ISLAMIC FINANCIAL INNOVATION THE CASE OF ISLAMIC STOCK INDEXES الابداع المالي الاسلامي: حالة المؤشرات المالية الاسلامية

LYNDA OUENDI^{*} Doctorate student Mouloud Mammeri University Of Tizi-Ouzou Algeria.

Abstract

This paper aims to present financial innovation shari'ahcompliant, with reference to the Islamic stock indexes, with a focus on analyzing the case of the Dow Jones Islamic Market (DJIM) Index. Result show that, adoption and implementation of innovative financial strategies in Islamic finance are necessary to enhance the performance, attractiveness and competitiveness of this industry. However, it is still facing a number of limitations, that might call into question its reliability, stability, attractiveness and competitiveness. Despite this fact, Islamic indexes, such as the (DJIM) shows its ability to compete its conventional counterpart.

Keywords: Islamic financial innovation, Islamic stock indexes, Dow Jones Islamic Market.

الملخص

تحدف هذه الورقة إلى التعريف بمفهوم الابتكار المالي المتوافق مع أحكام الشريعة الإسلامية، الإشارة إلى مؤشرات الأسهم الإسلامية مع التركيز على تحليل حالة المؤشر داو جونز الإسلامي. تظهر النتائج أن اعتماد وتنفيذ استراتيجيات مالية مبتكرة في مجال التمويل الإسلامي ضروري لتعزيز أداء هذه الصناعة وجاذبيتها وقدرتما على المنافسة، مع ذلك، فإنه لا يزال يواجه عددا من القيود، التي قد تشكك في موثوقيتها والاستقرار والجاذبية والقدرة التنافسية. على الرغم من هذه الحقيقة، فإن المؤشرات الإسلامية، مثل المؤشر داو جونز الإسلامي، تظهر قدرتما على منافسة نظيرتما التقليدية. الكلمات المفتاحية: الابتكار المالي الإسلامي، مؤشرات الأسهم المالية، سوق داو جونز الإسلامي.

^{*} <u>lynda.ouendi@gmail.com</u> Received 26 January 2018, Accepted 26 February 2018

Introduction

The purpose of this article is to highlight and present the role and place of financial innovation in Islamic finance, which is considered to be an integral part in the emergence, development and globalization of Islamic finance, mainly when facing global financial challenges marked by strong financial innovations; and to present the "*Islamic stock indexes*" as a model of innovation that has greatly contributed to the development of Islamic finance.

Our first motivation is rooted in an observation: since the advent of modern Islamic finance, mainly from the 1970s, it has proved able to present a multitude of innovative capacities. Indeed, if initially the Islamic finance was structured around a few products and instruments (i.e, musharaka, mudaraba, murabaha...), other instruments and products have been developed, such as the Shari'a-compliant stock indexes. In addition, we aim to contribute to the advancement of conceptual and empirical research on Islamic financial innovations in general and Islamic stock indexes in particular.

Indeed, despite the importance of this financial instrument for the development of Islamic financial markets, it is very rare to find theoretical as well as empirical research on the topic. A limited number of conceptual and empirical research that have been carried out on the topic, such as, the work carried out by *El Khamlichi Abdlbari* (2012) and *S&P Dow Jones Indices & Mc Graw Hill Financial* annual and quarterly reports. Thus, have let us to focus on the study of Islamic stock indexes,

This study has been mainly based on the database developed by the Dow Jones Islamic Market. We ought to highlight the lack of data, transparency and the difficulties accessing to academic journals, professional reports and papers hindered greatly our research study.

To carry out our study, we used a descriptive and analytical approach, based on data collected through a set of reports, articles and research papers from the theoretical and empirical literature review. The article is structured in three main points. The first point concerns the understanding of Islamic financial innovation. The second point presents the Islamic stock indexes. The last point refers to the case of the Dow Jones Islamic Market, which is considered as a successful Islamic financial innovation model.

1. Understanding of Islamic financial innovation

To cope with the constant changes in financial markets, which are strongly influenced by a multitude of new products and instruments allowing conventional finance to intensify competitive positions, Islamic finance needs to adopt innovative strategies so that it can ensure a sustainable and better development.

