Islamic Finance and Regional Development in MENA Region: An Empirical Evidence from the Golf Cooperation Countries

Halima Saadia KORICHI [1,*], Mohamed Lamine KHIAR [2], Mohamed Ali SBAI [3]

[1] Faculty of Economic, Commercial and Management Sciences, Kasdi MERBAH University(Algeria)
[2] Faculty of Economic, Commercial and Management Sciences, Oran 2 University(Algeria)
[3] Faculty of Humanities and Social Sciences, Abou Bekr Belkaïd University (Algeria)

Received: 01/10/2019 ; **Revised:** 05/10/2019 ; **Accepted:** 10/11/2019

Summary: This article investigates whether the Islamic finance and economic growth relationship is supported by our sample data of some Golf Cooperation countries in the Middle East and North Africa region. Specifically, the research uses a dataset of fifteen Islamic banks in five MENA countries for different periods ranging from 1994 to 2009. The growth rate of gross loans and the ratio of M2/GDP are taken into account to explore the causal and/or the long-run relationships between them. Our key findings generated by these two empirical tests show that Islamic finance has no effect on economic growth in the selected GCC's banks. Therefore, policies to improve the Islamic banking efficiency in the region are suggested.
Keywords: Islamic finance; economic growth; Islamic banks; MENA region; GCC countries; Islamic banking efficiency.
Jel Classification Codes : G21 ; G24 ; O53 ; O55

I- Introduction :

Islam is not only a religion but a complete way of life with simplest and purest moral values. The Shari'ah (Islamic law) principals are mainly focused on equity and fairness. These principals are by definition applicable to all aspects of human endeavor and existence.

Conventional economics became a separate scientific discipline in the West in the 1890s after the publication on 1890 of Marshall's great treatise (Gaunaurg, Abdelhady and Issa, 2011). Iqtisad (economics in Arabic) was defined by Ghazzali as the principle of moderation (Ökte, 2010). Therefore, the doctrine of Islamic economics provides an all-encompassing model for social, economic, and political life. It emphasizes on the encouragement of communal, non-individualistic values and on poverty reduction.

Islamic economics provides a superior alternative to secularist, value-neutral, materialist, or social-Darwinist worldviews. It has a multi-dimensional modernity and an unquestionable topic (Hefner, 2006; Ökte, 2010). However, other economists had argued that Islamic economics is irrelevant, incoherent, and even controversial *vis-à-vis* the present-day economic realities.

Islamic finance is not about developing a system which is very different to, or in conflict with, Western models, but rather about providing financial products or services that conform to Shari'ah (Islamic law), and enhancing efficiency, growth and thereby development (Chiu, Newberger and Paulson, 2006). Its simplest form is full of ideals along with a morally and ethically basis, and is thereby wishing to promote an "integrated" system to everyone, Muslim and non-Muslim. It's based on profit and loss sharing (PLS) structure rather than a lender-borrower arrangement (fixed-returns or interests), which implies that wealth must be encouraged trough trade in goods, investment in

* Corresponding author, e-mail: halimasaadiakorichi@yahoo.fr

productive capacity of labor and capital, and therefore a climate which is supported and enhanced by ethical business practice.

The destruction of the moral authority has incited post-modern thinkers to reintroduce the moral culture into the capitalistic system (Rice, 1999). The pressures of the material world will undermine the realization of comprehensive well-being, and the West will find it difficult to sustain its scientific, technological, economic and military supremacy. Consequently, such a constructive balance between the spiritual and the material needs is very crucial to withstand the lack in the spiritual values, and therefore to ensure a prosper economy so that it has a context in a human community.

Muslim and non-Muslim countries have taken some initiatives to give their economies an Islamic aspect that professes to provide the terms for an alternative economics to that of the modern West. These intellectual enterprises do not require an Islamic legal system as a pre-requisite for enforcement, but there is an incessant need for a society's members to embrace the Islamic values gradually and peacefully. Islamic economics promotes a lot of kinds of structures and investments, and relies less on credit (debt involving interests) in order to fulfill the criteria of equity and justice. Islamic finance avoids interest and allows lease-to-own arrangements, layaway plans, joint purchase and sale on agreements or partnerships (Karim, 2010). The Shari'ah-compliant financing has a superior overall performance to the traditional finance, and can be benefit for all if ideas are put into practice.

