	0.00	0.00	0.00	-0.24	0.12

Source: Own estimates based on the data from Kuwait Stock Exchange website

The groups were assigned specific numbers where 1 represents average returns of conventional banks, 2 represents average returns of Islamic banks, and 3 represents average returns of banks which offer both conventional and Islamic products using Islamic windows.

It can be argued that the highest deviations are found in average returns of conventional and Islamic banks. Moreover, the maximum returns are attributable to the group of Islamic banks being equal to 0.12. The factors mentioned above illustrate the trade-off between risks and returns when investors who can tolerate the certain degree of risk can benefit from larger returns.

By moving further, the next step was associated with the performance of the test of homogeneity of variances. The logic behind this test is to estimate whether the variances of each group are the same.

The output of this test is presented in the table below.

Table 3: Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
212.943	2	5718	.000

Source: Own estimates based on the data from Kuwait Stock Exchange website

Based on the above results, it can be concluded that the assumption of homogeneity is violated. This is because the significance level is less than 0.05. Therefore, the supplementary Welch F test and the Brown-Forsythe test were launched to check the homogeneity assumption (Roth, 1983).

Table 4: Welch F Test and Brown-Forsythe Test

Test	Statistica	df1	df2	Sig.
Welch	.135	2	3354.390	.873
Brown-Forsythe	.165	2	4045.002	.848

Source: Own estimates based on the data from Kuwait Stock Exchange website

The significance values of 0.873 for Welch test and 0.848 for Brown-Forsythe allow for assuming that the assumption of homogeneity is satisfied due to the fact that both values are higher than 0.05. Thus, the null hypothesis which states that the variances in population are different is rejected. Instead, the alternative hypothesis are suggested where the equality of variances is not breached. It is worth noting that the differences in variances cannot occur in the case of random sampling from populations with equal variances. Therefore, both the Welch test and the Brown-Forsythe test provides strong evidence that the assumption of homogeneity is not violated.

The next step which is undertaken is the assessment of the significance level of the ANOVA. Since the assumption of homogeneity of variances was tenable, the ANOVA table can be presented and interpreted.

Table 5: ANOVA Test

Description	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.000	2	.000	.165	.848
Within Groups	1.478	5718	.000		
Total	1.478	5720			

Source: Own estimates based on the data from Kuwait Stock Exchange website

It can be noticed that the significance value is 0.848, which is higher than 0.05. Therefore, the statistically significant differences do not exist. To be more specific the average returns on shares of conventional, Islamic and mixed banks do not deviate from each other in statistically significant terms. Although, the comparison of average returns showed that the returns of Islamic banks were significantly higher in contrast to other groups.

Since the basic ANOVA did not provide evidence of statistically significant results, the multiple regression table was not presented in the analysis. For the experiment purpose the order of variables was changed and dummy variables associated with groups were replaced by the returns on stock market index. The results are presented below.

Table 6: ANOVA Test (Experimental)

Description		Sum of Squares	df	Mean Square	F	Sig.
CONV	Between Groups	0.41	1817	0.00	0.95	0.64
	Within Groups	0.02	89	0.00		
	Total	0.42	1906			
ISLAMIC	Between Groups	0.88	1817	0.00	1.55	0.004
	Within Groups	0.02	89	0.00		
	Total	0.90	1906			
MIXED	Between Groups	0.57	1816	0.00	1.03	0.45
	Within Groups	0.02	89	0.00		
	Total	0.61	1905			

Source: Own estimates based on the data from Kuwait Stock Exchange website

The table presents the output of the ANOVA analysis and helps to identify statistically significant differences between sampled groups. It can be noticed that the significance value of "ISLAMIC" value is 0.004. The result is lower than 0.05, thus, the null hypothesis which states that there are no statistically significant differences between two groups. Therefore, the alternative hypothesis of an existing statistically significant difference is accepted. In contrast two other groups did not provide statistically significant results with the significance value of 0.64 and the significance value of 0.45 respectively. Since there is no specification regarding which groups are statistically significant. This problem can be solved by the performance of the Tukey post hoc test where multiple comparisons can be made.