1.1.Presentation of Islamic financial innovation

In the context of Islamic finance, innovation can be defined, according to *Humayon (2012)*, as "the process of using Islamic legal contracts in new ways to develop financial products that are in compliance to Shari'a Law and have the ability to replicate the economic effects of conventional financial products". It can also be defined as "all activities which include design, development and creation of new financial products following the teachings of Islam" (*Fath Rahman, 2002*).

Jasser (2010) emphasized the several factors that are mainly driving the need for innovation by Islamic finance, including the need to:

- Diversify the sources of profitability of Islamic financial institutions;
- Reduce investment risk by diversifying its methods and its sectors;
- Maintain the competitive position imposed by conventional finance;
- Meet the needs and requirements of customers;
- Cope with different transitions from international markets; and
- Face the challenges of financial globalization.

For this purpose, Islamic finance seeks to develop products and financial instruments which ought to be mainly characterized by a *legitimate Islamic credibility* and *economic efficiency*, as presented by *Kunduz* (2008):

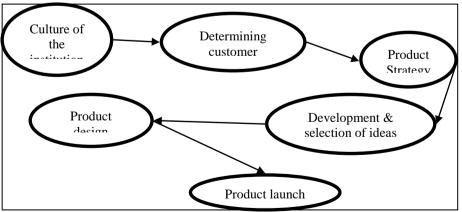
- *The legitimate Islamic credibility*: is the basis of Shari'acompliant specificity. This means that any financial innovation must be consistent with the teachings of the Shari'a;
- *The economic efficiency*: is the basis of its ability to meet the economic and competitive requirements from conventional finance, mainly, through the development of investment opportunities for risk sharing, reducing transaction costs, costs of obtaining information and brokerage commissions.

1.2.Islamic financial innovation strategies

In terms of Islamic financial innovation, two types of strategies have been implemented, namely: *technical strategy* and *Shari'acompliant strategy* (*Khoja*, 2005). According to the General Council of Islamic Banks and Financial Institutions and the Islamic world authority on economics and finance, the technical strategy of the Islamic financial innovation might be structured into six main stages, as illustrated in figure 1:

- *The culture of the institution:* is the vision created and adopted in the process of product development, culture and innovation environment;
- *Determining customer needs:* can help to anticipate and hence meet their needs, but also their requirements (especially in the competitive framework imposed by the conventional finance);
- *The product strategy:* is to develop a clear understanding of market needs through the coordination between the elements of the internal and external environment of the institution;
- *The development and selection of ideas:* refers to a proposal of methods and means to achieve financial innovation and to select the best performing;
- *Product design:* is to determine the characteristics of the product as well as its operation and legal aspect;
- *The product launch: is* through the knowledge of market entry strategies and various marketing approaches.

Figure 1: The main steps of the technical strategy of the Islamic financial innovation

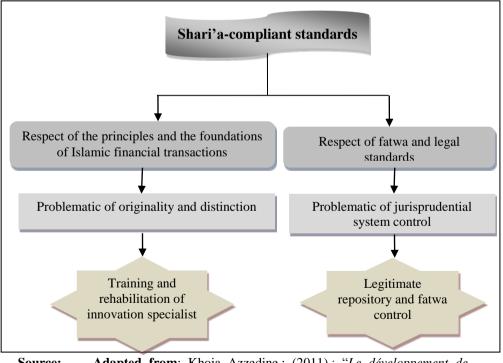


Source : Adapted from Khoja Azzedine ; (2011) ; "Le développement de produits financiers islamiques: méthodologie et le mécanisme" ; Le Conseil général pour les banques islamiques et les institutions financières (CIBAFI) ; Bahreïn; p53.

The Shari'ah-compliant standards are the main distinguishing feature between Islamic finance and the conventional finance. Thus, Shari'ah-compliant strategy can be shown in figure 2. Any Islamic financial innovation must ensure compliance with the following characteristics:

- *The financial transactions characteristics*: ethics respect, maintain strict link to real economy, profit and loss sharing and risk-taking;
- *The financial contracts characteristics*: respect for Islamic contractual conditions, achieve a balance of rights and obligations, an agreement between the contracting parties;
- *The financial transactions banned characteristics*: the prohibition of the riba, gharar, maysir, injustice and illegal investments;
- *The returns of Islamic financial institutions characteristics*: clear and transparent determination of profits, rents and commissions.

