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Article

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ISRA International Journal of Islamic Finance

Provided in Cooperation with:

International Shari'ah Research Academy for Islamic Finance (ISRA), Kuala Lumpur

Suggested Citation: Jouti, Ahmed Tahiri (2021) : The Fourth Market theory and interest rate benchmarking in the Islamic finance industry, ISRA International Journal of Islamic Finance, ISSN 2289-4365, Emerald, Bingley, Vol. 13, Iss. 1, pp. 46-65,
<https://doi.org/10.1108/IJIF-05-2020-0094>

This Version is available at:

<https://hdl.handle.net/10419/301999>

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The Fourth Market theory and interest rate benchmarking in the Islamic finance industry

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Received 3 May 2020
Revised 26 September 2020
11 November 2020
1 December 2020
Accepted 2 December 2020

Abstract

Purpose – This paper aims to understand the issue of interest rate benchmarking in Islamic financial institutions (IFIs) from a macro-economic perspective and assessing the relevance of creating a Sharī'ah-compliant profit rate benchmark to solve this issue. This paper also aims at suggesting an Islamic alternative that will handle both the negative economic impact on IFIs as well as on their financial performance.

Design/methodology/approach – The paper is based on literature review of conventional finance and Islamic finance theories to construct a theoretical model to assess the impact of interest rate benchmarking on the ability of IFIs to achieve the objectives of the Islamic economy.

Findings – The macro-economic perspective concludes that conceiving a profit rate benchmark for the Islamic finance industry is not relevant to raising the Sharī'ah credibility of the industry. Indeed, several adjustments need to be introduced in terms of the business model.

Research limitations/implications – The recommendations of this paper require the involvement of financial authorities and governments for their implementation. Indeed, the adjustments require a macro-economic review.

Practical implications – The paper considers a profit rate benchmark irrelevant and inefficient. Instead, it suggests the necessary adjustments in terms of business model and economic approach for IFIs to achieve their objectives.

Social implications – The paper considers zakat implementation and the adjustment of IFIs as the real path to implement a fair wealth distribution in the society.

Originality/value – The creation of a profit rate benchmark has always been the only solution for the pricing issue in IFIs. This paper challenges this idea and tries to give a deeper understanding of the situation.

Keywords Interest rate benchmark, Price control in Islam, Profit rate benchmark, Zakat

Paper type Research paper

Introduction

The detractors of the Islamic finance industry consider its banking model and products as a tricky way to attract customers with a religious concern while applying the same conventional financial mechanisms. Several researches conducted in dual banking systems confirmed this perception in countries such as Indonesia (Bougatf and Korbi, 2018), Malaysia (Chong and Liu, 2009; Lee and Isa, 2017) and others. Indeed, Islamic banks take



into account interest rates when determining profit rates (for both financing products and term deposit accounts).

In practice, conventional interest rates such as London Interbank Offered Rate (LIBOR), euro Interbank Offered Rate (EURIBOR), Singapore Interbank Offered Rate (SIBOR) and Kuala Lumpur Interbank Offered Rate (KLIBOR) serve as the main benchmarks for the pricing of Islamic financial products since they are allowed by various Islamic scholars on the basis of non-availability of substitutes (Mohd Yusof *et al.*, 2016). The Islamic International Fiqh Academy (IIFA), on its part, in its Eighth Conference held in Jeddah, 18–19 Shawwal/10–11 April 1993, issued Resolution no. 7 calling for the creation of a new benchmark that is acceptable from a Shari'ah (Islamic law) perspective as an alternative to interest-based rates for determining profit margins (International Islamic Fiqh Academy, 1993).

In this context, many research papers explored new paths to identify adequate alternatives to interest rate benchmarking and suggested models and indexes that can serve as Islamic pricing benchmarks for Islamic financial institutions (IFIs). Nevertheless, none of these suggestions has been implemented in practice. This leads us to question the relevance of creating a Shari'ah-compliant profit rate index and the willingness of IFIs to adopt it in their pricing policies.

This paper aims at challenging the idea that creating a new Shari'ah-compliant profit rate index is sufficient to replace current interest rate indices. The paper defends the idea that having a Shari'ah-compliant pricing policy in Islamic banks requires major changes in the economic rules and in the business model as well as the acceptance of these changes by both shareholders and customers of Islamic banks.

Therefore, the literature review presents the main suggestions to replace interest rate benchmarking and discusses their relevance from a macro-economic perspective based on both conventional and Islamic finance backgrounds. In the second part, the paper constructs a macro-economic model that defines the reasons behind the irrelevance of interest rate benchmarking and suggests alternative approaches.

Literature review

Alternatives to interest rate benchmarking

Researchers have adopted two different approaches to tackle the pricing index issue in Islamic finance. The first is to suggest a unique profit rate benchmark that would apply to all products regardless of the underlying contracts, such as:

- *The rate of dividend of Islamic bank deposits and investment accounts model* proposed by Umar and Sahatah (2000), as quoted in Shehatah (2002), where the interest rate is replaced by a profit rate. This suggestion is irrelevant since the rate of return paid to investment account holders is generally based on the interest rate of term deposit holders in conventional banks, as is the case in Malaysia (Ito, 2013).
- *The inter-Islamic-banks market index* proposed by Usmani (2007) would create an Islamic interbank market by creating a common pool that invests in asset-backed instruments and tangible assets. The shares in this pool would be freely negotiable and the value of these shares may serve as an index for Islamic pricing. This suggestion is interesting. Nevertheless, it requires the willingness of the financial authorities to set up an Islamic interbank market. It also requires a significant number of players. Indeed, for financial authorities, interest rate benchmarking may be perceived as a monetary policy transmission mechanism to IFIs. Therefore, any Islamic pricing alternative would alter this mechanism.