In order to identify whether the constructed sample is associated with a specific mean population, the one-sample T-Test was conducted. Prior to performing this test all necessary assumptions were checked. Firstly, the dependent variable was of continuous nature. Secondly, there was no relationship between observations. Thirdly, all significant outliers were removed from the sample. This step was performed in order to enhance the accuracy of results.

Once all assumptions were checked, the one-sample T-Test was launched in SPSS. The descriptive statistics of the test are presented below:

Table 7: One-sample T-Test (Descriptive Statistics)

	N	Mean	Std. Deviation	Std. Error Mean
Return	5721.00	0.00	0.02	0.00

Source: Own estimates based on the data from Kuwait Stock Exchange website

By looking at the column “Mean” it can be concluded that the mean depression score does not exceed the depression value of 3 which was selected for testing as “normal” score. However, what is more important is to test whether the sample comes from a normal population. The results of this test can be found in the table below:

Table 8: One-sample T-Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Return	-14116.02	5720.00	0.00	-3.00	-3.00	-3.00

Source: Own estimates based on the data from Kuwait Stock Exchange website

Based on the significance value it can be concluded that CONV, ISLAMIC and MIXED are all statistically significant at the confidence level of 95%. Hence, it lines up with the results obtained from the experimental one-way ANOVA test, but differs from the traditional ANOVA test where statistically significant results were not detected.

All in all, the analysis was conducted in accordance with existing assumptions. The overall evidence was mixed. On the one hand, T-Test showed that the differences in average returns of the sampled group were significant. On the other hand, the traditional ANOVA test showed that the results were not significant at the confidence level of 95%.

Risks

The analysis of risks showed that standard deviation of each individual stocks varied by 5%. Thus, it can be concluded that from the total risk perspective all three groups were equal. As a result, their contribution to the growth and development of financial markets in Kuwait was also equal.

Table 9: Risk Analysis

Bank	Total Risk (Standard Deviation)	Systematic Risk (Beta)
AL AHLI BANK OF KUWAIT KSCP	0.022	0.024
BURGAN BANK S.A.K	0.024	0.050
COMMERCIAL BANK OF KUWAIT KPSC	0.023	0.075
BOUBYAN BANK KSC	0.024	0.017
KUWAIT FINANCE HOUSE	0.024	0.046
WARBA BANK KSC	0.025	0.012
AHLI UNITED BANK KSCP	0.026	0.048
GULF BANK OF KUWAIT	0.022	0.122
KUWAIT INTERNATIONAL BANK KSCP	0.026	0.012
NATIONAL BANK OF KUWAIT SAKP	0.023	0.020

Source: Own estimates based on the data from Kuwait Stock Exchange website

However, the beta coefficients were different (Fabozzi & Francis, 1978). Considering separate groups, the lowest systematic risk was found in the group of Islamic banks with betas equal to 0.012, 0.046 and 0.017 respectively. The highest risk as expected was attributable to the group of conventional stocks. Therefore, it can be argued that in terms of contribution, the stocks of Islamic banks had a greater impact on the risk of the financial market in Kuwait.

DISCUSSIONS AND CONCLUSIONS

Comparison of Results with Empirical Evidence

The results of analysis highlight the importance of Islamic Banks in the development of financial markets in Kuwait. The majority of researchers who scrutinized the role of Islamic Banks over different periods of time stressed that the overall effect from the development of Islamic banks was positive. For instance, the research performed by Alqahtani et al. (2017) provided a solid evidence of the superiority of Islamic bank's performance during the GFC in countries-members of the GCC. However, the difference between the two analyses is hidden in the fact that Alqahtani et al., (2017) tested the performance of Islamic Banks during the GFC exclusively. In contrast, the underlined analysis covered much wider time period. Moreover, the methodological approach was different. While Alqahtani et al., (2017) utilized the CAMEL – sophisticated bank model, this dissertation focused on the market performance of the financial sector represented by average stock returns and risks. Nevertheless, both methods arrived at the same conclusion.

