

## PAPER DETAILS

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## **Financial engineering and its importance for Islamic Banks**

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### **ABSTRACT**

Islamic banks seek always to keep a variety of financial instruments and products to enable them to liquidity management a way that a profitable, in addition to provide appropriate flexibility in order to respond to the economic environment variables. For this reason, financial engineering is considered the right tool to achieve it. So it is working to find innovative solutions and new financial instruments with high economic efficiency. The purpose of this paper is to illustrate the importance of financial engineering for Islamic Banks and know the obstacles that faced it by looking at previous studies and find out the results and their interpretation. this study reached to that the financial engineering plays a role in the development of Islamic banking by creating financial products with economic efficiency and correspond with law Islamic.

**Key words:** Financial engineering, Islamic banks, Instruments, Securitization.

**Jel Codes:** G21.

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## 1. INTRODUCTION

The world has seen economic changes as a result of globalization and the operations of liberalization that led to the expansion of the financial and banking industry activities and widened Risk circuit and costs and shows it a clear impact on financial and banking institutions, prompting these institutions to look for financial instruments innovative for the management of those risks. However, the spread of Islamic banking which is based on a set of rules and principles derived from Islamic law, these banks have seen a series of successive and rapid developments despite these developments, the Islamic banks currently facing challenges in order to maintain its impetus and achieve sustainable development. The Islamic banks market's size, both in terms of assets and the base annual sales, is considered less than its true potential because there is a shortage of depth and expansion in the market. It needs to new tools that can enhance liquidity in the market, and develop the performance of Islamic banks in managing risk. But the process of establishing new tools considered complex, sensitive and requiring a multi-disciplinary consideration including a deep understanding of Islamic jurisprudence. Therefore, the Islamic banks face a range of challenges represented in innovating and the development of Islamic financial products able to face the conventional financial products and as well as providing financing and investment methods yielding efficient high economic and meet the needs of their customers. Accordingly, these banks have resorted to the use of financial engineering as an important entrance for Islamic banking and a source of creativity and innovation needed by financial institutions of different kinds and especially Islamic banks to meet the investment and financial needs of customers Which ensures its survival and continuity in an environment dominated by competitive away from the interests and usury, so financing business organization to achieve the interests of all participating parties in investment process to maintain a balance between the financial economic and real economic which ultimately leads to the achievement of stability and economic growth. So the Islamic financial industry based on the principle of innovation in accordance with the rules of the Islamic religion is one of the best alternatives for the development of financial engineering, hence the products and methods of funding for this industry will achieve growth and high efficiency because financial engineering will produce many of the tools and effective solutions in the world of finance ,so the future of Islamic banks depends on how can the exploitation of the latest methods of financing operations and devise new formulas for the concept of banking and develop existing formulas in order to fit with the banking developments.

### **1.1. Research problem**

The success of Islamic banking to meet of the customers' needs and their desires and achieve the desired targets that will not be achieved only through the continued development of financing tools for Islamic Banks so Islamic banks resorted to using financial engineering in spite of its modernity and it considered an emerging industry compared to conventional counterparts. Therefore, Islamic banks to be competitive, they need a variety of tools and financial products able to respond to local and global economic variables. It can formulate the research problem in the questions as follows:

- What is the importance of financial engineering for Islamic banks?
- How can the Islamic banks that benefit from financial engineering and what are the obstacles faced?

### **1.2. Research Hypothesis**

Through this study we will test the following hypothesis:

Financial engineering instruments contribute to the invention of financial products and contribute to the development of Islamic banks' work and enable them to compete with conventional banks.

### **1.3. Research importance**

In light of the massive radical changes witnessed by the world in the field of banking from changing the method of economic resources management to a free economic pattern, as well as the interdependence of international financial markets by the ICT revolution and with the emergence of the growing role of Islamic banks, especially after the global financial crisis in 2008 which led to the imposition of competitive pressures, especially with the growing demand for Islamic financial products. Therefore, Islamic banks face a range of challenges related to competition in the global banking environment and these challenges impose on them innovation of investment tools and sophisticated methods to meet customers' needs in line with the law of Islamic.