The second path consists of suggesting a methodology to calculate a profit rate benchmark per sector, project or product based on real economy factors. A survey conducted in different countries (Bangladesh, Indonesia, Iran, Oman and Pakistan) concluded that none of the real economic activities or trends can be represented by any one economic variable. Therefore, the Islamic financial world should adopt different benchmarks for different economic sectors (Ghauri, 2015). Among the suggestions adopting this path, we can find the use of:

- *Rental index as an alternative to interest rate* for Islamic home financing (Mohd Yusof *et al.*, 2016). Nevertheless, if this proposal seems relevant for home financing, it is important to identify equivalent indexes for other economic sectors.
- *Islamic pricing benchmark* based on the Asset Pricing Theory (APT) (Omar *et al.*, 2010). The model serves as a viable benchmark rate for the whole market. It recognizes four macroeconomic variables as having good return predictability for all sectors, notably industry production growth, money supply changes, ringgit exchange rate and the Kuala Lumpur Composite Index returns.

In practice, none of these suggestions have been implemented. This leads us to question the relevance and adequacy of a Sharī'ah-compliant pricing index for the Islamic finance industry to fit market practices and constraints. Certainly, adjusting the Islamic pricing method requires economic reforms. Therefore, it is important to compare the conventional and Islamic visions of money and its role in the economy.

The role of money in Islam

Islamic and conventional scholars agree on the functions undertaken by money in a defined economy. Islamic scholars consider the medium of exchange function as the main function of money (Al-Ghazālī, 1980; Ibn Rushd, the grandson, 1995). The other functions, unit of accounts and store of value, are just derived from its principal function.

From the conventional perspective, money plays the same functions but is considered as a commodity that has a price, notably the rate of interest (Say, 1803; Walras, 1886). This price is defined based on equilibrium between the demand for investment and savings which represent the supply of capital (Marshall, 1920).

The preference for liquidity theory, as advocated by Keynes (1936), defines the interest rate as the price that equilibrates the desire to hold wealth in the form of cash with the available quantity of cash. Actually, Keynes declared that the concept of hoarding may be regarded as a first approximation to the concept of liquidity preference and that interest is in fact the reward of “not hoarding”.

In Islam, money is not a commodity that has a price, and hoarding is considered a financial crime (Asad *et al.*, 2014). Therefore, instead of rewarding the “not hoarding” behavior, Islamic law prevents such practices through the application of zakat (alms) (Al-Suwailem, 2013).

The impact of money on market prices

The Equation of Exchange by Fisher (1911) gives an explanation about the impact of money on prices. The equation is composed of two sides: the first side comprises the quantity of money in circulation (M) and the velocity of circulation of money (V); and the second side includes the quantities of goods exchanged (Q) and the prices of these goods (P).

$$(M) \times (V) = (P) \times (Q)$$

According to Fisher (1911), a doubling in V will double P , provided M and Q remain as before. Similarly, a doubling in M will double P , provided V and Q remain as before. Therefore, increasing V or M will have an impact on market prices (P).

Moreover, any change in the interest rates applied will increase or decrease the quantity of money in circulation (M) and will lead to a change in terms of market prices (P) (Keynes, 1936). These changes will have a significant impact on investment and employment.

From the Islamic perspective, market prices go up or down if and only if the quantities of goods exchanged increase or decrease. Increasing or decreasing the quantity of money is not deemed as the right option. Moreover, Islam provides zakat as a solution to increase the velocity of circulation of money in a proper manner (i.e. fighting against hoarding), to safeguard the purchasing power and stabilize market prices (Al-Suwailem, 2013).

The experience of Worgl, an Austrian municipality, seems to be relevant to understand the link between zakat and economic cycles (Boyle, 2015). The principles underlying the Worgl experience are similar to those of zakat.

Unterguggeberger, Worgl's burgomaster, set up a plan to stimulate the economy of the municipality. The town authorities issued local notes that were called tickets for services rendered. These notes decreased in value by one cent every month. Therefore, the recipients had two options. The first option was to buy a stamp from the municipality to extend the life of the local notes; otherwise, as a second option, they needed to spend their notes immediately in shops that used them to pay taxes to the municipality. Then, the municipality used them again to pay the bills. During the first month, the coins issued by the municipality had made the complete cycle no less than twenty times. Moreover, the stamp taxes collected went to the poor relief fund and unemployment decreased. The stamp taxes were designed to fight against hoarding and were paid to the poor, adopting the same principles underlying zakat.

Literature review gap

The literature related to interest rate benchmarking in the Islamic finance industry focused more on its application on IFIs and product levels. The macro-economic aspects appear to be neglected such as the impact of interest rates on prices and on real economy markets.

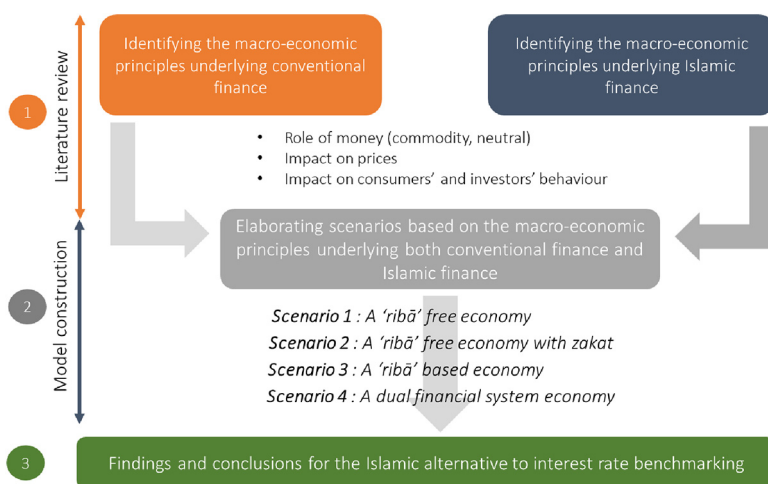
It is worth noting that the conclusions and findings related to theories of conventional economics are still valid in the context of hybrid financial systems. The aim of this paper is to address the issue of interest rate benchmarking based on the macro-economic principles underlying conventional finance and Islamic finance.

Research methodology

The objectives of this paper are to identify the impact of adopting interest rate benchmarking on achieving the macro-economic objectives of the Islamic finance industry and to issue recommendations for adjusting the business model. The research methodology adopted is as depicted in Figure 1.

The first step presents a literature review to identify the principles underlying conventional finance and Islamic finance in terms of the role of money in the economy and the impact of monetary policies on prices and on the behavior of people. The second step consists of conceiving a research model with four scenarios to assess the dual financial systems and their impacts on the Islamic finance industry. The construction of the research model would contribute to the third step; that is, issuing appropriate recommendations that take into account the macro-economic context of IFIs.

