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Islamic Financing Portfolio and its Comparative Growth Potential

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Abstract

Growth has a strong association with financial development. Both micro and macro level projects significantly benefit from the access to finance that helps to reduce their cost. Islamic financial development incorporates several benefits, such as the transformation of the economy towards Shari'ah compliance, a higher degree of risk-sharing, and the integration of returns with the risk / performance associated with the investment venture, thus ultimately leading to social prosperity. This study envisages to explore the contribution of the different types of Islamic financing, which Islamic banks currently utilize in their capital structure, in generating economic growth. This assessment may help to empirically identify the type of financing which has been successful in promoting growth. This is because each and every Islamic finance product has a particular role to play in promoting growth. Gross Domestic Product (GDP) was taken as the dependent variable. Control variables based on the Solow model included Labor Resource (L) and Physical Capital (K), while the base variable comprised the financing modes. Quarterly data was collected for 9 countries for the time period 2014Q1-2017Q4. The results indicated that other than Istisna financing all other types of financing have a positive effect on economic growth, whereas Salam financing has the highest potential of growth. Previous studies lacked in providing a country wise comparison of the growth related effect of the country-level Islamic capital structure, while considering finance as an input of economic growth within a panel data setup. This study found growth based weights of the popular Islamic finance options which policymakers can use to find a particular type of financing that needs to be promoted in order to boost economic growth.

Keywords: economic growth, Islamic capital structure, panel FGLS model

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Introduction

The relationship between financial development and growth has been widely studied. It was first explored with reference to conventional banking and remains in focus in the current research with reference to Islamic banking. There is a linkage of the financial sector with growth mainly because of the following reasons. Firstly, Financial extension counts as a crucial input in both the micro and macro level projects. Indeed, institutionalized financing provisions help to reduce the cost and thus increase the quality of access to the capital (Hassan et al., [2019](#)). Secondly, Islamic financial development incorporates some more benefits, such as the transformation of the economy towards Shari'ah compliance, a higher degree of risk-sharing, and the integration of returns with the risk / performance associated with the investment venture, thus ultimately leading to social prosperity (Badawi, [2014](#)).

Although this link is evident but empirical studies also point towards two-way causality between financial development and growth. These casual dimensions are both supply leading (financial development causes growth) and demand following (growth causes financial development) (Hassan & Kalim, [2017](#)). While advocating the role of the Islamic financial development, it is pertinent to note that Islamic banking has been the fastest growing sector of Islamic finance for the last two decades. Islamic banking is currently operational in more than 80 countries around the globe. This riba free banking model distinguished by risk-sharing innovation stimulates its growth among the Muslim as well as the non-Muslim countries.

Investment is an essential factor in development and economic growth. The establishment of Islamic banks is a viable method to mobilize the financial resources available for the Shari'ah approved projects. The doctrine of Shari'ah compliant financing assists in maintaining discipline and stability and remains useful in asset creation. Furthermore, transparency is the main feature of the Islamic financial system. Islamic banking has made an unprecedented progress over the last two decades. In this respect, the Middle East and South Asia have experienced remarkable growth and are considered to be the main hubs for such sort of ventures. However, besides its core potential, Islamic banking has been facing some challenges which may hamper its future growth and potential (Khan & Bhatti, [2008](#)). The growing Islamic hubs have been utilized as launch pads to introduce and promote Islamic banking in the western financial markets. There are several factors which spur the growth of Islamic banking and finance. These include the spiraling of oil prices, boom in the Middle Eastern economies, product innovation and sophistication. Moreover, the advancement of information technology and the

receptive attitude of conventional regulators also played a vital role in winning international recognition for the Islamic banking industry (Khan & Bhatti, [2008](#)). In the case of Pakistan, Islamic banking accounts for around 16% of the market share. In the housing sector, Islamic banking has crossed the 50% mark which denotes excellent progress. The expansion of the Islamic banking industry in various countries boosted their economies and led to extensive development. In several cases, growth in Islamic banking serves as a current source to enhance the macroeconomic efficiency of the country. It suggests that there is a huge potential that exists in such type of financial ventures (Gheeraert & Weill, [2015](#)). Kalim ([2020](#)) discussed the potential of Sukuk bonds to replace the public debt.

Regulators serving in both Islamic and non-Islamic countries now realize that Islamic banking is a viable option to enhance the financial conditions and boost the economy. Thus, they are now committed positively towards the development of the Islamic banking segment in their respective countries. In this context, one needs to remember that the roots of the conventional banking structure are fairly strong and stable all over the globe. Thus, Islamic banking faces stiff challenges in this scenario. Over the last few years, people all over the globe have inclined towards the Islamic financing networks. This is not because of their profitability solely but also because of their strong foundations and ethical principles; the absence of which, in the case of the conventional banking system, is still a big question mark (Sarker, [1999](#)). Islamic banking cannot perform optimally under the surveillance of the conventional banking system, since both streams of banking are considerably different from each other as far as their principles and beliefs are concerned. This does not mean that the existence of Islamic banking is threatened under the umbrella of the conventional banking system, rather strong challenges and stiff competition should be a part of the process side by side.