Therefore, Islamic banks seek always to keep a variety of financial instruments and products to enable them to liquidity management a way that a profitable. Also, they will provide appropriate flexibility in order to respond to the economic environment variables. For this reason, financial engineering is considered the right tool to achieve it. So it is working to find innovative solutions and new financial instruments with high economic efficiency.

#### **1.4. Research objectives**

This study aims to learn about the importance of financial engineering for Islamic Banks and how can the Islamic banks benefit from financial engineering in the development of their instruments and Islamic products. Also through this study will determine the most important foundations underlying the financial engineering and know the challenges that facing the Islamic financial engineering in achieving its goals.

#### **1.5. Research Methodology**

This study aims to learn about the importance of financial engineering for Islamic Banks and how can the Islamic banks benefit from financial engineering in the development of their instruments and Islamic products. Also through this study will determine the most important foundations underlying the financial engineering and know the challenges that facing the Islamic financial engineering in achieving its goals.

## **2. LITERATURE REVIEW**

(Mohammed, 1999) the purpose of this study is to evaluate the options of contracts in an Islamic way and to know the role of financial contracting in the Islamic system. This study attempted to analyse and discuss the status of a specific Islamic contract to determine the possibility of using this contract in managing other forms of risk. When comparing the contract with some traditional financial products, it turns out that financial engineer will get the ideas through which can be designed the contract in an efficient manner.

(Zamir, 1999), the goal of this study is to test the range of financial and engineering innovation in an Islamic financial system. The study result that, contrary to common belief, Islamic finance provides the fundamental building blocks that can be used to establish more complex instruments that will reinforce liquidity and suggests tools for risk management. With the presenting of asset securitization and exchange transactions as agreed on Islamic principles, also the affairs of secondary markets and managing risk can be addressed.

(Gandoz, 2008) this study aimed to search for the reality of the financial engineering of the Islamic financial institutions and the findings of this study that the financial Islamic differ from its conventional counterpart because it combines economic efficiency and Islamic law, as well as financial engineering used in risk management that faced the Islamic banks because they include tools are suitable with law of Islamic.

(Mohammed, 2010) the study clarified the role played by the Islamic Financial Engineering in addressing financial crises, and this study found that the Islamic financial engineering is

subject to controls Islamic law, which makes it as a safety valve for not falling into the crises in the future.

(Garowf, 2011) this study focused on financial engineering as scientific entrance for developing the Islamic banking products industry and find out the need of the Islamic financial institutions to a diversified portfolio of financial instruments and products that give sufficient flexibility to respond to economic variables and this study concluded that the Islamic financial market is still in need of further innovation and development in order to do optimization economic role ,hence the financial engineering use in the activation and development of Islamic financial products is the right tool because it combines between Islamic controls and economic efficiency.

(Al Taani, 2013) this study addressed the most important challenges faced financial engineering, especially in the absence of adequate mechanisms to protect against the risk of currency prices and interest rates and the ability of Islamic banks to developing its tools in order to avoid all shocks, also this study tested the validity of financial derivatives in accordance with Islamic rules and opinions of scientists in these derivatives.

(Alameen, 2013) the study aimed at identify the Islamic and conventional financial engineering and clarify their characteristics and importance, and the most important challenges that faced it and this study reached to the financial engineering until now did not create original financial products but only it entered amendments on traditional products in order to fit with Islamic law.

(Lemaach and Sara, 2014) this study aim to know the role played by the products of financial engineering in developing the Islamic banking industry and focus on the Emirates Islamic Bank experience in issuing Ijara instruments and this study reached that the issuance of this type of instruments they can avoid various risks, through the creation of a company oversees the process of issuing hence the bank will benefit from the transfer of assets leased related with the securitization to company and therefore transfer all risks and its impact.