Figure 1.
Research
methodology of the
paper



Source: Author's own

Model construction: Islamic financial institutions in dual financial systems

The research model consists of a virtual economy that is composed of three markets of essential goods and services, four profiles of economic actors and four scenarios.

- The three markets composing the economy are:
 - The first market, for raw materials and agricultural products;
 - The second market, for industrial goods; and
 - The third market, for services.
- Moreover, this economy gathers four profiles of economic actors:
 - "Profile 1" comprises people that invest their capital by themselves in at least one of the three markets. Generally, "Profile 1" actors would increase or decrease their risk exposures depending on market conditions.
 - "Profile 2" includes people that invest their capital by collaborating with "Profile 1" and have the necessary expertise in terms of portfolio diversification but are ready to share the profits and bear the losses. "Profile 2" actors would try to diversify their investments to mitigate the risks; but during unfavorable market conditions, they will decrease their investments.
 - "Profile 3" brings together people that would need to collaborate with "Profile 1" to invest in the markets and do not have the necessary expertise to diversify their portfolios. "Profile 3" actors would prefer hoarding rather than investing and sharing profits and losses if they are not assisted.
 - "Profile 4" gathers people other than investors. These are pure workers without any wealth to invest. Therefore, reducing investments would have a negative impact on employment and purchasing power of this category of people.
- The research model consists of four scenarios. Each scenario aims at identifying the macro-economic impacts based on the outputs of economic theories discussed in the literature review part:

- Scenario 1 is the basic scenario where conventional and Islamic theories of money and economics are not applied.
- Scenario 2 is the scenario where Islamic principles and perception of money are applied.
- Scenario 3 is the scenario where conventional principles and perception of money are applied.
- Scenario 4 is the scenario where both Islamic and conventional principles are applied while conventional financial institutions are dominating the economy.

Scenario 1: a ribā-free economy

To better understand the economic mechanisms in an economy operating without *ribā* (interest), let us start with defining the necessary assumptions underlying this scenario:

- *Ribā* is not practiced (conventional banking and all forms of *ribā*-based transactions are forbidden).
- The only principles applied in these three markets are '*al-ghunm bi al-ghurm*' and '*al-kharāj bi al-damān*' (the one who deserves a profit shall bear the loss, if there is any; and to deserve a profit, a person shall bear the loss, if there is any). Accordingly, to make a profit in this economy, it is compulsory to get involved in a commercial activity in one of these markets while bearing the risk of loss.
- Products are characterized by atomicity, and there is a lack of friction when it comes to cost and information.
- The existence of an efficient governance system in these markets reduces the agency costs (Jensen and Meckling, 1976).
- There are no investment or financial institutions in this economy.

The following describes the macro-economic impact on markets and financial behavior under this scenario:

- *A preference for hoarding*: Generally, in such economies, hoarding practices spread and people tend to acquire and hold money because of the fear that prices will fall and losses will be incurred (Asad *et al.*, 2014). There would be no disincentive to hoarding because doing so would not entail any loss of interest and money would not lose value. These practices are justified by the loss aversion phenomenon as discussed in the prospect theory (Kahneman and Tversky, 1979). When market conditions are not stable, people would prefer hoarding instead of consuming or investing in the absence of fixed income instruments that would reward their preference for liquidity (Keynes, 1936).
- *Profiles of economic agents, investment and consumption levels*: In this configuration, sharing the profits and losses would discourage people (from all profiles) from investing in one of these three markets, especially during cycles of significant instability of prices. Moreover, reducing investments would have a negative impact on employment and consumption levels that would create a vicious cycle decreasing the size of markets.
- *Impact on market prices*: To increase sales volume, businesses would offer sales on credit as well as spot sales to their customers. From a Sharī'ah perspective, prices in sales on credit and in spot sales can be different. Moreover, the level of prices in both options would be defined based on the offer and demand in these markets. Figure 2 summarizes the conclusions of Scenario 1.

Scenario 2: a ribā-free economy with zakat

In Scenario 1, hoarding represents the reaction of people in a *ribā*-free economy. Islam forbids *ribā* and considers hoarding one of the worst economic crimes since it diverts resources from the economy and affects the circulation of money (Asad *et al.*, 2014). It suggests zakat as an alternative system and institution to fight against hoarding practices.

Assumptions underlying Scenario 2:

- *Ribā* is not practiced (conventional banking and all forms of *ribā*-based transactions are forbidden).
- The only principles applied in these three markets are ‘*al-ghunm bi al-ghurm*’ and ‘*al-kharāj bi al-ḍamān*’ (the one who deserves a profit shall bear the loss, if there is any; and to deserve a profit, a person shall bear the loss, if there is any). Accordingly, to make a profit in this economy, it is compulsory to get involved in a commercial activity in one of these markets while bearing the risk of loss.
- Products are characterized by atomicity, and there is a lack of friction when it comes to cost and information.
- The existence of an efficient governance system in these markets reduces the agency costs (Jensen and Meckling, 1976).
- There are no investment or financial institutions in this economy.
- Zakat is deducted from all the eligible people and redistributed to needy people in line with Sharī‘ah principles.

Macro-economic impact on markets and financial behavior:

- (1) *Eradicating hoarding effects*: In this economy, zakat contributes effectively to gradually reducing hoarding practices. Indeed, money loses its value automatically if it does not circulate since people would pay zakat on it on a yearly basis. In this context, the three previous profiles (Profiles 1, 2 and 3) can adopt one of the following economic behaviors:

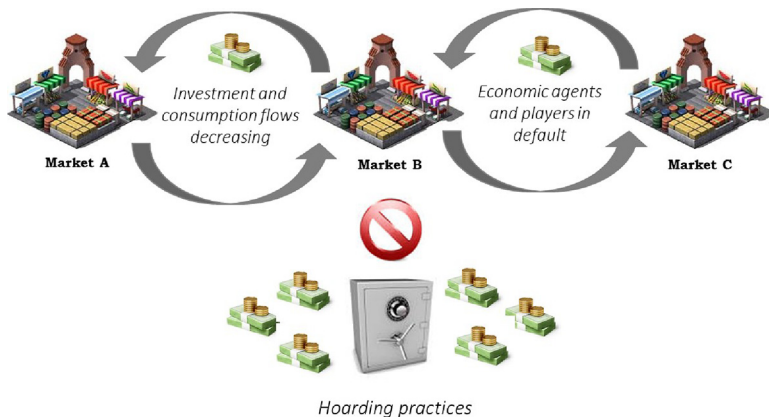


Figure 2.
Scenario 1 – a *ribā*-free economy

Source: Author's own

- Investing their funds and getting a profit that will be used to pay zakat, safeguard the capital and have an additional return;
- Spending their funds and acquiring fixed assets on which zakat is not levied.
- Maintaining their funds and accepting to pay zakat.