However, considering the viability, customer perception change and potential growth prospects, even conventional banks are now operating Islamic banking windows. It can be considered a remarkable success and achievement of Islamic banking as compared to the conventional banking sector (Akram et al., [2011](#)).

The Origins of Islamic Banking

Islamic banking serves as a tool to achieve socioeconomic development and justice in the society. Riba free banking products are designed to facilitate financing according to the Shari'ah. These include Mudarabah, Musharaka, Istisna, Salam and Ijarah, all of which can be used individually or in combination with each other to promote financial development. Based on its risk-sharing features, Islamic banking boosts the economy through a more equal income distribution.

Islamic banking operations and practices always reflect a Shari'ah based environment. The first Islamic bank was founded in Egypt in 1963. The first modern commercial bank based on Islamic principles was Dubai Islamic Bank which was established in 1975 (Ariss & Sarieedine, [2007](#)). Afterwards, Islamic banks and their branch network rapidly expanded in many other countries around the globe, for instance, Malaysia, Iran, Bahrain, Indonesia and Saudi Arabia. The banking systems in Iran and Saudi Arabia practice Shari'ah based retail operations.

UAE focused on the Islamic mode of financing to facilitate trade and finance. In North Africa, Islamic banks contend on the quality of the Islamic banking products instead to put up with religious grounds. Financing is focused on the real estate and the petroleum sectors in Kuwait. Since 1979, in the era of the Islamic revolution in Iran, studies have been conducted for the formation of a riba free banking system parallel to the structural development and banking sector reforms. Malaysia primes a competitive and a very vibrant component of growth and development in the overall Islamic financial system. According to a report of the Bank Negara Malaysia, the country has shown a remarkable economic growth record since 1970. Like Pakistan and other developing countries, Malaysian economy has slightly shifted towards industrialization and the services sector, which together contribute more than 80 percent of the GDP of the country.

The two basic principles of profit and loss sharing and the prohibition of riba differentiate the Islamic banking system from the conventional banking system. After World War II, the financial economy had suffered a recession during the financial crises in 2008. It slowed down the economic growth in many developing countries by contributing to financial instability and raising the unemployment rate. The Z score assessment in literature found that Islamic banking and finance is more stable as compared to its conventional counterpart, as it is less risky and more robust (Ghenimi et al., [2017](#)). Recently, many empirical studies agreed on the fact that the financial system lubricates the economic vehicle. However, unlike the conventional financial system, Islamic banks have specialized instruments to target special economic needs. Indeed, the composition of the economy, the expertise of the banks and the need of the hour explains which product provides higher returns in terms of economic growth.

Objectives of the Study

Based on the above discussion, this study envisages the contribution of the different types of Islamic banking and finance in economic growth at an aggregate level. This assessment may help in empirically identifying that which one of the two modes of financing are more fruitful in promoting growth.

Research Questions

Following research questions aim to fulfil the research objectives.

What is the role of different forms of Islamic banking and finance in promoting growth?

Is there any difference between the effects of the different types of Islamic banking and finance on growth?

Literature Review

While connecting Islamic banking and finance with growth, one must form the link between them using an appropriate functional form of the estimation model. This study proposes Islamic banking and finance as the injection into the economy which works in collaboration with the physical capital and labor to yield the desired output. The current theory demonstrates that the development of the banking and finance industry is encouraging in order to achieve economic growth, since the banking sector operates to mobilize the savings, stimulates innovation in technology and improves the efficiency of the resources. This study anticipates that the Islamic financial system is a potential source for the eradication of debt financing and it can mend the efficiency of the financial resources (Kalim, [2020](#)).

Almighty Allah has guaranteed that the money spent in the way of Allah grows like a seed of a grain which grows in seven branches and each of which yields 100 grains, thus contemplating 700 times growth (Al – Qur’an 59:7). For this purpose, the spending model must ensure that it has no hint of riba (Al – Qur’an 2:276, 3:130, 30:39). Moreover, money is spent moderately (Al – Qur’an 17:29) and responsibly (Al – Qur’an 8:27; Sahih Muslim 1833a). So, the spending is coupled with the blessings of Allah Almighty.

Darrat ([1988](#)) found riba free banking more dynamic and robust in accomplishing the monetary targets. This type of banking is centered on sustained and real economic growth. Moreover, it reduces the inflation rate and boosts employment. While sharing the experience of Iran Khan and Mirakhor ([1990](#)) stressed that the reliance on profit-sharing arrangements makes the Islamic system similar to an equity-based system. The findings of these studies suggest that Islamic banking is a better option as compared to non-Islamic banking in order to deal with the banking crisis. Furqani and Mulyany ([2009a](#)) found that in the long run, there is a bidirectional relationship between Islamic banking and fixed investments in the country. It also suggested that an increase in the GDP causes development in Islamic banking and not vice versa.