Economic development has ultimately to be interpreted in terms of spiritual as well as material fulfillment, and it is known that moral and economic growth go hand in hand, reinforcing each other. From an Islamic point of view, it must be underscored that the preservation of wealth is one of the five most important objectives of the Shari'ah, and can also be traced back to Ibn Taymiyya's concern for the eradication of poverty in the thirteenth and fourteenth centuries, and to Ibn Khaldun's moral theories of business cycle developed shortly after.

Without question, Islamic finance is a part of the global capitalist order which is in a formative period, but has a great potential (Karim, 2010; McMillen, 2009). The contemporary Islamic finance is tremendously growing at a rate of 15 to 20 percent annually, from assets of $ 637 billion in 2008 up to $ 825 billion in 2009. Currently, this industry is mainly concentrated in the Middle East and Southeast Asia; but it is performing in predominantly non-Muslim countries.

Hence, in this article, the researcher aims to give a discussion on various aspects of Islamic finance and banking trough a survey of the literature. Next is a description of the Islamic ethical system in order to provide some theoretical knowledge and the practices which are based on the Islamic percepts. To fill the gap and to contribute to the existing literature, this article endeavors to check for the implication of the Islamic business ethics on the regional development. The MENA region is taken as an illustrative case.

This research proceeds as follows. The first section attempts to assess the Islamic perspective on business ethics, and presents the basis for guidelines on doing business. Section 2 embeds the possible relationships between Islamic finance and development across selected MENA countries. The final section concludes and proposes some avenues for further research.

I.1. Islamic finance: Islamic finance is a relatively new brand of finance which is representative of a new wave of corporations whose spiritual goals are at least (if not more) as important as material ones. Islamic banking refers to a system of banking which relies on two principles: the profit-and-loss sharing principle and the mark-up principle. These two principles try to remove interest, uncertainty, risk and speculation from the different methods of investments.

Islamic banks try to introduce a variety of financial instruments in order to safe keep depositors' savings and shareholders' capital and put these funds to good use. Islamic mode of finance revolves around a number of risk-reward sharing mechanisms which are allowable in the Islamic law. The consistency with the Islamic law will play an important in role in every sphere of life whether business, service or any other part of the human life.

I.1.1. Profit sharing financial products:

1. **Musharaka:** it is a contractual agreement between the bank and the party needing financing (the project company) from a musharaka, each receiving hissas (ownership interests) for their capital contribution. Each partner has the right to equal management authority over the venture, even through their respective investments may be unequal. Profit is determined on the basis of a pre-agreed ratio; whereas an eventual loss is shared according to equity contributions (McMillen, 2009).
2. **Mudarabah:** refers to a profit-sharing partnership typically between a mudarib (a financial institution or an investor) and a rabb ul-maal (an entrepreneur or a manager) who is seeking funding; the rabb ul-maal contributes capital; the mudarib contributes services. Profits that are made in the venture are shared on the basis of a pre-agreed ratio. Conclusive profit allocations can be either lumps sums, guarantees, or other assurances of capital (McMillen, 2009).
3. **Qard Hassan:** charitable, benevolent or interest-free (unremunerated) loans for socially beneficial purposes. Modest service charge is permissible.
4. **Wakalah:** the customer authorizes the bank to conduct his business.
5. **Hawalah:** is an agreement between the bank and the customer in which the bank undertakes some of the liabilities in return for a service fee.

I.1.2. Advance purchase financial products:

1. **Murabaha:** it consists of bank or financial institution buying an asset (usually a commodity) from a third party and selling it back to the customer on a single deferred payment or multiple deferred payments basis. This trade-based contract is considered as a "cost-plus" sale contract in which the asset's price includes a disclosed price plus a profit margin agreed by both parties. The asset must be owned by the seller, who must support the risks of ownership (McMillen, 2009).
2. **Ijarah:** is a leasing contract that involves the transfer of the usufruct or manfa'a from the bank (the lessor) to the client (the lessee). This contract involves the rent of an object or a service that the banks buys and leases out for a specified period. The lessee is not responsible for the structural maintenance of the assets and the correlative obligations (e.g., property insurance) (McMillen, 2009).
3. **Mu'ajjal or Bai' Bithaman Ajil (a deferred-payment sale or a credit sale):**

It is a sale contract that allows for a deferred delivery of existing assets or a deferred payment. The lender isn't obliged to disclose the profit margin up-front.

4. **Istisna':** a contract for acquisition of goods by specification or order, where the price is paid progressively in accordance with the progress of job completion.