(Jadi, 2015) this study was conducted to clarify the Islamic financial engineering's role in the Islamic financial industry development in Malaysia, Sudan and benefit from the experiences of traditional banks and the most important findings of this study that although issued Malaysia in the field of Islamic banking locally and internationally, as well as innovation Sudan to Islamic products, but all of them suffer from constraints that can limit the spread of Islamic financial engineering.

(Nassari, 2016) this study focused on the rules of Islamic financing product engineering,

through analytical study and reached to that the financing products engineering is based on certain rules gives advantages and privacy is different from conventional finance and financial engineering offering Islamic financial products covering all sectors of finance and the needs of customers.

Based on all stated in previous studies, we find that most of these studies agreed on the importance of financial engineering in the provision of financing products able to avoid all risks to financial products. In addition, it is aiming to achieve economic efficiency and credibility because it complies with Islamic law, thus it can meet the needs of different customers. So this research is designed to collect all previous studies together to illustrate the importance of financial engineering for Islamic Banks.

### **3. DEFINIATION OF FINANCIAL ENGINEERING**

- (Kotby, 1990), defined Financial Engineering as "the use of risk management strategies to manipulate the shape of risk profiles one firm is facing". Kotby is a frontier in submittiing this topic to Islamic bankers and economists.after the study was finished in a non-Islamic environment (Japan).
- Financial engineering is the use of Financial Instruments to redesigning an existing financial profile into another one having properties that more desirable.
- Financial engineering collects between the accurate study of computative mathematics, economics, and quantitative finance. Financial engineers are the specialized who cope with the quantitative aspect of the derivatives market. Financial engineering is beneficial tool for economic planning and tool for transformation economic.
- Financial engineering is estimating of securities, management of risks, financial management, Insurance, taxation, derivative accounting, commodity trading and other financial decision applications.
- financial engineering includes the design, the expansion, and the creating innovative solutions to problems in finance (Neeraj,2011).

#### **3.1. The reasons for the emergence of financial engineering**

There are several reasons for the emergence of financial engineering:

##### **3.1.1. The different needs of investors and funding applicants**

When the financial institutions shift the funds from the cash surplus units to the cash deficit units will lead to a lot of inefficiencies and lack of effectiveness. Although, the emergence of new and sophisticated needs of the various means of funding, has made it difficult for these financial institutions to satisfy the desires of investors in the capital markets, so it appeared

the need for new ways to meet these needs (Algali, 1996).

### **3.1.2. The emergence of the concept of efficiency and effectiveness**

The concept of efficiency in the capital market means the market's ability to meet the needs of the participants. As for the concept of efficiency is the ability of these markets to meet those needs at a lower cost and high speed, hence these criteria help markets to provide new services to customers.

### **3.1.3. Intensity of competition**

It pays to stimulate and innovation some tools to risk management and overcome the limitations of monetary policy.

### **3.1.4. Fluctuations in interest rates**

Fluctuations in interest rates lead to enable the financial engineering from innovation the idea of the variable or floating interest rates.

**3.1.5. Legislations:** financial innovation came as a reaction to the legislations and legal and tax restrictions.

**3.1.6. Increase in inflation** which has led to a rapid increase in interest rates, prompting engineers to search for tools to reduce inflation and reduction interest rates, and costs.

**3.1.7. The collapse of the global securities markets** caused to prompting investors to search for protection to their assets through the derivatives markets (Radwan, 2005).

### **3.1.8. Islamic financial engineering properties** (Garowf. 2011)

The most important characteristics that must be enjoyed by Islamic financial engineering:

- **Credibility, legitimacy:** That means the Islamic finance industry must offer financial products so that they are suitable to Islamic law.
- **Economic efficiency:** Financial engineering products can increase economic efficiency by expanding investment opportunities and the sharing of risks, reduce transaction costs and reduce the costs of obtaining information.