In the MENA region, the relationship between Islamic finance and economic growth (Kar et al., [2011](#)) demonstrates a heterogeneous nature across various countries. Whereas the relationship is negative for the petroleum exporting MENA countries, it is positive but not significant for MENA countries without oil. A similar study conducted in the MENA region by Goaid and Sassi ([2010](#)) showed that the development and economic growth of banks are negatively associated with the economic growth of the country. However, Islamic financial institutions (IFIs) performed positively, though the empirical relationship is not very strong. Regarding the relationship between Islamic banking and the economic growth of Bangladesh, Abduh and Chowdhury ([2012](#)) were of the view that growth in Islamic banking leads towards an increase in economic growth, both in the long-run and in the short-run.

Iran and Indonesia are also struggling to drive their economy into a better position. However, both are known to be established Islamic states. Taking Iran and Indonesia as sample countries, Yazdan and Hossein ([2012](#)) showed a significant relationship in both the short-run and the long-run between Islamic financial development and economic growth. The relationship appears to be a bidirectional relationship. The said research empirically showed the role of the Islamic banking system in enhancing the economic growth.

According to El-Galfy and Khiyar ([2012](#)), the studies about the impact of Islamic banking on growth are single-country studies and their findings are difficult to generalize. However, their findings suggest that Islamic banking positively contributes to a country's macroeconomic stability. In Pakistan, a study was conducted using the AID (Assets, Investment and Deposits) model (Hussain & Islam, [2012](#)). The results showed that Islamic banks have shown remarkable growth. In Qatar, the empirical results were reported by Tabash and Dhankar ([2014](#)). They stated that Islamic banking and finance have a positive impact on economic growth and Shari'ah compliant financing is also significantly correlated with economic growth. In UAE, according to Tabash and Dhankar ([2014](#)), Islamic finance and its impact on economic growth shows positive results. Moreover, there is a bidirectional relationship between Islamic banking and finance and Foreign Direct Investment (FDI). It means that FDI reinforces Islamic finance. It can be argued that there is a dire need in UAE to be more focused on Islamic finance in order to attract more FDI.

In Indonesia, Abduh and Omar ([2012](#)) empirically examined the short-run and long-run relationships between Islamic banking and the economic growth of the country. They reported a bidirectional relationship between the IFIs and the

economic development of Indonesia. While discussing the same concept, Dahduli (2009) conducted a study on the effectiveness of the Islamic banking and finance. It has been witnessed that Islamic PLS contracts help to boost economic growth by directing the funding to profitable industries. Kassim et al. (2010) reported a bidirectional relationship between the IFIs and economic growth in Malaysia after considering the financial shocks for Islamic banks from 1997 to 2007. Hafnida et al. (2015a) found the positive impact of various Islamic financing modes such as Mudarabah, Musharaka, Murabah, Ijarah and Istisna on economic development in selected OIC countries. They suggested that the regulators and policymakers, when proposing a new policy, should consider Islamic mode of financing on a priority basis. Nedra and Khoutem (2012) indicated that Islamic financing instruments which include Mudarabah and Musharaka stimulate economic growth in an economy. Ali (2004) suggested that Islamic finance modes such as Ijarah and Murabah require Islamic banks to know the purpose of financing. They have to make sure that the funds are used for the stated purpose; it keeps the credit tied to the real economic activity throughout the tenure.

Furqani and Mulyany (2009b) examined the relationship between economic growth and the Islamic banking system in Malaysia. They employed the cointegration test and VECM. The results indicated that Islamic financing and economic growth are positively correlated in the long-run. Hasan and Dridi (2010) revealed that Islamic banks positively contribute to financial stability and macroeconomic growth by making more credit available. Hasan and Dridi (2010) reviewed the literature available on the relationship between Islamic banking and economic growth. Their study demonstrated that the main channel of economic growth is Islamic banking, in general. They recommended that future research on Islamic banking and economic growth should be done using panel data analysis instead of time series analysis.

Ledhem and Mekidiche (2020) compared the indicators of CAMELS approach based performance and its effect on the economic growth of 5 countries. This model showed that very few indicators have a significant effect on economic growth.

Most of the previous studies used a single indicator to measure the progress of the Islamic banking sector, such as Islamic banking and finance, Islamic banking assets and/or Islamic banking deposits (Kalim et al., 2016; Mushtaq et al., 2018; Tabash & Dhankar, 2014; Hussain & Islam, 2012; Abduh & Omar, 2012). Unlike conventional banking, the financial products of Islamic banks are not perfect substitutes to each other, hence they tend to have a different effect on the economy. A study by Hafnida et al. (2015b) used five popular products to assess their effects

on economic development. This study extends this model to assess the effects of 7 products using advanced panel data models.