It is also worth comparing the results of the underlined test with the evidence obtained by Gregoriou et al., (2016). Although the scholars targeted, focused on the one country (Kingdom of Bahrain), they also tested only one bank. In terms of financial development, the contribution of one bank cannot be extrapolated to the whole population. Therefore, it can be argued that the results of the current analysis are more credible since it analyses the performance of ten banks. At the same time, the observation period exceeds ten years. Furthermore, Gregoriou et al., (2016) were more concerned with the performance of Islamic Banks during the GFC.

Considering, the evidence obtained by Imam and Kpodar (2016) allowed to assume that almost all sampled countries significantly contributed to the financial development. It is worth noting that the scholars could construct the dataset which included 52 countries. In terms of observations, the analysis was superior to the underlined work because the scholars tested the period from 1990 to 2010. However, the distinctive feature of the current analysis is the focus which is put on the development of financial markets and not on the overall economy.

Overall, evidence allows for concluding that the differences in results emerged due to the methodological frameworks used. Moreover, all studies which were selected for the comparison did not aim at determining the role of Islamic banks in the development of financial markets. Many researchers concentrated on the contribution of Islamic banks to a national economic growth. Since, there was an obvious gap in the empirical studies devoted to the assessment of the role of Islamic banks in a financial development, the underlined research bridged that gap by providing scientifically viable evidence.

Limitations

Although the quantitative part did not include comprehensive econometric tests, there were several limitations which put a strain on the research flow. Firstly, the limitations associated with the performance of ANOVA test in SPSS must be mentioned. On the one hand, it is automatically assumed that samples included in an analysis are random. In other words, the data points are obtained from larger populations. At the same time, those samples must be independent meaning

that they do not impact each other. The independence is generally tested by the repeated measures test. However, this test was not performed within the scope of the current analysis. Therefore, the bias was not eliminated, completely. Secondly, the ANOVA test assumes that standard deviations in groups are the same or fluctuate slightly. Nevertheless, there were some differences detected in groups.

The research can be improved and expanded by future researchers. The first recommendation that can be made is that the contribution of Islamic banks to other aspects of financial market development besides risk and return should be analyzed. In particular, it can be recommended that future studies should analyze and compare economic efficiency of Islamic and conventional banks in the country. The second recommendation is to assess the effect of the development of Islamic banking on financial freedom in the country, but this will require more years ahead as there are very few Islamic banks to analyze. This problem can be partly solved if future studies analyze a panel data from several Islamic countries.

CONCLUSIONS

The aim of the research study has been achieved by means of econometric analysis using such tools as the ANOVA test and t-tests. On the one hand, the analysis of average returns showed that Islamic stocks were superior in terms of their contribution to the development of the financial market in Kuwait. On the other hand, the analysis of risk showed that Islamic stocks were ahead of other groups in terms of systematic risk. In addition, the T-Test showed statistically significant results at both tails. However, the one-way ANOVA did not provide any evidence of statistically significant results. Overall, evidence allows for assuming that Islamic banks indeed contributed to the development of financial markets. Furthermore, their role was tremendous. Nevertheless, the prospective researchers should utilize other methods such as bank performance models or VECM models to enhance the accuracy of research findings.

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APPENDIX**List of Banks**

Public/Private	Entity Name	TYPE
Public	AHLI UNITED BANK KSCP	Conventional with Islamic Window
Public	AL AHLI BANK OF KUWAIT KSCP	Conventional
Public	BOUBYAN BANK KSC	Islamic
Public	BURGAN BANK S.A.K	Conventional
Public	COMMERCIAL BANK OF KUWAIT KPSC	Conventional
Public	GULF BANK OF KUWAIT	Conventional with Islamic Window
Public	KUWAIT FINANCE HOUSE	Islamic
Public	KUWAIT INTERNATIONAL BANK KSCP	Conventional with Islamic Window
Public	NATIONAL BANK OF KUWAIT SAKP	Conventional with Islamic Window
Public	WARBA BANK KSC	Islamic