These three options would enhance investment and consumption in the economy while using the collected zakat to safeguard the purchasing power of Profile 4.

- (2) *Profiles of economic agents, investment and consumption levels:* In this scenario, Profile 1 and Profile 2 would prefer to invest rather than keeping their cash assets aside. Cash assets would lose automatically 2.5% of their value on a yearly basis while their investment can provide them with a return that will safeguard their wealth, pay zakat and generate a return. For Profile 3, not investing would be justified by the absence of trustworthy financial and/or investment institutions that can provide the necessary expertise to people in this category. Nevertheless, it is worth noting that for this category of people, investing is the best option.

The collected amounts of zakat would serve to support the purchasing power of people from Profile 4 in case of economic instability and thus would contribute not only in reducing the negative impacts on the economic cycle but also in reviving it as per the Worgl experience.

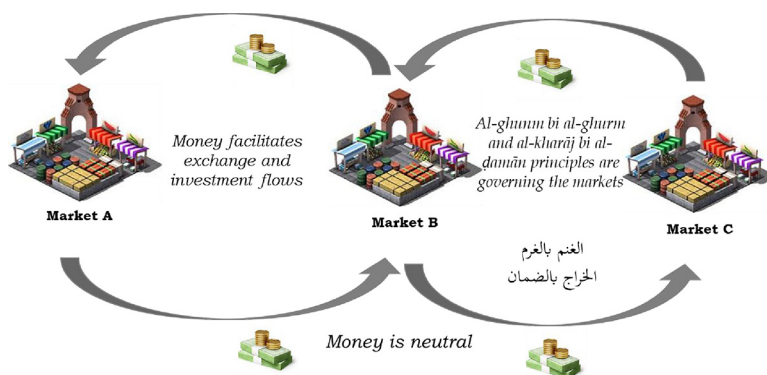
- (3) *Impact on market prices:* As per the previous scenario, there are two prices in the markets: spot prices and term prices. To understand the impact of introducing zakat on market prices, Fisher's (1911) Equation of Exchange seems to be the most appropriate tool. In the very short term, introducing zakat would increase the velocity of circulation of money, but later the production capacity of the economy would improve and prices would come back to their initial level. Therefore, introducing zakat in a correct and efficient way would eradicate hoarding, enhance investment and consumption cycles without deeply affecting prices in the market. The only challenge in this scenario is that people belonging to Profile 3 would see their wealth decreasing throughout the years if they cannot find appropriate investment opportunities. Figure 3 summarizes the conclusions of Scenario 2.

Scenario 3: a ribā-based economy

As a response to hoarding practices in Scenario 1, *ribā*-based instruments and mechanisms can be seen as a solution to stimulate the economy and optimize money circulation.

Assumptions underlying the scenario:

- *Ribā* is practiced (conventional banking and all forms of *ribā*-based transactions are allowed).
- Products are characterized by atomicity, and there is a lack of friction when it comes to cost and information.
- There are investment and financial institutions with a business model based on *ribā* practices.
- No zakat is collected in this economy.



Source: Author's own

Figure 3.

Scenario 2 – a *ribā*-free economy with zakat

Macro-economic impacts on markets and financial behavior:

- (1) *Creating a fourth market in the economy (money market)*: Allowing *ribā*-based transactions in the economy would transform “money” to a “commodity” that is traded with a price (interest rate). Granting a loan of US\$100 with an interest rate of 5% would mean selling US\$100 at US\$105.

Therefore, such practices would lead to creating a fourth market in the economy but with different rules than those of the three existing markets. Actually, in this market, all the involved parties would get fixed income (fixed interest rates) or a variable income (variable interest rates) but would never bear a loss. Actually, the *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān* principles are broken in this market, and income has no connection with real economy activities.

- (2) *Profiles of economic agents, investment and consumption levels*: In this scenario, introducing *ribā* practices would dramatically change the rules and principles underlying this economy. First, Profiles 1, 2 and 3 would always have a second choice, direct investing (or through equity) in the three markets, or investing in the fourth market. The latter is less risky with a predefined guaranteed return while investing directly in the three markets would be riskier and the return would not be guaranteed. Therefore, the fourth market would attract more investors than the three markets (through equity) due to the loss aversion phenomenon (Kahneman and Tversky, 1979).

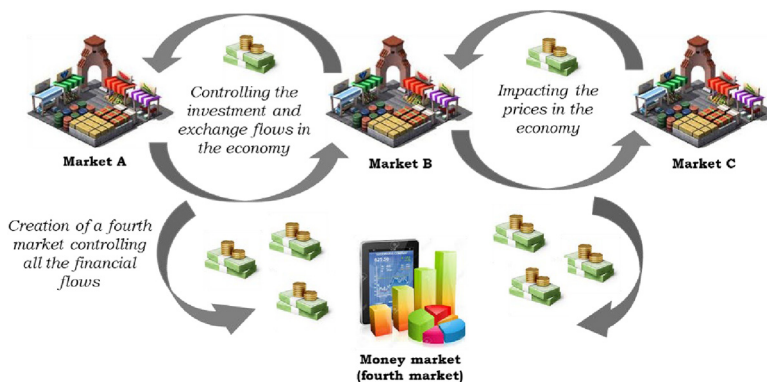
Secondly, people belonging to Profile 1 would have the choice to raise funds through instruments in line with *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān* principles (option 1) or *ribā*-based instruments (option 2). In practice, unless they have deep religious concerns, they will prefer the second option because financing with debt would enhance the value of the firm, as propounded by Modigliani and Miller (1963), and would not affect their control over their activity and business.