Incidence of Financing and Economic Growth

Wakalah Financing

AAOIFI outlines Wakalah as “*An act of one party authorizing the other one to act on its behalf in what can be a subject matter of delegation.*” For instance, an agency can be established to execute Murabah transaction where the wakil can act as an investment agent appointed by the muwakil (Akhtar et al., [2011](#)). Depending on the nature of transaction, Wakalah can be seen on both sides of the balance sheet (asset / liability). In this arrangement, there is no aspect of profit and loss sharing (Iqbal, [2014](#))

Annuar et al. ([2004](#)) stated that in Malaysia, Wakalah mode of financing provides more benefits than the Takaful operators. At the same time, it doesn't incur any extra cost to the customers. In this respect, it is essential that Syarikat Takaful Malaysia Berhad (STMB) must review its policies to incorporate all the measures which enhance the performance of the current system. Prabowo and Jamal ([2017](#)) found that there is a dire need to align the true Islamic philosophy with consumer protection. They are of the view that Indonesia must adopt the model of Malaysia for this purpose. Furthermore, they stressed that in the context of Wakalah, banking operation must have legislative harmony and a diversified mechanism for Islamic institutional oversight. Figure 1 shows the positive empirical association between the incidence of Wakalah financing and economic growth.

Musharaka Financing

Musharaka is a partnership based on the model of a business venture in which two or more partners jointly contribute the capital to run the business (ElGindi et al., [2009](#)). Profits and rewards are shared based on a pre-defined ratio decided at the time of the contract, whereas the losses are tolerated according to the contributed ratio of the invested capital (Hearn et al., [2012](#); Kayed, [2012](#)).

Musharaka (like Mudarabah) is basically a partnership based model of business. Due to its profit and loss sharing nature, the proponents of Islamic banking argue that partnership contracts are the ideal mode of financing and they characterize the true spirit of Islamic banking (Dusuki & Abdullah, [2007](#); Usmani, [1998](#)). On the other hand, non-partnership based contracts do not have the characteristics of profit and loss sharing. So, the non-partnership mode of financing should only be used when the partnership mode of financing is not available or cannot be applied.

Figure 1

Line Chart Wakalah Financing and Economic Growth

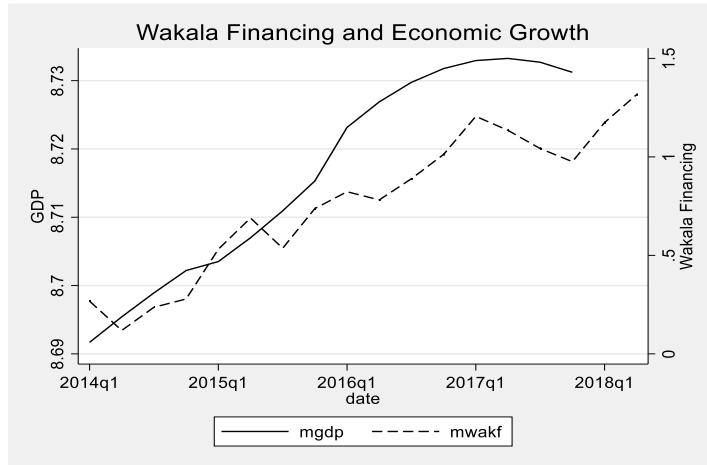
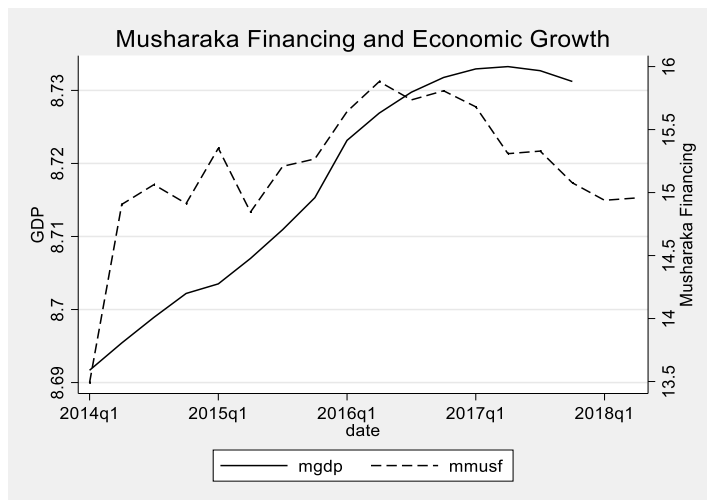


Figure 2

Line chart Musharaka Financing and Economic Growth



Moreover, the advocates of Islamic banking and many authors believe that until Islamic banks amplify the practice of the partnership mode of financing, the basic philosophy of Islamic banking cannot be transformed (Sadique, [2012](#)). When the partners share profit and loss, each one of them accesses the risk with the utmost care. Indeed, manifold assessment and monitoring of the business matters helps to stabilize the financial sector.