Figure 2: Shari'a-compliant strategy of Islamic financial innovation



Source: Adapted from; Khoja Azzedine; (2011); "Le développement de produits financiers islamiques: méthodologie et mécanisme"; Le Conseil général pour les banques islamiques et les institutions financières (CIBAFI); Bahreïn; p10.

The legitimate repository and the fatwa control consist in the implementation of a system in compliance with the opinion of scholars (the fatwa) in every financial and banking transaction. Thus, the Islamic financial experts and Islamic financial institutions have to respect the fatwas and put into execution, and referring mainly to the collective opinion (such as those established by the Islamic Fiqh Academy).

2. Stock indexes: An Islamic financial innovation model

The adoption of innovative strategies by Islamic finance has enabled it to develop a number of products, instruments and financial services, such as the stock indexes. Indeed, they have been developed in several financial markets, such as the New York financial market and the London financial market.

2.1. Presentation of the Islamic stock indexes

The "Socially aware Muslim Index" (SAMI) was the first Islamic stock index to be launched in the market, in 1998. Since, it has been considered as the leading providers of stock indexes together with wide range of services. Nowadays, they offer a wide range of Shari'acompliant indexes to support the accelerated development of Islamic finance. Through, a wide range of indexes in several international financial markets, including various sectors of the economy and all levels of capitalization. Stock indexes for sukuk market and SRI (Social Responsibility Investment) indexes also exist. However, in order for a value to be quoted in Islamic stock indexes, it has to undergo two types of selection based on qualitative and quantitative criteria (*Ruimy, 2008*).

2.1.1. Qualitative criteria

From the Shari'a point of view, some investments are prohibited due to the categorized illegal activities and/or sectors (such as, alcohol, pork, gambling, pornography...). In addition, the prohibition of some financial technical and instruments due to their non-compliance with shari'ah, such as, riba, leverage, short selling, margin, etc. Thus, any financial institution using the previously mentioned investment categories would be prohibited from introducing an Islamic stock index.

In order to determine whether the activities of a company were in compliance with the principals of the Shari'ah, the members of the Shari'ah Boards usually use three classifications, namely:

- *ICB (Industry Classification Benchmark)*: launched in January 2005 by the Dow Jones and the FTSE Group, and adopted by

Euronext a year later. It follows a hierarchy composed of 10 industries, 19 super-sectors, 41 sectors and 114 subsectors;

- *GICS (Global Industry Classification Standards):* adopted by the committee of S&P and MSCI Islamic stock indexes. It consists of 10 sectors, 24 industry groups, 68 industries and 154 sub-industry;
- SIC (*Standard industry Classification*): not used by leading Islamic indexes, but rather taken into consideration by some funds in Malaysia (such as the Amiri Capital Fund). It credits several codes to the same company according to different activities in which it's engaged.

2.1.2. Quantitative criteria

Quantitative criteria relate to the financial structures of companies which might be able to satisfy the requirements expressed as ratios (mainly, three ratios): the level of debt, receivables and cash generating interest. Sometimes, a fourth ratio is added concerning the part of illegal products to total products produced or managed by the company:

- *The level of debt*: to ensure that the company is moderately indebted or ideally no debt (eg; Dow Jones Islamic: total debt / average market capitalization of 24 months <33%);
- *Receivables*: (eg; MSCI Islamic: total debt / total assets <70%);
- *Cash generating interest*: represents the threshold that indicates the maximum level of liquidity that companies should take in countries with no Islamic banking and financial institutions or when they use conventional institutions to deposit excess cash (eg; FTSE Shariah: total cash generating interest / total assets <50%).

2.2. The development of Islamic stock indexes

Interest in Islamic stock indexes developed in several countries, mainly in Western countries, such as: Dow Jones Islamic Indices, S&P Shariah Indices, FTSE Islamic Indices and MSCI Islamic Indices; that offer a varied typology in international markets, and whose performance is more remarkable. *(Malaysi'a Islamic Marketplace, 2013)*.

In the Gulf countries, we can illustrate the case of: "*FTSE DIFX Shari'a Index Series*", it is working in collaboration with the DIFX (Dubaï International Financial Exchange)ⁱ. The index was launched initially to assess the progress of companies in Kuwait and Qatar, before it's expanded to other Gulf countries. The "*Kowait Shariah Criteria Index*" created by the Kuwait Stock Exchange; the "Bakheet" index on the Riyadh exchange market, in Saudi-Arabia; and "*Dow Jones Islamic Market Index (DJIM)*"(*El Khamlichi, 2012*). In early 2011, a Shari'a-compliant index of companies was launched in the Istanbul Stock Exchangeⁱⁱ.