People belonging to Profile 1 would prefer raising funds in the fourth market in the absence of any serious and credible alternative.

(3) *Impact on market prices*: Integrating the fourth market in the economy would have the following impacts:

- Most businesses would prefer to sell commodities on spot, and the fourth market institutions would grant the necessary loans to customers if they could not afford spot sales. This would lead to reducing and replacing term sales.
- In the previous scenarios, the term and spot prices were determined separately based on the demand and supply in each market and on each commodity. In this scenario, the fourth market becomes the term price market for all commodities [1] and prices are defined based on the demand and supply of ‘money’ (the new commodity) instead of the demand and supply of each of the commodities. Moreover, this fourth market would transfer the demand and supply related to the term sales compartment to the spot sales compartment, which can lead to more pressure on spot prices.
- In this scenario, the fourth market controls the investment and exchange flows in the economy and replaces the term sales compartment in each of the three existing markets. Indeed, the fourth market would grow rapidly and would reach a very important size that would enable it to control the whole economy. For instance, when interest rates go up, the number of people able to obtain financing would decrease and so would the market prices (Fisher, 1896; Yohe and Karnosky, 1969).

In most Islamic finance literature, the prohibition of *ribā* is linked to exploitation and injustice. Some authors (Farooq, 2012) argued that the relationship between *ribā* and exploitation/injustice is evident, but this is not so when it comes to commercial bank interest. Nevertheless, in this scenario, it is clear that it is not only about the relationship between individuals; rather, it is also a macro-economic issue where institutions creating a new market can control the whole economy and have an impact on prices. Figure 4 summarizes the conclusions of Scenario 3.



Source: Author's own

Figure 4.
Scenario 3 – a *ribā*
based economy

Scenario 4: a dual financial system economy

In different countries of the Muslim world, Islamic finance was introduced to satisfy the needs of segments with religious concerns to achieve financial inclusion while evolving side by side with conventional finance.

Assumptions underlying the scenario:

- The three markets are governed by ‘*al-ghunm bi al-ghurm*’ and ‘*al-kharāj bi al-damān*’ principles.
- *Ribā* is practiced (conventional banking and all forms of *ribā*-based transactions are allowed).
- Products are characterized by atomicity, and there is a lack of friction when it comes to cost and information.
- There are two types of investment and financial institutions – *ribā*-based business model and Shari‘ah-compliant business model – competing together in the same market.
- Zakat is not compulsory in this economy.

Macro-economic impact on markets and financial behavior:

- (1) *Market competition and influence on Islamic financial institutions*: This scenario consists of introducing IFIs in a *ribā*-based economy where they will be competing with well-established conventional financial institutions in a hostile context. This hostility comes mainly from the inappropriate legal and regulatory frameworks but also from the economic rules, practices and customers’ behavior towards financial products and services.

As a result, IFIs adopt a pragmatic approach that seeks to adjust their operational model to comply with current practices to ensure the viability of their businesses. Therefore, the risk profile of Islamic banks is almost identical to conventional banks in terms of product features and financial mechanisms to calculate the profit.

- (2) *Profiles of economic agents, investment and consumption levels*: In this scenario, the fourth market still exists and is still more attractive to Profiles 1, 2 and 3 than direct investment in the three markets where *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān* principles are strictly applied. Therefore, for IFIs to attract more customers including those with religious concerns, they have to offer investment instruments that have a similar risk profile to those of the fourth market institutions.

Indeed, in the absence of guaranteed returns or deposit insurance, IFIs engage in natural income smoothing such as Profit Equalization Reserves (PER) and Investment Risk Reserves (IRR) (FAS 11, AAOIFI) and profit waiver when the profit is inferior to the targeted return rate (Taktak, 2011). In some contexts, IFIs offer commodity *murābahah* (*tawarruq*) or *wakālah*-based investment accounts offering fixed and guaranteed income to depositors.

Moreover, for IFIs to implement income smoothing, they are oriented towards fixed income financing instruments such as *murābahah* and *ijarah* applying the same pricing mechanisms and interest rate benchmarks.

Therefore, the macro-economic impacts of the fourth market on the economy are still valid and the introduction of IFIs has not changed anything.

- (3) *Impact on market prices*: Introducing IFIs is supposed to end or reduce and replace the fourth market as well as its practices and impacts. Nevertheless, adopting practices and product features similar to conventional products would keep the same impacts on market prices:

- Businesses would sell commodities on spot prices and the fourth market institutions as well as IFIs would grant the necessary financing to customers.
- Introducing Islamic term sales does not affect the fourth market since they are benchmarking both the risk profile of conventional products and their pricing mechanisms.
- In this context, the term prices are still defined in the fourth market and applied to term sales in Islamic financial transactions.

Overall, instead of competing with the fourth market, IFIs become a part of it while keeping the same impacts on investment, consumption and market prices. Therefore, it seems obvious that implementing a Shari'ah-compliant profit rate benchmark would not lead automatically to establishing a macro-economic context that is in line with the requirements of *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān* principles. Indeed, a Shari'ah-compliant profit rate would be just an instrument to control the other three markets as per interest rates' benchmarks. Table 1 summarizes the impacts of each scenario on investment, consumption and prices.

The main challenge for the Islamic finance industry is to set up a model that comes closest to Scenario 2 in terms of economic impact. Instead of controlling the investment and consumption flows as well as the term prices, IFIs need to be in fact a neutral vehicle for investment.

The way forward for an Islamic alternative to the fourth market

When analyzing the fourth scenario, "an economy based on a dual financial system", it would seem that the Islamic alternative could not be serious enough to compete with the fourth market institutions. This conclusion is true if we introduce IFIs without taking into account the necessary economic mechanisms.

Obviously, Scenario 2 is the most suitable economic context for IFIs that can help professional and non-professional investors to find adequate investment opportunities in the three markets while applying the '*al-ghunm bi al-ghurm*' and '*al-kharāj bi al-damān*' principles. To do so, it is required to implement zakat, to apply '*al-ghunm bi al-ghurm*' and '*al-kharāj bi al-damān*' principles, and to review the business model of IFIs.