These sales-based modes of financing extended by IBs, include the rate of return which becomes a part of the deferred-payment price; whereas the interest-based loans are exploitative and inequitable in sharing the risks. In the first case, the sale or lease of real goods and services requires the bank's ownership or possession at the time of the sale or lease.

Islamic investment certificates "Sukuk" are held by holders who are entitled to share both the revenues as well as the proceeds from their ownership of assets. However, investments in Sukuk are not necessarily targeted to end poverty or even to generate better opportunities.

Zakah is one of the five pillars of Islam. It is "a religious tax" which is levied on the wealth, and not income, of every Muslim and Islamic institution (Haniffa and Hudaib, 2011). The spending of the proceeds is specified in the holy book Qur'an, and concerns the poor, the needy, debtors, new converts, slaves, wayfarers, zakah officials and those that fight in the cause of God. The Islamic society can also benefit from Sadaqa (charity); but it is not obligatory as zakah.

I.2. Relationship between Islamic finance and economic growth into the MENA region

A paradigm shift from a value-neutral economy toward a distinctive Islamic economics is premature because of the high spiritual level that Islam demands. The financial crisis of 2008 confirmed the weakness of the interest based financial system in promoting the economic regeneration, the worldwide unequal allocation of resources and thereby the exacerbation of poverty with more than three billion people living in absolute poverty. This regulatory fallout has increased the demand for Shari 'a-compliant financing and gives opportunities for new financial products, particularly Islamic ones.

The ongoing development of the international consensus on Shari 'a practices is also a response to Muslims' demand for an alternative to the conventional banking system. Over the last three decades, Islamic finance has grown in size at ten to twenty percent annually, and will become more important in the future.

Assets in Islamic finance in 2012 grew by 36.8%, to $ 1.13 trillion from $ 826 billion in 2010. This gain in popularity is partly a reflection of the moral decline of the prevailing global economy, which is based on too much irresponsible and imprudent lending. During the global economic crises of 2008-2009, Islamic banks have recorded less damage because of their ethical essence in practices and applications.

However, there are many deficiencies which have impeded the full potential of the Islamic industry. In fact, there exists a lack in the regulation of the Islamic industry, and in the supervision of its financial services.

Islamic economics cannot afford to ignore that its biggest moral challenge relating to reducing poverty pass through Shari 'a compliant instruments which are religiously acceptable but economically and financially sound and competitive. Moreover, the Islamic system remains peripheral and unsolved in the Muslim and non-Muslim world economy.

Despite the fact that the Islamic finance is growing at a rate greater than 10% per year for each of the past ten years, it represents a very small niche in the total volume of international finance. The major market for Shari 'a finance is typically the Middle East and the Southeast Asia, and it is gaining popularity in the UK, Europe and USA.

The Middle East and North Africa (MENA) region covers a wide array of countries from Morocco in the west and Iran in the east. Most of these countries share many common features, notably the Islamic religion and the Arabic language. Therefore, the choice of this region is accounted for the fact that the empirical evidence on the causal relationships between Islamic finance and economic development in MENA region, is scarce or even inexistent to the best knowledge of the researcher.

Economic development patterns depend on the natural endowments of MENA countries. In MENA, there are many oil-producing states such as Algeria, Kuwait and Saudi Arabia and non-oil producing states such as Jordan, Morocco and Tunisia. The priorities and sequencing of development strategies will also vary regarding the governance's quality. In this line, the states of Middle East and North Africa can be divided into three distinct categories: " Bunker states", such as Algeria and Syria. "Bully praetorian states", such as Egypt and Tunisia, and the somewhat more successful "globalizing monarchies", such as Morocco and Saudi Arabia.

The global development reports indicate that almost all MENA economies were growing quickly over the last two decades. The average real GDP growth rose from 3 percent a year from 1990 and 2000 to 4.6 percent between 2000 and 2003 and to 5.8 percent between 2004 and 2008. Despite the global financial and economic crises, the average real GDP growth recorded 3.94% between 2008 and 2011. These positive growth rates can be attributed to the structural adjustment policies that were implemented during 1980s and 1990s, to better business environment and to higher oil prices.

Human development indicators between 1960-2000 were much better than other countries. This is thanks in part to the global competitiveness in human capital and to the social safety net programs for the poor, which encompass food subsidies, energy subsidies, public work, micro-finance and cash assistance programs, mainly in the oil exporting countries.