Malaysia also developed an Islamic stock index. Indeed, the stock market in Malaysia, which had a single Islamic Index *KLSI (Kuala Lumpur Shariah Index)*, developed, in 2007, two new indices: «*FTSE Boursa Malaysia EMAS Shariah Index* » and «*FTSE Bursa Malaysia Hijrah Shariah Index* », launched in partnership with the British stock market FTSE to Malaysian and international investors. Singapore has also developed Islamic stock index with the participation of "*Singapor Exchange*" (*SGX*) and "*FTSE SGX Shariah Index Series*". (*El Khamlichi, 2012*).

It was in October 1999 that the "Global Islamic Index Series", one of the first Islamic stock indexes was launched by the FTSE in UK, an overall index covering all sectors in line with the Shari'a and on an international geographical coverage. Currently, it has become the "FTSE Shariah Global Equity Index Series" created by a joint venture operation between the "FTSE" and the company "Consulting Yasaar"; the series includes indexes of DIFX Sharia, the SG X100 and the FTSE Bursa malaysia Index « FTSE 2010 ». (El Khamlichi, 2012)

Europe (excluding UK) has also developed Islamic stock index. The "*STOXX Europe Islamic Index* » is designed to provide exposure to European markets accordance with the Shari'a. Based on technical exclusive screening and innovative, its constituents are selected from the "*STOXX Europe 600 Index*" and weighted according to the float market capitalization. The selection process is supervised by "The Shari'a Supervisory Board"ⁱⁱⁱ. Germany, also has its Islamic stock index, the "German West LB Islamic Index", launched in January 2012, comprising the largest German companies (DAW and MDAW). (*Islamic Finance News, 2012*)

In Canada, Standard & Poor's has launched a Shari'a-compliant version of the "*S&P/TSE 60*", which is highly correlated with the S&P/TSX 60 and thus provides an index of comparable investments, while adopting explicit selection criteria and defined by the Shari'a^{iv}. The United States of America has also created an Islamic stock index. Indeed, we can illustrate the "*Dow Jones Islamic Market Index*" (*DJIMI*), launched in February 1999. The rating agency Standard & Poor's launched in 2006, the Islamic version of its benchmarks, and other new indexes. Thus, in addition to the overall "*S&P 500 Shariah Index*", slamic index family includes "*Standar&Poor's 2010b*": regional

indexes (04 indexes), sector indexes (04 indexes), etc. The latest launched index focused on in small, medium and large companies in the 26 most developed markets in Asia, Europe, America and Australia. (*El Khamlichi, 2012*)

3. The Dow Jones Islamic Market (DJIM)

The Dow Jones Islamic Market (DJIM) is one of models that have demonstrated success in Islamic financial innovation, in terms of performance, a better global integration and development of the Islamic finance.

The Dow Jones Islamic Market (DJIM) was launched in Bahrain in 1999. It reflects changes in stock prices of over 2700 companies, majority of the Dow Jones listed companies, whose activities were consistent with the principles of Shari'a (*Ruimy, 2008*). Its Shari'a board composed of five eminent jurists, namely: Shaykh Nizam Yaquby (Bahrain), Shaykh Mohd Daud Bakar (Malaysia), Shaykh Mohamed A. Elgari (Saudi-Arabia), Shaykh Abdul Sattar Abu Ghuddah (Syria) and Shaykh Yusuf Talal DeLorenzo (USA) (**S&P, 2017**).

In addition to the compliance with principles of Shari'a, any company wishing to subscribe to DJIM must also meet the following financial ratios^v:

- Total debt divided by the average market capitalization of 24 months must be <33%;
- Total cash and securities interest divided by average market capitalization of 24 months must be <33%;
- Total divided flow by the average market capitalization must be <33%.