Implementing zakat

Zakat constitutes the fundamental component of the Islamic alternative to the fourth market. Before launching IFIs, the zakat institution as a pillar of this ecosystem shall be prioritized because it ensures the stability of the system as a whole (Al-Suwailem, 2013). In our context, implementing zakat would enable IFIs to compete with the fourth market institutions.

Breaking the hegemony of the fourth market on financial flows in the economy. In our context, implementing zakat would give an advantage to Islamic investment instruments compared to investment instruments in the fourth market. When a person X who is eligible to pay zakat has a conventional term deposit, he has to get rid of the interest received and pay zakat (2.5%) on the invested capital. Therefore, person X will always have a negative return (-2.5%) whatever the interest rate offered.

From another perspective, when a person Y who is eligible to pay zakat has a Shari'ah-compliant investment instrument, he will receive a return that can be used to pay zakat (2.5% of the invested capital – more or less depending on the underlying investment portfolio) and if there is any surplus, it will be for the ownership of person Y. Therefore, a Shari'ah-compliant investment instrument is more interesting from a financial perspective than conventional financial investment instruments.

Scenarios	Economic phenomena	Impact on investment	Impact on consumption	Impact on prices
<i>Scenario 1 A ribā-free economy</i>	Preference for hoarding	Investment reduced during instability	Consumption levels decreased	<ul style="list-style-type: none"> • Existence of spot prices and term prices; the prices are defined based on the offer and demand in the markets • Prices decrease during instability
<i>Scenario 2 A ribā-free economy with zakat</i>	Eradicates hoarding effects	Encourages investment	Encourages consumption	<ul style="list-style-type: none"> • Existence of spot prices and term prices; the prices are defined based on the offer and demand in the markets • Prices increase in the short term but are stabilized in the mid-term
<i>Scenario 3 A ribā based economy</i>	Creates a fourth market	Fourth market controls investment flows	Fourth market controls consumption flows	<ul style="list-style-type: none"> • Existence of spot prices only • Fourth market controls term prices and impacts spot prices
<i>Scenario 4 A dual financial system economy</i>	Integrating IFIs in the fourth market	Fourth market controls investment flows	Fourth market controls consumption flows	<ul style="list-style-type: none"> • Existence of spot prices only • Fourth market controls term prices and impacts spot prices

Table 1.
Summary of the economic impacts on investment, consumption and prices in each of the scenarios

Therefore, implementing zakat would direct deposits to Islamic investment instruments and would break the hegemony of financial institutions in the fourth market on investment and consumption flows in the economy.

Enhancing the return of investment instruments in Islamic financial institutions. IFIs grant financing to Profile 1 (direct investors) but also to other profiles (for consumption purposes if needed). In case of default, zakat can be used to fulfill the financial commitments towards these institutions as per the Baitul Maal Wa Tamwil experience in Indonesia where

zakat is used as a buffer in the case of poor borrowers' default (Wulandari and Kassim, 2016).

In this case, the Return on Assets (RoA) related to the investment portfolio of IFIs would be steady without the need to engage in smoothing mechanisms that can be criticized from a Sharī'ah perspective. Moreover, employing zakat mechanisms would enhance the attractiveness of investment instruments in IFIs.

Creating a new generation of direct investors (profile 1). Employing zakat to assist indebted people during hard times would encourage IFIs to provide appropriate financing and accompaniment to talented people with brilliant entrepreneurship ideas without requiring collateral. Therefore, IFIs, with the assistance of zakat, would create a new generation of direct investors (Profile 1) and thus would achieve the Qur'ānic principle of a fair distribution of wealth among people (Qur'ān, 59:7). Implementing zakat would:

- encourage new investors and diversify the investment opportunities in the economy;
- reinforce the investment instruments of IFIs by providing them with a financial advantage; and
- stabilize the investment instruments' rate of return by fulfilling the financial commitments of people towards IFIs.

The advantage provided by zakat to IFIs would enable them to compete fiercely with the fourth market institutions. Nevertheless, IFIs need to review their business model and adjust it accordingly.

Rigorously applying al-ghunm bi al-ghurm and al-kharāj bi al-damān principles

To duplicate the conventional investment instruments' features, IFIs adopt mechanisms that are in line with *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān* principles in form but not in substance. These mechanisms aim at ensuring a targeted rate of return (PER and IRR, profit waiver, etc.); and if there is a favorable performance trend of the investment portfolio, the surplus is not shared with the customer; it goes only to the bank.

Adjusting the investment instruments features. Most of the investment instruments in IFIs are based on *tawarruq*, *muḍārabah* and *wakālah bi al-istithmār*. *Tawarruq* is the best instrument for exactly duplicating the fourth market experience while *muḍārabah* and *wakālah bi al-istithmār* can be deviated easily from their main structures through a number of practices.

- In *muḍārabah*-based instruments, IFIs use two mechanisms to guarantee the targeted rates of return to their customers. First, in the case of a return rate lower than the targeted rate of return, IFIs waive part of their profits to reach the target. Secondly, if the rate of return is higher than the targeted rate of return, IFIs can change the profit-sharing ratio at their discretion without the express approval of customers to keep the surplus for the bank. Therefore, the customers do not bear any shortfall and do not benefit from any positive evolution of the financial performance.
- In instruments based on *wakālah bi al-istithmār*, the IFIs, which act as the *wakīl* (agent), receive a fixed fee while the *muwwakīl* (customers) bear losses and get profits generated from the investment portfolio. IFIs use two mechanisms to adapt the financial features of this instrument to the fourth market mechanisms. First, they reduce the *wakālah* fixed fees to increase the probability of reaching the targeted rate of return for the *muwwakīl*; and in case there is a gap between the targeted and the real rate, the *wakīl* waives part of his profit to the *muwwakīl*.

Second, the *wakīl* gets 100% of the surplus if there is any. These two mechanisms invert the *wakālah* structure. Indeed, the *muwwakīl* receives a predefined return while the *wakīl* gets the remaining part of the profit.

Adjusting the investment instruments to be in line with the Sharī'ah principles is a prerequisite. Therefore, IFIs need to:

- Renounce the profit waiver practices. If there is any loss or shortfall, the customer is supposed to bear them.
- Renounce practices that limit the profit share of the customer in case of a surplus.