The region as a whole seems to suffer from low productivity (more than -1 percent annual decline in the oil exporting countries between 1970 and 2000, and a flat trend in the non-oil ones). In addition, the work culture is globally uncompetitive, and the resource-rich - labor importing countries prefer to hire foreign graduates from other countries.

The MENA's population is increasing at a 2% average rate and the labor force is expected to reach 185 million by 2020. The economically-active population represent an opportunity to accelerate the development process through a new social contract which must couple political and social reforms. Thousands were employed because many countries are rich in hydrocarbons; but the MENA's governments have to establish the appropriate policies in order to generate more than 100 million jobs by the year 2020. Socio-economic institutions are concerned about driving ahead the governmental reforms by translating the "access gains" in education into "income gains".

Whichever Shari 'a or conventional finance is analyzed in MENA; the impact of banking depth on growth is at least a third lower than in other emerging states. This is in part due to a quality gap in the bank intermediation, and an average loan-deposit ratio which is below the global emerging state average. In this respect, Ben Nacer, Ben-Khedhiri and Casu (2011) found that the efficiency levels for selected banks, vary substantially across 5-MENA countries depending on technology differences. Al-Malkawi and Abdullah (2011) analyzing the impact of financial development on growth in thirteen MENA countries, found that a sustainable economic growth is an ultimate outcome from the financial development over the 1985-2005's period. Pearce (2011) recommends the alleviation of constraints to the growth of financial Islamic services in MENA. He reports that 70% of the Shari 'a financial products offered in Egypt, UAE and Yemen are murabahah contracts.

Haniffa et al., (2011) point out the little efforts made by the managers of seven IBs in seven Arabian Gulf region in communicating their results between 2002 and 2004; contrary to the congruence between rhetoric and ethical benchmark based on Shari 'a which is vital for the reputation of the IBs. Srairi, Kouki and Harrathi (2011) demonstrate that the efficiency of 25 Islamic banks in the Gulf Cooperation Council (GCC) countries has increased over the period 2003-2009, but remains low as compared to the conventional banks efficiency.

According to the World Islamic Banking Competitiveness Report 2011-2012, the MENA Islamic banking assets reach $416 million in 2010, and are expected to double to $990 million by 2015. The market share of Shari 'a compliant assets represents 14% and 26% in MENA-non GCC and GCC countries, respectively. More than 60% of the Islamic assets in the world were held by the GCC countries in 2008.

The regional banking system can be divided into low, medium and high potential groups. This implies that there are significant performance variations across MENA countries depending on many factors, such as business environment, levels of banked people, state ownership of banking sector and political regimes. Islamic banking in the GCC countries had recorded an average growth of about 7% between 2002-2008, and is remarkably resisting to the current global slowdown. Furthermore, if the financial and real sectors converge in the resource-rich countries, Islamic banks will benefit from great financial potentialities.

There is a need for an alternative method to redress the role of Islamic banking in Algeria, Tunisia, Morocco,…etc, through better quality and diversified Shari' a compliant assets. However, prospects for the future are expected to be better for all the MENA countries.

II– Methods and Materials:

The economic literature often suggests the existence of a close link, direct and indirect, between financial development and economic growth. However, the debate on the direction of causality between financial development and economic growth is still on.

Given the empirical findings of the extent of the relationships identified between financial development and economic growth, the researcher proposes a dynamic model to estimate the empirical association between Shari 'a finance and economic growth.

Before proceeding to the estimation of the model and interpretations of the results, it is necessary to define the model to estimate. The first step consists in selecting two proxies whose measure the relationship between Islamic banking depth and economic growth. Accordingly, the growth rate of gross loans is used as a proxy to measure the Islamic banking activity. Thus, an increase in the growth rate of gross loans may be interpreted as an improvement in the activity of the selected Islamic banks, and as a contribution to economic activities by mobilizing funds toward productive economic activities. The second proxy is the ratio of M2 to the level of nominal GDP. An increase in this ratio may be interpreted as an improvement in financial depth which can influence economic growth through productivity or capital accumulation (Boulila and Trabelsi, 2004; Al-Malkawi et al., 2011). The researcher argues that the ratio of M2 to GDP is the transmission channel which ties between Islamic banking depth and economic growth.

The second step before testing the model is to collect the corresponding data. To do so, the growth rate of gross loans is obtained from bankscope database which provides homogenous classification of banks and their annual reports. The ratio of M2 to GDP is compiled from World Development Indicators Database, 2012 (World Bank, 2012). The final step is concerned about testing the model.