### **3.2. The objectives of the Islamic Financial Engineering** (Sawilm, 2004)

- Providing high quality Islamic financial products as an alternative to traditional financial products.
- Achieve returns for investors and diversify sources of profitability.
- Contributing to the economic recovery.
- Assisting in achieving alignment between returns, risk, and liquidity for companies and financial institutions.

- Assisting in the development of domestic and international capital markets through the creation of Islamic securities.
- Reducing of investment risk by diversifying investment formulas and reducing the inflationary effects.

### **3.3. Requirements of Islamic financial engineering (Ibrahim, 2000)**

- Full knowledge of conditions of the financial market and what are the most important tools it needs.
- The transactions statement and its transparency by disclosure and know the transactions that can be performed by tools that have been invented.
- Commitment to Islamic law in dealing that means the existence of capitalism's ability was able to deal in accordance with Islamic law.

Now, before talking about the product of Islamic financial engineering and its importance for Islamic banks and the differences between Islamic and conventional financial engineering, we must know Nature of Islamic bank and the most important distinctions between Islamic and conventional banks.

### **3.4. The nature of Islamic bank**

The describing of Islamic banking and finance as a system through which providing the finance is in the form of money in return for either property rights or to share the future business profits or in the form of commodity and services delivered in return for a committing to repay their value at a future date.

- According to the General Secretariat's Organization of the Islamic Conference (OIC). Islamic banks defined as a financial foundation whose statutes, rules and procedures explicitly state its commitment to the principle of Islamic shariah, and the prohibition receipt and payment of interest on any of its operations (Hasan, 1999). Othman and Owen (2000) defined an Islamic bank as a non-interest based financial foundation that Islamic Laws fully ban them and they possess creative, advanced financial engineering to presenting efficient and competitive banking.
- Islamic banking accomplishes the same basic functions as the conventional banks do, except the rules and principles of Islam that based on it Islamic banks (Henry and Wilson, 2004). Islamic banks present banking services without interest that Islamic law or shariah prohibits it. the Islamic banks based on The principle profit and loss sharing. (Al Nasser, 2013) Muslim ethics in financial matters emanate from the sacred texts and their interpretation:

-Koran(HolyBook).

- Sunna (the interpretation of the acts, the words and the life of the Prophet).
- Fiqh (jurisprudence).

### **3.5. The differences between Islamic banks and conventional banks in many characteristics**

- The major characteristic of Islamic banks is Interest prohibited in Islam, the evidence in the Holy Qur'an, while traditional banking system relies on the basis of a fixed payment called interest.
- Other distinguishing features of Islamic banks are profit and loss sharing.
- Islamic banks possess ways of financing that differ to a great extent to those available to conventional banks, so Islamic banks expose to various kinds of risks of credit as compared to conventional banks.

### **3.6. Factors Affecting Islamic Banking and Market Shares**

There are a number of economic, technological, and regulatory factors which reflect the influence the shifts in the market shares of Islamic banks. inflation, volatile interest rates, consumers, deregulation, despecialization, globalization, and capital market are the principal factors at work (Ismail,A,2007) :

#### **3.6.1. Inflation and Volatile Interest Rate**

In the late 1990s through 2000s, interest rates continued to decline. The clients are encouraged by decreasing interest rates to refinance their funds and others to obtain financing. As savings and loans exited the market Islamic banks became the largest real estate and consumption financing provider. Hence, Islamic banks faced problems similar to those found in the early 1990s, short-term deposit and longer-term financing many with fixed rates of return. Due to higher inflation, Islamic banks charge higher mark-up rate to customers.

#### **3.6.2. Consumers**

Well-informed consumers have played a major role in the changing structure of the Islamic banking industry. Greater education in personal wealth management, as well as high returns on financial products in some periods and losses in others, have made fund flows more volatile. In addition, access to the Internet and online banking and investment services gives consumers of financial services the means to move funds for very small costs.