The proponents of Musharaka financing state that due to the characteristic of risk and loss sharing, it leads to the financial system's stability, tremendous allocative efficiency and GDP growth (Iqbal & Molyneux, [2016](#)). Islamic banks are currently reluctant to indulge in the partnership based mode of financing because of the high risk attached with it. There are many studies in which the authors reported related issues of this sort, for instance (Ahmad & Haron, [2002](#); Khan, [2010](#); Shinsuke, [2012](#)). As a matter of fact, risk arises when the outcome of an event is unknown. Every type of business faces uncertainties and hence, some banking institutions face more risk while others face less risk (Khan, [2010](#)). In order to bring risk at tolerance level, Islamic banks must have a strong management information system (MIS) for the monitoring, reporting, and the identification of the transactions involved. Banks should engage apt experts including Shari'ah advisors to review and ensure that the financing proposals are Shari'ah compliant. Islamic banks may engage technical experts to evaluate the feasibility of the new proposals. They can establish the clauses of collateral and third party guarantees to ensure the extent of reliance and redemption or utilization of collateral in the case of counterparty defaults. Any kind of penalty imposed should be donated for charity, according to the Shari'ah. Periodic reviews of business transactions are recommended in order to control the operational deficiencies and to maintain transparency. These may include an external audit by the external auditor. Figure 2 shows the positive association between Musharaka financing and economic growth.

Murabaha Financing

Shofawati ([2014](#)) explored the practices of Islamic modes of financing in Indonesia, along with other modes of financing like Musharaka, Mudarabah and Ijarah. They suggested that government must adopt all those measures which ensure the fulfilment of Fiqh regulations. Further, they empathized the idea specifically for Murabaha as the same is a source of dominating source of Islamic modes of finance in Indonesia.

Murabaha is the most commonly used mode of sale, in its original Islamic association Murabaha is not a sort of financing but a particular kind of sale agreement. It is a superlative Shariah compliant alternate of debt financing by the conventional banking system. In this sale agreement, the commodity sold for cost plus profit, in its mechanism, the seller disclose the cost of acquiring specified product required by the purchaser along with the profit margin. The total price, which includes cost and profit margin paid in instalment usually. Thus, Murabaha is not a loan given on interest which is firmly prohibited by Shariah. Instead, it is a type of financing to purchase a commodity. The banks basically use Murabaha in

order to facilitate trade financing and it is flexible enough to facilitate currency exchange and hedging (Alsayed, [2010](#)). Figure 3 depicts the disjoint of association between Murabaha financing and economic growth.

Mudarabah Financing

Mudarabah is, by nature, a profit / loss bearing contract in Islamic finance and it was also the most widely practiced contract before the advent of Islam. The capital provider is called “Rub ul Maal”, who provides the intact capital required to finance a project. However, the other person who offers his expertise and efforts is called the entrepreneur, that is, the “Mudarib”. Capital gains or profits of the venture are shared between both partners, according to the pre-agreed ratio. Whereas, all the losses (if any) are entirely borne by the Rub-ul-Maal. On the other hand, the liability of an entrepreneur is limited liability to the loss of his time and efforts.

In modern times, the application of the Mudarabah contract has been extended to cover various businesses. It is widely used as a simple partnership contract in which one party provides the capital and the other comes with the labor and expertise. Both the parties share the gains from the business according to the pre-determined ratio. The Rab ul Maal completely bears the loss of capital, whereas the Mudarib or manager bears to lose his efforts and time. The other uses of the Mudarabah contract include investment accounts and project financing (Rahman, [2018](#)). As an equity financing tool, Mudarabah can be used as an alternate of the venture capital provided by the conventional financing system. In its essence, it is a vibrant tool to remove the interest from the society as it provides interest free financing by employing the Mudarib as the manager of the resources of the economy. In contrast, banks provide financing and share gains and losses, unlike the interest based mode of financing. Actually, interest bearing credit creation is the major source of creating inflation in the economy. So, interest free business activities help to reduce inflation in the economy and also have a significant impact on employment creation by promoting commercial activities (Thaker et al., [2020](#)).

Letter of credit based on Mudarabah is also used to facilitate trade. Mudarabah based Takaful model is also practiced in Takaful Malaysia and Takaful Nasional. Moreover, it is used in various service sectors including health care, education, information, and communication. Equity financing or profit sharing under Mudarabah can be practiced in many productive ventures irrespective of the product type, time period and risk tangled provided that the product is permissible in the Shari’ah, can be marketed and is able to generate profit (Rahman, [2018](#)).