This research uses annual aggregate data for only 5 countries in Middle East and North of Africa (MENA) for different periods ranging, according to data availability, from 1994 to 2009. Accordingly, the data set used does not include all of the MENA region countries – in addition some countries have been excluded on the grounds that there is a lack of data in many countries such as Algeria and Morocco; the Islamic banking system which represents less than 2% of the total banking assets in the North African countries (Algeria, Libya, Morocco and Tunisia), and the state-owned banks (Algeria and Syria) that still dominate the conventional banking sectors and are careless about their profitability.

The population of our research consists of IBs operating in five Arabian Gulf region where the Islamic banking represent 27%, 31%, 22%, 35% and 17% in Bahrain, Kuwait, Qatar, Saudi Arabia, and UAE, respectively. Our sample consists of fifteen Islamic banks in five of those countries over the period of 1994-2009. The selected Islamic banks are listed in the appendix.

The approach taken in this research is to model the relationship between Islamic banking depth and economic growth in the selected Golf Cooperation Countries. To this end, the researcher will proceed in the following steps: First, the stationary of the different series will be tested by the ADF unit root test. Second, the Granger Causality test will also be performed to provide some evidences on the causal relationships between the variables. Finally, there will be a focus the cointegration testing method in order to account for the long-run relationships between Islamic banking depth and economic growth in the selected MENA countries.

III- Results and discussion :

In what follows, the unit root test will be utilized to check the order of integration (stationarity) of the variables. In this line, the null hypothesis of this test is that there is stationarity or there is no unit root (Gujarati and Porter, 2010). The Augmented Dickey-Fuller (ADF) unit root test will be used. The results are shown in table (1).

Table (1) shows the time series properties of our series in levels and in first differences. First, we test for the existence of unit roots by using the standard Augmented Dickey-Fuller tests that reject the null hypothesis of a unit root for M2/GDP-UAE, B3, K1, K2, K3, Q2, S1, U1, U2 and U4; but the results concerning M2/GDP-Bahrain, M2/GDP-Kuwait; M2/GDP-Qatar, M2/GDP-Saudi Arabia, B1, B2, B4, Q1, S2 and U3 show that the series are integrated of order (1), since the calculated values (in absolute value) are lesser than the critical values (in absolute value) at 1%, 5% and 10% significance levels.

The simplest test to investigate whether a particular observed series Granger-causes another one or to know if a particular observed series contains useful information for predicting another one, over and above the past histories of the other variables in the system (Gujarati et al., 2010). To implement this test, a particular autoregressive lag length p is assumed and then estimated by OLS (Gujarati et al., 2010):

$$x_t = c_1 + \alpha_1 x_{t-1} + \alpha_2 x_{t-2} + \ldots + \alpha_p x_{t-p} + \beta_1 y_{t-1} + \beta_2 y_{t-2} + \ldots + \beta_p y_{t-p} + u_t$$

An F test of the null hypothesis is conducted (Gujarati et al., 2009):

$$H_0 : \beta_1 = \beta_2 = \ldots = \beta_p = 0.$$

To be more explicative, we can consider the following F test statistic:

$$\tau = \frac{(RSS_R - RSS_{UR})/m}{RSS_{UR}/(n-k)} \rightarrow F_q , (m, n-k)$$

where

1. RSS_R : the sum of squares residuals in the restricted regression or the restricted residual sum of squares.
2. RSS_{UR} : the sum of squares residuals in the unrestricted regression or the unrestricted residual sum of squares.
3. m: is the number of the parameters estimated in the unrestricted regression.
4. n: is the number of observations.
5. k : is the number of the restricted parameters.

If the τ (calculated) > the critical value, the null hypothesis that y does not

Granger-cause x is rejected, and y does Granger-cause x. Accordingly, the past values of y are useful for predicting the future values of x.

Table (2) reports that the ratio of M2/GDP do Granger-Causes the growth rate of gross loans which are provided by U1; whereas the other results don't show any causation between the ration of M2/GDP and the growth rate of gross loans in all the selected MENA countries.

Economically speaking, two variables will be cointegrated if they have a long term, or equilibrium, relationship between them. In the econometric jargon, there is a cointegration, if the linear combination of the residuals might be stationary, which can be interpreted as a synchrony and

a unison in the random stochastic processes (Gujarati et al., 2010). The cointegration relationship can be tested only if each of the series taken individually has the same order of integration. If two time series have the same order of integration, that is, they contain a stochastic trend and the regression on the level of the variables is meaningful (is not spurious). So, we don't lose any long term information regarding the quite possibility that the two series share the same common trend (Hamilton, 1994; and Gujarati et al., 2010). However, we cannot look for cointegration due to many series which are integrated of different orders.