Several indices derived from DJIM, namely^{vi}:

- *Equity Indices*: compound of Dow Jones Average, Dow Jones Emerging Market Indices, Dow Jones Gobal Indices; Dow Jones Sector Indices, Dow Jones Titans Indices Dow Jones Total Stock Market Indices and other Equity Indices;
- Strategy & Thematic Indices: compound of Dow Jones Global Composite Yield Index, Dow Jones Global Commodity Equity Indices, Dow Jones Islamic Market Indices, Dow Jones Sustainability Indices, Dow Jones U. S Thematic Market Neutral Indices and other Strategy & Thematic Indices;
- Alternative Asset Class Indices: compound of Dow Jones Brookfield Infrastructure Indices, Dow Jones FXCM Dollar

Index, Dow Jones Real Estate Indices, Dow Jones UBS Commodity Indices and Dow Jones EFY 100 Indices;

- *Fixed Income Indices: compound* of Dow Jones Equal Weight U.S Issued Corporate Bond Index, Dow Jones Credir Suisse Inflation Breakeven Indices and Dow Jones Sukuk Index;
- *Total Portfolio Indices*: compound of Dow Jones Relative Risk Indices, Dow Jones Target Date Indices and Dow Jones Real Return Target Date Indices.

The DJIM, which is one of the major Islamic stock indexes, is able to compete with its conventional counterpart, in terms of sectors and countries of operation, but also in terms of performance as it can be observed during twenty years 1996-2016 (figure 4), and where it can be find that the tendency of the performance is almost the same between the both indexes.

Figure 4: Performance of DJIM World vs DJ World (Feb 2996-Feb 2016)



Source: http://www.azzadfunds.com/how-halal-investing-can-impact-your-bottom-line/

For a better lecture of the above figure, a comparative study of returns and volatility between the DJ World and the DJIM World was made and the results are presented in the table 1 (according to the last available data). It is found that Shari'ah-compliant indexes are less volatile and better in returns than the conventional counterparts, both in times of crisis as well as in times of stability. The main reasons can be observed on the prohibition of leverage, interest rate, derivatives, excessive uncertainty and investment in some sectors.

and the DJIM World													
18-month bear market (October				F	Five years (5March 2008-March								
2007-March 2009)					2013)								
	DJ	DJI	Differe			DJ	DJI	Differe					
	Worl	Μ	nce			Worl	Μ	nce					
	d	Worl				d	Worl						
		d					d						
Total	-	-	7.27%	To	tal	1.26	9.13	7.87%					
return	50.48	43.21		ret	turn	%	%						
	%	%											
Annuali	-	-	6.04%	Ar	nuali	0.25	1.76	1.51%					
zed total	37.87	31.83		zeo	d total	%	%						
return	%	%		ret	turn								
Annuali	34.08	32.47	-1.62%	Ar	nuali	21.94	20.54	-1.40%					
zed	%	%		zee	ł	%	%						
volatilit				vo	latilit								
У				у									
Source:	CIMB-Principal Islamic Asset Management; (31th March, 2013);												

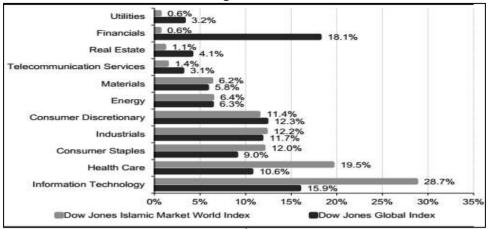
 Table 1: Comparative returns and volatility between DJ World

 and the DJIM World

e: CIMB-Principal Islamic Asset Management; (31th March, 2013); "Case for Islamic Asset Management"; Malaysia; p2.

The figure 5 provides a performance overview of the DJIM World against the Dow Jones Global Index (DJGI), during the Q1 2017. It can be found that both indexes have almost the same tendency in terms of increase of their value in certain sectors of intervention, such as industrials sector (12.2% for the DJIM World, 11.7% for the DJGI) and consumer discretionary sector (11.4% for the DJIM World, 12.3% for the DJGI). But it is also found that the performance in other sectors represents a different tendency with an intervention of the DJIM World superior to that of the DJGI, such as health care (19.5% for the DJIM World against 10.6% for the DJGI) and information technology (23.3% for the DJIM World against 12.5% for the DJGI). However, the most remarkable difference is in the financial sector, where the DJIM World does almost not intervene (only 0.6% for the DJIM World against 18.1% for the DJGI), which may be explained by the prohibition of many operations and services that exist in the market (interest, leverage, derivatives ...).