Figure 3

Line Chart of Murabaha Financing and Economic Growth

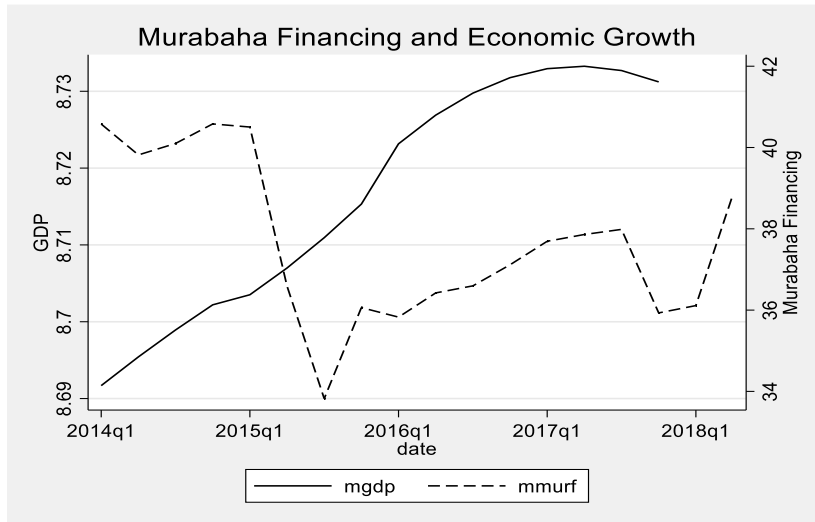
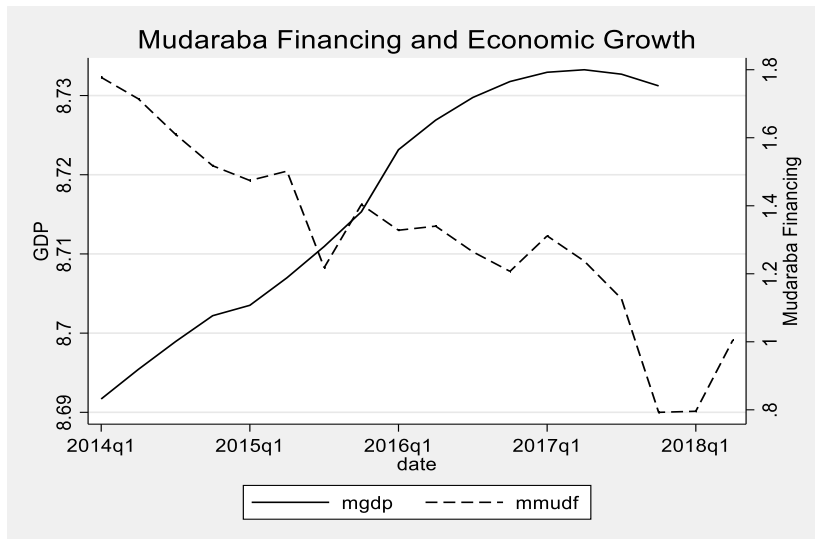


Figure 4

Line Chart of Mudarabah Financing and Economic Growth



Equity financing modes are considered as high-risk financing modes, where Rab ul mal provides the capital to the Mudarib while completely relying on his ability and integrity (Hassan & Lewis, 2007). In this way, the financier is exposed

to both the market and credit risks (Antonio, [2001](#); Bacha, [1997](#)). If a bank acts as Rab ul mal, it provides the capital to an external agent and the bank is not allowed to take part in the management of the venture. It creates an agency problem in equity based financing (Dar & Presley, [2000](#)). So, the financing risk is quite high because of the covert business transactions and the lack of transparency (Rosly et al., [2008](#)). These kinds of risks need to be analyzed using the AAI OFI risk methodology framework.

In Pakistan, Mudarabah law has been introduced pertaining to debut Mudarabah certificates as practiced in Jordan. Most of the Islamic banks in different countries are adopting to this Mudarabah contract. On the other hand, Islamic banks have reduced the degree of risk using the Shari'ah complaint form of Mudarabah, although using them only with public limited concerns where they can have a check on the periodical performance through audit reports and other financials of the entities.

Financing being extended to economic activities where banks can have access to the use of finance, such as a motor car dealer purchases cars from the manufacturing companies and then sells those cars on an instalment basis and the Mudarabah contract is formed between customer and the bank. Moreover, sureties and securities are also introduced against delayed repayments and loss due to the mismanagement or negligence of the Mudarib (Ahmad & Haron, [2002](#)). Figure 4 shows that there seems a negative association between Mudarabah financing and economic growth.