The hypothesis of non-cointegration is rejected for only the M2/GDP-Bahrain and B1. For the remaining Islamic banks in Qatar and Saudi Arabia, the hypothesis of the absence of cointegration cannot be rejected.

The absence of cointegration can be attributed to the minor contribution of the Islamic finance in the productive activities in one side, and to the dominance of the conventional banking system in the selected MENA countries in the other side.

The empirical methodology that attempted to study the relationship between Islamic finance and economic growth has been much less robust than the theoretical literature which argues that Shari 'a finance has positive effects on economic development. The choice of the proxies may influence our empirical findings.

IV- Conclusion:

In conclusion, the relationship between Islamic finance and economic growth in the selected MENA countries does not seem to be strong, it implies not only those countries suffer from weak financial systems and not enough efficiency in their Islamic banking sectors; but also points to the fact that the Shari 'a financial services must be consistent with the characteristics of the prevailing economic condition.

The key findings that emerged from this empirical analysis show no evidence in favor of causality running from growth rate of gross loans to M2/GDP in the 5-MENA countries. In addition, the cointegration testing method reveals that the long-run relationship between Islamic finance and economic growth is far from being found.

While the empirical findings are somewhat limited by the availability, reliability and accuracy of the data, the analysis nevertheless reports the minor contribution of the financial Islamic sector in the process of real sector. Other shortcomings may arise regarding the fact that many possible mechanisms of the relationship being studied were not considered; but our choice of variables is likely to yield real implications and meaningful results.

Indeed, the MENA countries should pursuit their efforts toward deeping the Islamic finance by mobilizing the resources and enhancing the services' quality of the Islamic banks.

- Appendices:

Table 1. Unit root tests for the variables in levels and first differences

	Null hypothesis: the variable contains a unit root	
Variables	**Calculated Dickey-Fuller**	**Calculated Augmented Dickey-Fuller**
M2/GDP-Bahrain	1.058	- 1.964*
M2/GDP-Kuwait	- 0.658	- 3.084***
M2/GDP-Qatar	- 0.665	- 3.791***
M2/GDP-Saudi Arabia	0.923	- 2.449**
M2/GDP-UAE	2.509**	- 0.789

Growth rate of gross loans -B1	- 1.381	- 3.486***
Growth rate of gross loans -B2	- 1.124	- 2.445**
Growth rate of gross loans -B3	- 2.218**	- 2.218***
Growth rate of gross loans -B4	- 1.345	- 3.346***
Growth rate of gross loans -K1	- 2.280***	- 4.680***
Growth rate of gross loans -K2	- 1.183*	- 2.645**
Growth rate of gross loans -K3	- 1.934*	- 4.459***
Growth rate of gross loans -Q1	- 1.533	- 4.408***
Growth rate of gross loans -Q2	- 2.437**	- 7.917***
Growth rate of gross loans -S1	- 1.906*	- 3.108**
Growth rate of gross loans -S2	- 1.567	- 4.800***
Growth rate of gross loans -U1	- 2.817**	- 11.203***
Growth rate of gross loans -U2	- 2.108**	- 6.446***
Growth rate of gross loans -U3	- 1.246	- 3.456***
Growth rate of gross loans -U4	- 4.204***	- 3.616**

B1: Arcapita Bank B.S.C; B2: Bahrain Islamic Bank B.S.C; B3: Investors Bank B.S.C; B4: Albaraka Islamic Bank B.S.C; K1: International Investor Bank K.S.C; K2: First Investment Company K.S.C.C; K3: Kuwait Finance House; Q1: Qatar Islamic Bank SAQ; Q2: Qatar International Islamic Bank; S1: Al Rajhi Bank-Al Rajhi Banking & Investment Corporation; S2: Islamic Development Bank; U1: Abu Dhabi Islamic Bank, Public Joint Stock Co; U2: Dubai Islamic Bank; U3: Sharjah Islamic Bank; U4: Tamweel PJSC.

*, ** and *** denote 10%, 5% and 1% significance levels.