Figure 5: DJIM performance in terms of sectors of intervention in Q2 2017



Source: S&P Dow Jones Indices; (^{1st} Quarter 2017); "S&P Shariah Indices, Dow Jones Islamic Market Indices"; USA; p 4.

The table 2 illustrates the performance of the DJIM between March2013 and March2017, in which it can be observed that the average of the performance is rather in decreasing during the five years, in almost all regions and of all kinds of tradable indexes, after a period of increasing. This is may be due, mainly, to the economic slowdown in many countries because of the fall of oil prices.

	Index Performance							
Index Name	Stock Count	QTD	1-Year	3-Year	5-Year			
DJIM Benchmark Indices			11111111		4			
DJIM World	2,699	7.5%	10.9%	4.0%	6.4%			
Dow Jones Global	7,585	6.4%	12.9%	3.1%	6.3%			
DJIM Global ex-U.S	2,205	8.5%	8.7%	-0.3%	1.9%			
Dow Jones Global ex-U.S.	6,356	7.4%	10.4%	-1.3%	2.3%			
DJIM Developed Markets	1,652	7.2%	10.8%	4.3%	7.1%			
Dow Jones Developed Markets	4,655	5.9%	12.6%	3.4%	7.3%			
DJIM Developed Markets ex-U.S.	1,158	7.8%	7.8%	-0.6%	2.6%			
Dow Jones Developed Markets ex-U.S.	3,426	6.5%	9.2%	-1.6%	3.2%			
DJIM U.S.	494	6.9%	12.4%	7.0%	9.7%			
Dow Jones U.S.	1,229	5.5%	15.3%	7.7%	10.8%			
DJIM Asia-Pacific	1,579	9.1%	11.5%	4.0%	3.3%			
Dow Jones Asia-Pacific	4,501	8.8%	13.9%	2.8%	3.6%			
DJIM Asia-Pacific ex-Japan	1,303	11.1%	10.5%	1.4%	1.3%			
Dow Jones Asia Pacific ex-Japan	3,528	12.3%	14.6%	1.3%	2.3%			
DJIM Europe	310	9.0%	6.7%	-1.8%	3.9%			
Dow Jones Europe	871	6.9%	6.3%	-3.8%	3.4%			
DJIM Emerging Markets	1,047	11.2%	12.4%	0.1%	-0.3%			
Dow Jones Emerging Markets	2,930	10.8%	15.2%	-0.3%	-0.8%			
DJIM Tradable Indices	100000000000							
DJIM Titans 100	102	7.6%	11.0%	5.0%	7.6%			
Dow Jones Global Titans 50	54	5.7%	14.6%	4.5%	6.8%			
DJIM International Titans 100	103	9.1%	9.5%	-0.7%	2.2%			
Dow Jones Developed Markets ex-U.S.	3,426	6.5%	9.2%	-1.6%	3.2%			
DJIM Asia Pacific Titans 25	25	10.8%	15.3%	4.6%	4.2%			
Dow Jones Asian Titans 50	50	8.1%	18.5%	1.2%	2.7%			
DJIM Europe Titans 25	26	8.8%	6.3%	-3.3%	2.7%			
Dow Jones Europe	871	6.9%	6.3%	-3.8%	3.4%			
DJIM Malaysia Titans 25	25	5.5%	-13.0%	-11.5%	-6.0%			
Dow Jones Malaysia Titans 30	30	8.5%	-10.2%	-11.2%	-5.6%			
DJIM Thematic Indices								
DJIM Global Select Dividend	100	4.4%	11.5%	-0.6%	2.5%			
Dow Jones Global Select Dividend	100	4.0%	7.9%	-3.8%	1.3%			
DJIM Sustainability	99	8.3%	10.6%	2.2%	6.0%			
Dow Jones Sustainability World	319	7.4%	14.7%	0.7%	4.9%			

Table 2: DJIM performance (March2013 – March2017)

Source:

S&P Dow Jones Indices; (^{1st} Quarter 2017); "S&P Shariah Indices, Dow Jones Islamic Market Indices"; USA; p 5.