Applying the right profit calculation sequence. In the fourth market institutions, money is a commodity that has a price. Therefore, the cost of financing in this market includes three main components: the fixed return that goes to depositors, the margin of the financial institution to cover the operational expenses and the cost of risk and the return that goes to shareholders.

When the IFIs are using interest rate benchmarks, they are applying the profit rate calculation sequence related to the fourth market institutions. Indeed, IFIs are targeting, as explained above, the same level of returns.

Therefore, adjusting the investment instruments' features to apply rigorously the principles of *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān* as discussed above would invert the profit calculation sequence. Hence, the rate of return to serve to depositors will be based on the return on assets. Figure 5 presents both profit calculation sequences.

Adjusting the financing offer features. To apply rigorously the principles of *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān* when conceiving financing products, the underlying contracts should be in line with the financing purposes and the financial features should be in accordance with the practices in real economy markets.

First, in Islamic law, each contract has its own purposes and its utilization should be in line with these purposes. For instance, *ijārah* (leasing) is more suitable for pay per use needs and short-term financing. Therefore, using the *ijārah* contract for ownership financing is not appropriate. For this reason, IFIs are adding other contracts to *ijārah* to achieve ownership financing which creates a hybrid product that is new to the market and that can raise credibility issues.

From another perspective, IFIs would need to adopt financial features as practiced in real economy markets. For example, if, in these markets, an *ijārah* contract is terminated based on a three months' notice, IFIs should do the same.

Overall, the dichotomy between IFIs and the real economy starts with the development and implementation of products that are new to the real economy markets and that are exclusively offered by them. Moreover, if these products do not observe rigorously the principles of *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān*, their purposes can be easily deviated and the financial features would be disconnected from the reality of the markets.

For decades, innovation in Islamic finance was limited to products. However, it would be more efficient to innovate in terms of business models while keeping the same products (as practiced in the three markets) without any change.

Reviewing the business model

Let us suppose that implementing products with financial features (including pricing) similar to those practiced in the markets would link the IFIs to the real economy. If that is the case, it is necessary to review the current business models to enable a successful integration in these markets. Since most Islamic banking assets are *ijārah*- or *murābahah*-based, the examples will focus on both of them.

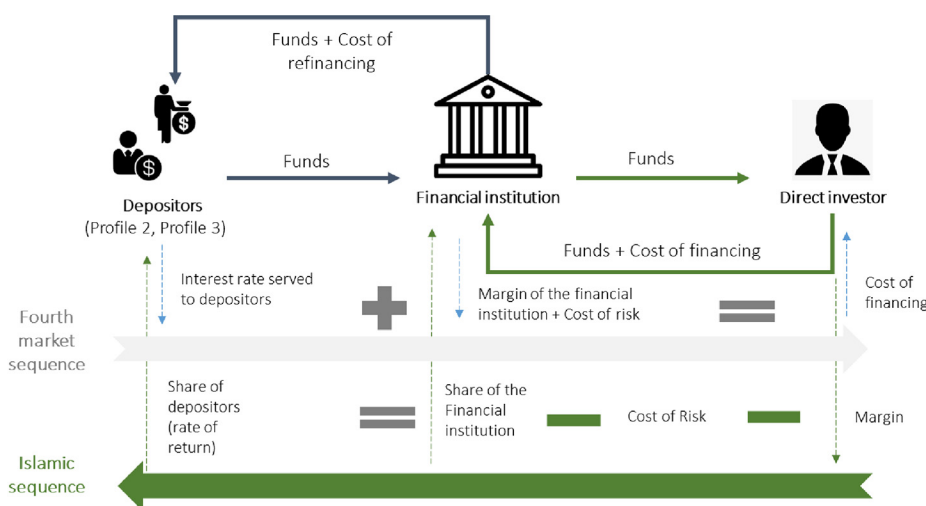


Figure 5. Profit calculation sequences in the fourth market and in the Islamic finance alternative

Source: Author's own

Business model innovation for ijārah-based products. IFIs in the Islamic alternative should play the role of a neutral vehicle for financing. They should provide their expertise in terms of risk management, investment and innovation while being part of the real economy and participating in its stability and development.

For instance, innovative business models can provide direct investors (Profile 1), professional and non-professional investors (Profiles 2 and 3) and workers (Profile 4) with a number of advantages such as risk diversification, fixed assets management, etc. For example, it is always better for an investor to have a stake in an *ijārah* fund – managed by a professional financial institution – than to buy a real property for the reasons discussed in Table 2.

For a lessee, dealing with a professional *ijārah* fund is always better in terms of quality of services and maintenance. Therefore, the IFI should implement the necessary schemes to manage the assets under *ijārah* such as legal documentation management, maintenance and replacing the lessees [2].

It is worth noting that in practice, there is a rental market that was not impacted by the fourth market institutions because there is no rival product. Therefore, for *ijārah*, IFIs need

<i>Ijārah</i> fund	Fixed asset investment
Investing in an <i>ijārah</i> fund is having a stake in every fixed asset managed by the fund (diversification)	The investor is directly exposed to risks related to the fixed asset investment (no diversification)
The <i>ijārah</i> fund would take in charge all the maintenance and management tasks of the underlying assets (delegation)	The investor would need to manage all the aspects linked to the fixed asset (no delegation)
The investor can sell its shares in the <i>ijārah</i> fund whenever cash is needed (liquidity)	The investor would need more time to sell the fixed asset when cash is needed (no liquidity)
The <i>ijārah</i> fund would negotiate maintenance fees with professional entities (optimization)	The investor would not be able to negotiate fees with professional entities (no optimization)

Table 2. Comparison between investing in an *ijārah* fund and in a fixed asset

Source: Author's own

to have an adequate internal organization to ensure the services provided by a property owner while applying the market prices. (Such entities can implement decreasing *mushārahah* with *ijārah*).

Business model innovation for murābahah-based products. In the absence of term price markets, implementing an alternative to *murābahah*-based products would be more complicated. Nevertheless, the strategy of car makers can be a suitable business model to apply to *murābahah*-based products. Indeed, most car makers (such as Renault, PSA and Toyota) have their own finance companies granting loans to people willing to buy their cars. Therefore, it is possible to allow large corporations to set up their own finance entities that would be specialized mainly in sales on credit (through *murābahah*).