#### **3.6.3. Deregulation**

Deregulation has affected the operation of Islamic banks and other Islamic financial

institutions. Deregulation of banks refers to the decrease or elimination of laws that put limits of geographical on banks, the services and the product they can present and the rate of return they can pay. The current practice of Islamic banks are limited as to the rate of return that they could pay on deposits. In contrast, the elimination of geographic barriers to entry in the 2000s contributed to a large number of banks mergers and the increased consolidation in the industry, and also the entry of new players in the domestic market.

#### **3.6.4. Globalization**

As a result of the integration of global markets as never before that is in which the money moves across international borders costlessly, and immediately. In principle, this change should be in line with an Islamic system. But in practice, globalization is a problem for the Islamic money movement for two reasons:

Firstly, the major base of this new trend that Countries that have adopted Islamic banking system in the Middle East, South, and south-east Asia its economies are small and its the financial systems less developed than in the advanced countries.

Secondly, Islamic financial institutions experience from smallness in size and very few of them operate in more than one country. with entry of some major conventional financial institutions into the field the condition changed. then this also made things more difficult for the older Islamic financial institutions, so Islamic banks obliging to consideration into account to mergers. Globalization has increased the fluctuation of nearly every financial variable, especially the exchange rates. It also decreased the efficiency of administration macroeconomic in the nation. It can only be redressed through international agreements that limit speculation and regulate financial markets. The flow of Islamic funds, the sharing of finance and financing related to commodities such as Murabaha and the reduction of the role of debt required great potential.

#### **3.6.5. Cash and Capital Markets**

Cash and Capital Markets increased competition from the money markets (short-term funds) and capital markets (long-term funds) has played a role in the decline of banks' market share of financial assets. Large and high-quality corporations have found that they can access funds cheaper through direct financing in the capital market (through utilizing commercial paper or other securities) than by acquiring funds from banks.

#### **4. THE DIFFERENCE BETWEEN ISLAMIC AND CONVENTIONAL FINANCIAL ENGINEERING**

Financial engineering Islamist is the process of developing and innovation of financial instruments or funding mechanisms for the management of funding and liquidity, taking into account the Islamic law controls in order to achieve the legitimacy and economic efficiency. Conventional financial engineering is also working on the development of tools and mechanisms of funding but does not take into account the Islamic law and it just aims to achieve the economic efficiency (Gandowz, 2008). As well as the Islamic Financial engineering depending on the principle of participation in the profit and loss either the traditional financial engineering aims to achieve a profit. Moreover, the traditional financial engineering go to specific category or private institution, which displays the public interests to risk and events gap between the real economy and the placebo economy either financial engineering Islamist go to the public interest and private interest, also it helps to achieve the sustainable development and the events of the balance between the real economy and the money economy. With regard to tools, we find that the traditional financial engineering tools are characterized by uncertainty and risk either the Islamic financial tools are characterized by clarity and flexibility. It is through it, we find that the traditional financial engineering designed to achieve personal purposes so that appeared crises as a result of excessive risk-taking, hence the placebo economy grew more than the real economy, while financial engineering Islamist takes the moral dimension into account to achieve sustainable development in the financing of projects and encourage the real investment based on goods and services (Jadi.2015).

#### **5. THE PRODUCTS OF ISLAMIC FINANCIAL ENGINEERING**

The Islamic banks can take advantage of Islamic engineering by the environment in which work them and the extent of interest in research and development. Therefore, the use of financial engineering will make them more competitive and attract from their conventional counterparts, therefore, the presence of Islamic financial tools that will enable them to solve the problems that faced through the development of Islamic tools that will work to protect Islamic banks and investors from risks. Based on the above, the most important of Islamic financial engineering tools are as follows (Alsabahani, 2012):

First: investment instruments as an alternative to bonds that based on interest:

The most important of their characteristics include:

1 - Instrument represents a significant share in the shareholders' equity.