Conclusion

Islamic finance, as an integral part of the international financial system, has been facing an intense competitive pressure from its conventional counterpart and customer requirements. Hence, it has quickly achieved the need and the importance of innovative measures. The adoption and implementation of innovative financial strategies were necessary to enhance the performance, attractiveness and competitiveness of Islamic Finance. Indeed, since the advent of contemporary Islamic finance, it has proved to be capable of offering several innovative products, instruments and services.

However, this industry still facing a number of limitations, that might call into question its reliability, stability attractiveness and competitiveness. Indeed, the Islamic financial innovation presents limitations in terms of research and development (R&D), expertise and specialists, coordination between regulators and Islamic banking and financial institutions (IFBIs), unification of legitimate references (of Shari'ah), unification of using standards for financial instruments, evaluation and products rating and originality and creativity (by trying to imitate the traditional financial products and instruments).

Therefore, through this contribution, we propose a set of recommendations that might contribute to improve the quality of innovation strategies in the context of finance based on Islamic principles (shari'ah), such as the case of Islamic indexes:

- Strengthening the role of Shari'ah-compliant control in financial innovation operations;
- Establishing unified shari'ah norms and standards;
- Providing better interest in interpretations of religious texts;
- Encouraging and fund R&D in this area;
- Creating financial markets for all Islamic financial products and instruments, so that they can be exchanged and generate liquidities;
- Providing training to employees of IFBIs, to reduce operational risks and Shari'ah-compliant risks;
- Developing better market research, to further better understanding its needs and requirements; and
- Establishing a mutual understanding of conventional finance and Islamic finance.

Islamic financial innovation: the case of Islamic stock indexes

ⁱ Become "NASDAQ Dubai" in November 2008

vi http://www.djindexes.com/literature/

References

- CIMB-Principal Islamic Asset Management; (31th March, 2013); "Case for Islamic Asset Management"; Malaysia.
- El Khamlichi Abdlbari ; (2012) ; « *Ethique et performance : le cas des indices boursiers et des fonds d'investissement en finance islamiques* » ; Thèse de doctorat; Université d'Auvergne-France.
- Fath Rahman Ali Mohammed Saleh; (Décembre2002); "Les instruments du marché monétaire islamique: Introduction à l'ingénierie financière islamique"; Revue Elmasrafi; Volume 26; Banque du Soudan; Khartoum.
- Humayon Dar; (2012); "Islamic financial innovation: Tools and trends"; Islamic finance; Edbiz Consulting Ltd, UK.
- Jasser Mohammed Omar; (20-21 mars 2010) ; "Vers des produits financiers islamique innovés"; Conférence intitulé "Les banques islamiques yéménites : Etat des lieux et les défis de l'avenir" ; Le Club des hommes d'affaires yéménites ; Sanaa-Yémen.
- Khoja Azzedine; (2011); "Le développement de produits financiers islamiques: méthodologie et mécanisme; Le Conseil général pour les banques islamiques et les institutions financières (CIBAFI); Bahreïn.
- Kunduz Abdulkarim; (2008); « l'ingénierie financière islamique »; Journal de l'Université King Abdulaziz; L'économie islamique »; Volume 20; N°2; Arabie-Saoudite.
- Malayasi'a Islamic finance marketplace; (23 December 2013); "Global Islamic Funds".
- Ruimy Michel; (2008) ; "*La finance islamique*" ; Edition SEFI ; Collection Finance D'aujourd'hui ; Québec ; Canada.
- S&P Dow Jones Indices LLC; (August 2014); "Dow Jones Islamic Market World Index"; McGraw-Hill Financial Companies; New-York.

ii <u>http://fr.muslimvillage.com/2011/11/08/16036/how-the-rise-of-islamic-banking-is-</u> <u>changing-turkey/</u>

http://www.stoxx.com/indices/index_information.html?symbol=SXISBP

^{iv}http://www.mondaq.com/canada/x/120566/Insurance/Takaful+Islamic+Insurance

v http://www.djindexes.com/islamicmarket/?go=shariah-compliance

- S&P Dow Jones Indices; (^{1st} Quarter 2017); "S&P Shariah Indices, Dow Jones Islamic Market Indices"; USA.
- Standard & Poor's. (December 2017). *Dow Jones Islamic Market indices methodology*. USA.
- http://www.azzadfunds.com
- WWW.BANKOFSUDAN.ORG
- http://www.djindexes.com
- http://www.mondaq.com
- http://fr.muslimvillage.com
- http://www.stoxx.com