To increase their sales, car makers generally offer sales on credit through their finance companies. Based on the market conditions, car makers may decide to offer low interest-rate (or even 0% interest-rate) loans to their customers and pay the interest required by their finance companies, thus reducing their profit margins. This business model is similar to the concept of positive banking (Al Rabiah, 2012).

This model can be adjusted to be in line with Shari'ah principles. In fact, large corporations can create their own separate finance entities that would be in charge of sales on credit. On a regular basis, large corporations would decide on the term price based on the market conditions and would give the stock of commodities to the finance entity at its production cost. IFIs could provide adequate funding to finance entities through *murābahah* or *mushārahah* and would share the profit according to the market conditions. The profit to be shared would be equal to the term price less the cost of production and any direct expenses related to the stock. For

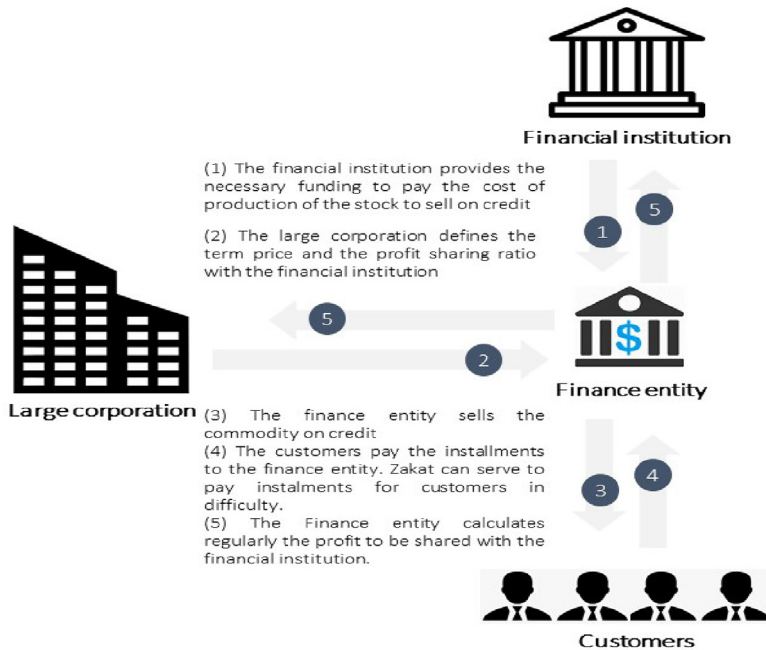


Figure 6.
Selling on credit
based on market
conditions

Source: Author's own

customers in difficulty, zakat could be used as discussed above to pay for them. Figure 6 summarizes this business model.

This business scheme can provide large corporations with the necessary funding when selling the stock of commodities to the finance entity; *istiṣnā'* can be used as the underlying contract. Moreover, the finance entity is not necessarily a finance company; it can take several forms.

Summarizing the pillars of the Islamic alternative. The Islamic alternative aims at competing seriously with the fourth market. First, it should attract more funds to its sphere. Secondly, the IFIs should play the role of neutral vehicles that orientate savings to profitable and impactful projects and businesses. Moreover, the Islamic alternative aims at eliminating the control of the financial sphere on prices. Table 3 summarizes the main ideas of the Islamic alternative.

Conclusion

The pricing model of Islamic financial instruments undermines the Sharī'ah credibility of the whole industry. Hence, looking for a serious alternative seems to be relevant to ensure the independence of the industry and reinforce its credibility. From a macro-economic perspective, the pricing issue is just the tree that hides the forest.

In *ribā*-based economies, a new market is born where money is considered as a commodity. This new market grows rapidly and starts to control all the investment and financial flows including prices in the real economy markets. It even replaces the term prices and affects the spot prices.

The introduction of Islamic finance in such economies requires a lot of attention. In fact, to be competitive, IFIs start benchmarking the interest rates (for both financing and investment instruments) to find a place in this economy. Thus, instead of offering an alternative to the fourth market, IFIs become a part of it.

Component	Objective	Macro-economic impact
<i>Implementing zakat</i>	Reinforcing the attractiveness of Islamic investment instruments	Competing with the fourth market to attract funds and break its hegemony and control of financial flows
	Enhancing the return of investment instruments in IFIs Orienting a portion of the investment flows to new, talented investors	A fair wealth distribution among the society
<i>Applying rigorously 'al-ghunnm bi al-ghurm' and 'al-kharāj bi al-damān' principles in investment instruments</i>	Invert the profit calculation sequence where the profit rate of investment instruments is an output	Transforming investment instruments to neutral vehicles for investment
	Involving the financial institutions in the real economy sphere through the adoption of practiced financial features and contracts	Linking the financing instruments to the real economy and eliminating the control of IFIs on market prices
<i>Reviewing the business model</i>	Moving from product-based innovation to business model-based innovation	Defining the main trends for business model innovation to correctly implement the different components of the Islamic alternative

Table 3.
Macro-economic impact of the various components of the Islamic alternative

Source: Author's own

Therefore, conceiving a Sharī'ah-compliant profit benchmark for the Islamic finance industry is not a solution and the Islamic alternative as discussed in this paper requires the implementation of a zakat institution and the adjustment of investment instruments and financing products to be linked to the real economy markets. Moreover, IFIs need to focus more on the business model innovation involving zakat and real economy market practices.

This paper calls for the creation of new business models that link IFIs to zakat and that rely on contracts commonly used in the real economy markets with the same financial features while applying rigorously the principles of *al-ghunm bi al-ghurm* and *al-kharāj bi al-damān*.

Finally, the pricing mechanism of IFIs requires the review of their business model. It is not only about the creation of a Sharī'ah-compliant profit benchmark. Therefore, the research and financial engineering efforts should be oriented to conceiving new business models instead of focusing on new products.

Notes

1. As discussed, the fourth market loans reduce and replace the term sales in the three markets. Therefore, to buy a commodity on credit, the acquisition cost includes the interest rate.
2. Because IFIs are not interested in getting involved in real economy transactions, they include terms in contracts that delegate the maintenance to the lessee; and if the lessee wants to terminate the contract, he needs to pay all the remaining rentals.

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