2 - The instrument issued on the basis of a legitimate contract.

3 - These instruments profit& loss sharing by the amount of the share that represented by the instrument.

4 - Afford all investment risk.

Second: securitization:

This operation is the transfer of financial illiquid assets into instruments tradable in the stock market. Securitization Process includes the following:

1 - The partition of assets into rations or identical parts.

2 - These rations are documented by bonds or instruments.

3 - These rations are documented by bonds or instruments where the holder of these instruments can be proved his ration from the value of assets.

4 - Providing a mechanism for dealing with these documents in the stock market.

Third: Islamic investment funds:

The Islamic investment funds play an important role in the capital markets where considered as an effective way to accumulate savings, so these funds have to be established in the form of an investment firm can run by government agencies, where these funds collect subscriptions through the issuance of investment units of equal value, such as stocks ( Megginson,2004).

Fourth: investment accounts based on the speculative:

Investment accounts come in the form the contract of speculation among depositors and Islamic banking where banks invest this money for getting a percentage of the profit, specific in the contract

Fifth: The investment accounts based on reverse Murabaha:

In this case, the bank becomes a buyer and the client becomes the vendor, so the investment amount with the profit will be content to the bank (Hasini, 2007).

Sixth: Islamic investment portfolios:

The total of possessions of the individual or institution from stocks and bonds that exist in different companies, hence the investment portfolio aims to reduce the risk through diversification.

Seventh: Credit Cards:

It is a document issued by the bank, the holder of this document can get the goods and

services. Accordingly, the Islamic bank can issue the service cards because this type do not contain any type of credit and the bank gets the wage for this service that provided to the customer, because it acts as a mediator for the client in paying for purchases. Also, the Islamic Bank cannot be issued credit cards with deferred debt because they contain the interest and this is not in line with Islamic law (Idries, 2001).

## **6. FINANCIAL ENGINEERING AND ISLAMIC RULE**

The conventional financial engineering modified financial instruments for the current financial markets or redesigned new instruments. financial engineering acquires a special feature which can be described clearly as designing and innovating without violating any of the conditions defined by the Islamic law ( Sharia).

The concept of Sharia does not only govern the relationship between human and God but also organize relationships humanity and their financial transactions, according to the basic sources of the Sharia are (a) the Quran, (b) the Sunnah (the practices, writings, pronouncements and examples of the Prophet Muhammad (SAV)), (c) ijma (consensus, particularly the consensus of the community of scholars or the —assembly of the learned ), and (d) qiyas (or analogical deductions and reasoning). And the application of the Sharia to commercial and financial activities.there are the basic prohibitions of Sharia-related to financial life. These prohibitions are the major pillars of Islamic finance and can be explained briefly as:

- Prohibition of specific Economic Sectors:

Financing of industries considered as illegal by Sharia--such as industries involving pork, wines, entertainment, and gambling—all these are forbidden.

- The Maysir's Prohibition:

Islam prohibits all kinds of gambling and games like lottery papers because in financial aspect there is a possibility of total loss for one party.

- The Riba's Prohibition:

Islam prohibits all forms of Riba that as being equivalent to interest paid on a loan.

- Prohibition of Gharar:

the concept of Gharar Defined as to expose a person or one's property for dangerous, or the sale of a possible item whose existence or characteristics are not certain (Schoon, 2008). the gharar refers to acts and conditions in which, the full implications of which are not clearly

known to the parties. (Kamali, 2005), include all kind of cheating, and dishonesty also covered by the prohibition of gharar.

Financial engineering in Islamic finance requires a close cooperation with scientists Islamic jurisprudence and the products of Islamic financial that have principally been limited to classical modes that developed centuries ago and they were adapted to modern conditions .While financial markets are becoming more sophisticated, and competitive, financial engineering is becoming more an innovation, and imperative in Islamic finance.