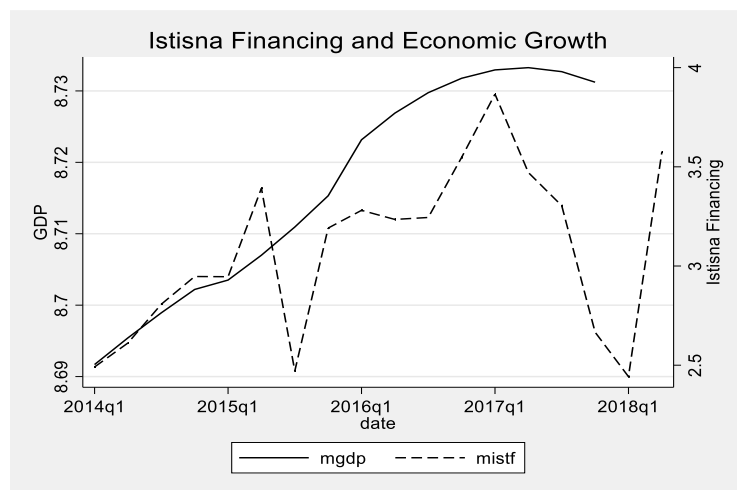
Istisna Financing

Istisna resembles the non-participatory mode of financing. Moreover, it is a special kind of sale which is exempted from the particular Fiqh rule (Do not sell because it satisfies the needs of the society otherwise not fulfilled by the conventional financing. It is a contract in which one party undertakes to manufacture or to construct something according to the given specifications for a definite price, which may be paid in lump sum or in instalments. The distinctive feature of Istisna is the permissibility of the deferment of both price and commodity. Shari'ah scholars do not approve such kind of a sale contract because of deferment. However, Istisna is exempted from such constraints because of its economic benefits at large. The possibility of the price paid in instalments is legitimate in the Hanafi school of thought and is also adopted by various IFIs. Currently, Istisna is widely used in the Gulf and Asian countries in order to finance commercial and industrial projects as well as for home financing.

Islamic banks and IFIs use the Istisna mode for financing in the construction of residential estates, shopping avenues, villas, showrooms and other buildings used for a viable purpose. Moreover, the central objective remains to promote the manufacturing capability related to the manufacturing of machines, ships, and other equipment which may be used for agriculture, infrastructure and/or to benefit the industrial sector. For instance, medium term financing is provided under Istisna to meet the financial requirements which include the purchasing and manufacturing of equipment used in transport, telecom, hospitals, oil tankers, locomotives, electric generators, food preservatives and canning industries. Moreover, intangible assets can also be financed under Istisna and the financing tenure depends upon the procurement of material and the manufacturing of a specified commodity.

Figure 5

Line Chart of Istisna Financing and Economic Growth



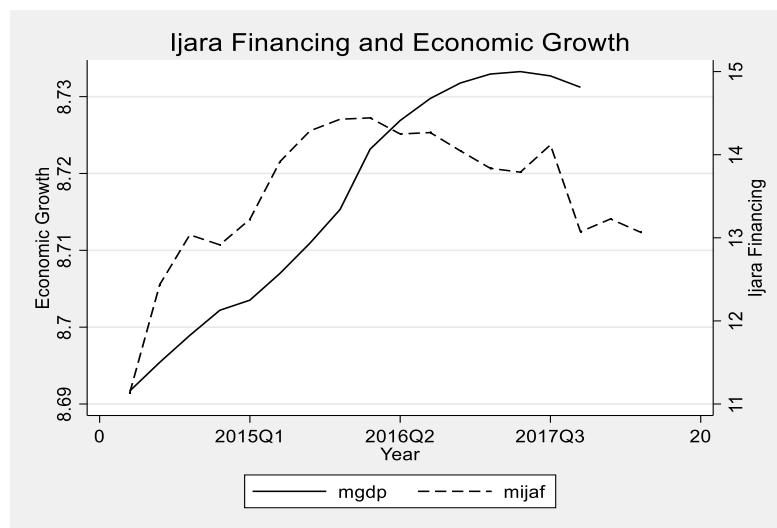
In monetary terms, the customer has no direct obligation of repayment. This transaction is considered as a high-risk transaction with a number of inherent risks, unlike other modes of Islamic financing. These risks include the commodity risk, the price of commodity risk and the risk of no performance or the non-delivery risk. To overcome these situations, the banks may have the option of parallel Istisna where they execute a second contract and three parties are involved in the parallel Istisna. On the other hand, Islamic banks may require appropriate security or guarantee in the form of a mortgage or in the form of hypothecation. Banks, keeping in view the precautionary measures, should obtain the Takaful cover for the underlying commodity. In the execution of the Istisna contract, it is recommended to avoid financing for specialized items such as a software of a particular nature.

This is because of the fact that upon the refusal of the client, there will be probably no other buyer.