The different sample periods are as follows: M2/GDP-Bahrain 1994-2009; M2/GDP-Kuwait 1994-2009; M2/GDP-Qatar 1994-2009; M2/GDP-Saudi Arabia 1994-2009; M2/GDP-UAE 1994-2009; B1 1998-2009; B2 2005-2009; B3 2006-2009; B4 1994-2009; K1 1997-2008; K2 2004-2009; K3 1994-2009; Q1 2000-2009; Q2 1994-2009; S1 2005-2009; S2 2001-2009; U1 1999-2009; U2 1994-2009; U3 2003-2009; U4 2005-2009.

The Granger Causality test yields the following results in table (2):

Table 2. The Granger Causality Test Results

Null hypothesis: H_0	**Obs**	**F-statistic**	**Probability**	**Decision**
M2/GDP-Bahrain does not Granger Cause B1	10	0.92460	0.45533	Accept H_0
M2/GDP-Bahrain does not Granger Cause B2	3	NA	NA	-
M2/GDP-Bahrain does not Granger Cause B3	1	NA	NA	-
M2/GDP-Bahrain does not Granger Cause B4	12	0.50935	0.62156	Accept H_0
B1 does not Granger Cause M2/GDP-Bahrain	10	0.32656	0.73571	Accept H_0
B2 does not Granger Cause M2/GDP-Bahrain	3	NA	NA	-
B3 does not Granger Cause M2/GDP-Bahrain	1	NA	NA	-
B4 does not Granger Cause M2/GDP-Bahrain	12	1.30807	0.32911	Accept H_0
M2/GDP-Kuwait does not Granger Cause K1	10	0.67289	0.55108	Accept H_0

M2/GDP-Kuwait does not Granger Cause K2	4	NA	NA	-
M2/GDP-Kuwait does not Granger Cause K3	11	0.33603	0.72724	Accept H_0
K1 does not Granger Cause M2/GDP-Kuwait	10	0.22645	0.80511	Accept H_0
K2 does not Granger Cause M2/GDP-Kuwait	4	NA	NA	-
K3 does not Granger Cause M2/GDP-Kuwait	11	0.57148	0.59268	Accept H_0
M2/GDP-Qatar does not Granger Cause Q1	12	0.13376	0.87698	Accept H_0
M2/GDP-Qatar does not Granger Cause Q2	14	1.80767	0.21880	Accept H_0
Q1 does not Granger Cause M2/GDP-Qatar	12	0.40930	0.67903	Accept H_0
Q2 does not Granger Cause M2/GDP-Qatar	14	0.31100	0.74028	Accept H_0
M2/GDP-Saudi Arabia does not Granger Cause S1	3	NA	NA	-
M2/GDP-Saudi Arabia does not Granger Cause S2	7	2.23036	0.30956	Accept H_0
S1 does not Granger Cause M2/GDP-Saudi Arabia	3	NA	NA	-
S2 does not Granger Cause M2/GDP-Saudi Arabia	7	0.30758	0.76477	Accept H_0
M2/GDP-UAE does not Granger Cause U1	9	9.89088	0.02829*	Reject H_0
M2/GDP-UAE does not Granger Cause U2	14	0.10518	0.90125	Accept H_0
M2/GDP-UAE does not Granger Cause U3	6	0.01615	0.90691	Accept H_0
M2/GDP-UAE does not Granger Cause U4	3	NA	NA	-
U1 does not Granger Cause M2/GDP-UAE	9	1.3312	0.36045	Accept H_0
U2 does not Granger Cause M2/GDP-UAE	14	0.34282	0.71864	Accept H_0
U3 does not Granger Cause M2/GDP-UAE	6	1.28387	0.33955	Accept H_0
U4 does not Granger Cause M2/GDP-UAE	3	NA	NA	-

B1: Arcapita Bank B.S.C; B2: Bahrain Islamic Bank B.S.C; B3: Investors Bank B.S.C; B4: Albaraka Islamic Bank B.S.C; K1: International Investor Bank K.S.C; K2: First Investment Company K.S.C.C; K3: Kuwait Finance House; Q1: Qatar Islamic Bank SAQ; Q2: Qatar International Islamic Bank; S1: Al Rajhi Bank-Al Rajhi Banking & Investment Corporation; S2: Islamic Development Bank; U1: Abu Dhabi Islamic Bank, Public Joint Stock Co; U2: Dubai Islamic Bank; U3: Sharjah Islamic Bank; U4: Tamweel PJSC.

* denotes 5% significance level.