If the needs are real, then the innovative tools could be adapted with traditional menu, or new alternatives could be invented Sharia compatible (Kamali 2005). This procedure must take into account of rules shown above and every contract, or financial tool must be analyzed for acceptance of jurists it is Sharia compliant. Islamic scholars agree that hedging in order to reduce risk or protect investment allowed in Islam, however, the conventional derivative instruments of forwards, futures, swaps and options in the present form are not considered as Sharia- complaint.

## **7. THE ROLE OF FINANCIAL ENGINEERING IN THE DEVELOPMENT OF ISLAMIC FINANCIAL INSTITUTIONS**

Financial engineering is considered a financing mechanism to provide investment products that meet the diverse needs of customers in order to achieve competitive advantage and providing the new solution to the problems arising from the financial crisis. Also, Financial Engineering contributes to the activation of the stock market through (Jadi, 2015):

- **Manage the risks of investing in the stock market:** By issuing Islamic instruments because these instruments are working to move the financial resources and direct them to productive investments in order to be able to manage any kind of risks that faced by hedge style.
- **Increase the volume of investment:** The instruments offer us opportunities to achieve revenues and increase profits through increased investment opportunities and diversify the investment portfolios of financial institutions, which lead to increase the number of dealers with the providers of these services.
- **To increase the liquidity of securities:** Instruments are considered an effective way to improve liquidity through its ability to convert illiquid assets into financial negotiable instruments which lead to increase the liquidity of the investment portfolio.

- **The speed of implementation of investment strategies:** Due to the flexibility of instruments and good liquidity that make them more attractive in the implementation of investment strategies.
- **Supporting efficient of the stock market:**

The efficiency of the market is a market that there is no time interval between the arrival of information to the market and its analysis and <sup>20</sup> between accesses to specific results related to the price of the securities.

## **8. THE OBSTACLES OF ISLAMIC FINANCIAL ENGINEERING**

Despite the growing global trend towards issuing instruments, but the Islamic finance industry faces a large challenge and is working on finding mechanisms to manage financial risk, especially in light of globalization and the existence of an international environment where increasing the risks, which made financial engineering as input for the development of risks for the Islamic tools .Hence, some of the Islamic countries have emerged in this area, where was characterized by the existence of a dual financial system that combines traditional and it has an integrated structure is characterized by balance and the financial industry characterized by evolving the local and international spread. The financial system was an integrated system, and Islamic financial industries were characterized by diversity and regeneration. Despite all the development that has seen it in the Islamic financial engineering but it is still without the required level because a set of obstacles that limit the evolution of Islamic financial engineering and, spread, these obstacles as follows (Lemaach&Sara,2014) :

- The weakness of workforce in the field of financial engineering due to lack of administrative efficiency in Islamic institutions.
- The weakness of research and development processes.
- The absence of property rights to the idea of the new financial product or developer.
- Poor coordination between the legitimate authorities and legitimate reference.
- The lack of credibility in the financial engineering products leads to the lack of confidence in these products.
- Marketing: lack of awareness and advertising for Islamic finance that will lead to the lack of knowledge of the people for the Islamic products.
- The challenge of accounting standards: all banks subject to international accounting standards for this, the Islamic banks face a big challenge because these standards do not correspond with Islamic law.
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## 9. CONCLUSION

Financial engineering is considered an effective way to develop the work of Islamic banks by creating financial products that comply with Islamic law. And that Islamic financial instruments and found an alternative to the traditional tools considered effective tools because they are compatible with Islamic law and able to achieve the economic efficiency requirement. If managed financial engineering in the Islamic banks from overcoming the obstacles they face and provide advanced tools are able to meet customer needs permission, so financial engineering will become one of the best ways to develop the work the Islamic financial institutions, hence be able to compete with conventional banks and achieve economic efficiency. In addition, Islamic banks could utilize the financial innovations in order to: manage liquidity, share the risk and generate the revenue.

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