Table (3) reports the computations which are based on the Johanson procedure trace statistic and the null hypothesis is that there is no cointegrating vector.

Table (3). Johanson Cointegration Test Results

	Null hypothesis r = 0,	**Alternative hypothesis r = 1**	
	Trace statistic $Jr = -T \Sigma \ln(1-\lambda_i)$		
Variables	**Trace Statistic**	**number of lags**	**Number of observations**
M2/GDP-Bahrain and B1	20.27757*	1	10
M2/GDP-Bahrain and B2	-	-	-
M2/GDP-Bahrain and B3	-	-	-
M2/GDP-Qatar and Q1	4.058256	1	12
M2/GDP-Saudi Arabia and S2	4.285676	1	7

*indicates the presence of cointegration between the variables at 5% significance level.

Referrals and references:

Al-Malkawi, H. A. M. and Abdullah, N. (2011). "Finance-Growth Nexus: Evidence from a Panel of MENA Countries". International Research Journal of Finance and Economics. Issue. 63, pp. 129-139.

Ben Nacer, S. Ben-Khedhiri, H. and Casu, B. (2011). " What Drives the Performance of Selected MENA Banks? A Meta-Frontier Analysis". IMF working paper 11/34, pp. 1-31. Available at http:// ww.imf.org/external/pubs/ft/.../2011/wp1134.pdf.

Boulila, G. and Trabelsi, M. (2004). "The causality issue in the finance and growth nexus: empirical evidence from Middle East and North African countries". Review of Middle East Economics and Finance. Vol. 2, No. 2, pp. 123–138.

Chiu, S. Newberger, R. and Paulson, A. "Islamic Finance in the United States". Transaction Social Science and Modern Society. pp. 64-68.

Gaunaurg, P. M. Abdelhady, H and Issa, N. A. (2011). "Islamic Finance". International Lawyer. Vol. 45, Issue 1.

Gujarati, D. N. and Porter, D. C. (2010). Essentials of Econometrics, Fifth Edition, The McGraw-Hill Companies.

Hamilton, J. D. (1994). Time Series Analysis, Princeton University Press.

Haniffa, R. and Hudaib, M. (2007). "Exploring the Ethical Identity of Islamic Banks via Communication in Annual Reports". Journal of Business Ethics. Vol. 76, pp. 97-116.

Hefner, R. W. (2006). "Islamic Economics and Global Capitalism". Transaction Social Science and Modern Society. Vol. 44, No. 1, pp. 16-22.

Karim, W. J. (2010). "The Economic Crisis, Capitalism and Islam: The Making of a New Economic Order?". Vol. 7, Nos. 1–2, pp. 105–125.

McMillen, M. J. T. (2009). "Contemporary Islamic Finance: An Introduction to Essential Structural Concepts". International Law News. Vol. 38, Issue 4.

Ökte, M. K. S. (2010). "Fundamentals of Islamic Economy and Finance: Theory and Practice". Electronic Journal of Social Sciences. Vol .9, Issue 31, pp. 180-208.

Pearce, D. (2011). "Financial Inclusion in the Middle East and North Africa : Analysis and Roadmap Recommendations ". Policy Research Working Paper 5610. pp, 1-45.

Rice, G. (1999). "Islamic Ethics and the Implications for Business". Journal of Business Ethics. Vol. 18, pp. 345-358.

Srairi, S. Kouki, I. and Harrathi, N. (2011). "The Relationship Between Islamic Bank Efficiency and Stock Market Performance: Evidence from GCC countries". 8th International Conference on Islamic Economics and Finance. Center for Islamic Economics and Finance, Qatar Faculty of Islamic Studies, Qatar Foundation. pp, 1-20.

The bankscope database. (2010). http://bankscope2.bvdep.com

The World Bank. (2012). http://data.worldbank.org.

The World Islamic Banking Competitiveness Report 2011-12. (2011). The 18th Annual World Islamic Banking Conference. Available on: http:// http://www.ey.com/Publication/vwLUAssets/IBCR_Report/$FILE/IBCRReport2011(LR)%20Final.pdf

How to cite this article by the APA method:

Halima Saadia KORICHI, Mohamed Lamine KHIAR and Mohamed Ali SBAI, (2019), **Islamic Finance and Regional Development in MENA Region: An Empirical Evidence from the Golf Cooperation Countries,** Algerian review of economic development, Volume 06 (Number 02), Algeria: Kasdi Marbah University Ouargla, pp. 329-340.