Within the framework of the Shari'ah compliant financing, which is a type of asset-backed financing, Istisna fits well (Nasucha et al., 2019). The financial needs of construction companies can be fulfilled under this contract. A set of guidelines is provided by the Shari'ah to structure the financing deals tailored for small and large projects. However, financial institutions are reluctant to utilize the Istisna financing due to legal constraints (Hasmawati & Mohamad, 2019). There is a dire need to develop more robust risk management measures in order to overcome the issues and challenges faced with. The combination of Istisna and Ijarah is emerging in infrastructure development, as stated in the case study (Ahmad, 2017). Figure 5 shows little or no association between the Istisna financing and economic growth probably because of its volatility.

Figure 6

Line Plot of Ijarah Financing and Economic Growth



Ijarah Financing

Usmani (1998) defined Ijarah financing in his book as “Ijarah contract of Islamic banks includes purchase of a required asset by the customer and allow him to use it against the rental payment that is fixed throughout the tenure, the fundamental feature of Ijarah contract is the ownership of the asset remained with the bank or financial institution till the instalments are being paid by the customer.”

Hafnida et al. (2015a) suggested that in the private sector the liquidity for the IFIs are not affected when financial intermediation is done using Ijarah. This finding supports several modes of Islamic financing which include Mudarabah, Musharaka, Murabaha, Istisna and Ijarah. Kamali (2007) investigated the importance of Ijarah financing in contrast to interest-based financing. The author opined that, being an asset-backed financing mode, Ijarah is the best substitute of the conventional lease and contributes to the economic development. It does not adversely get affected by inflationary pressure as compared to the conventional lease. Also, several empirical researches support this argument and confirms its effect on profitability, such as Akkas (1996) conducted a study with similar findings in Bangladesh.

Since the collapse of conventional banking as well as interest-based financing modes, people are more inclined to seek the better alternate of conventional financing. Conventional banks were pertaining to easy collateral and convenient rules, in accordance with the Shari'ah norms. Profit and loss sharing mechanism helps to nurture economic development via the encouragement of the concept of equal income distribution. Islamic financing addresses the creditworthiness of the customer along with the profitability of the financed project (Ahmed, 2014).

Ijarah contract is not intended specifically either for industrial development or for agriculture purposes. Indeed, it is mostly made for the lease arrangements of buildings and household apartments and/or the hotels and commercial business centers. In many Arab countries and in the western world, Ijarah finance has proved to be a substantial source of economic development. Ijarah financing is provided for a wide range of assets which used for financing manufacturing business, furniture, and medical services. Financing is provided to SMEs for the high tech machinery to ensure production according to the market needs and expectations (Abdelrahman et al., 2017; Thaker et al., 2020).

Ijarah financing arrangement is made by the mutual consent of both parties, which leaves no room for doubt among the contracting parties. Since it is asset-backed financing, it is considered more susceptible to ensure default free transactions which mitigate the risk faced by the banking sector. In Ijarah financing the Islamic bank, being the owner of the assets, bears all the risks attached to the asset throughout the leased period. Abu Hussain and Al-Ajmi (2012) found in the case of Bahrain that the banks clearly understood about risk and risk management because they followed efficient risk assessment, risk monitoring and credit risk analysis practices.

In Malaysia, the Prime Minister Najeeb Razaq in his speech of October 2014 announced the extension of the tax break on Ijarah Sukuk till 2018. That was due to the wide acceptance of Ijarah among scholars (Chew et al., [2014](#)). Islamic banks do not have any specialized risk management guidelines or framework. Risk management is done by the regulatory body of the concerned country. For instance, in Malaysia, all banks use the risk management strategies of their counterpart. The establishment of IFSB 2005 was due to the growing awareness among the people and the society about the separate specialized legal framework of Islamic banking. Figure 6 shows the positive association between Ijarah financing and economic growth.

Salam Financing

Muhammad and Chong ([2007](#)), while discussing the similarities and differences between Salam and Istisna, were of the view that in Salam financing the price is paid beforehand but the required goods are delivered at a later stage. Whereas, in the case of Istisna, the price and goods both are settled afterwards. Mohammed et al. ([2016](#)) recommended that in Nigeria, Salam financing must be implemented to uplift the agricultural output, and to boost the industrial and the commerce sectors of the country. Moreover, it will also promote the stable economic growth of the country.

Kaleem and Abdul Wajid ([2009](#)) discussed the application of Bai Al-Salam for financing agriculture in Pakistan. According to the findings of the survey, they suggested that the farmers could save a considerable amount of funds if they purchased the machinery at once (Thaker et al., [2020](#)). Muneeza et al. ([2011](#)) developed a new model of financing for agriculture based on Bai Al Salam which they believed is workable, theoretically. They further argued that Salam is a risk oriented product and this is the reason that in Malaysia, it has not been implemented on a large scale. Figure 7 shows a positive association between Salam financing and economic growth.

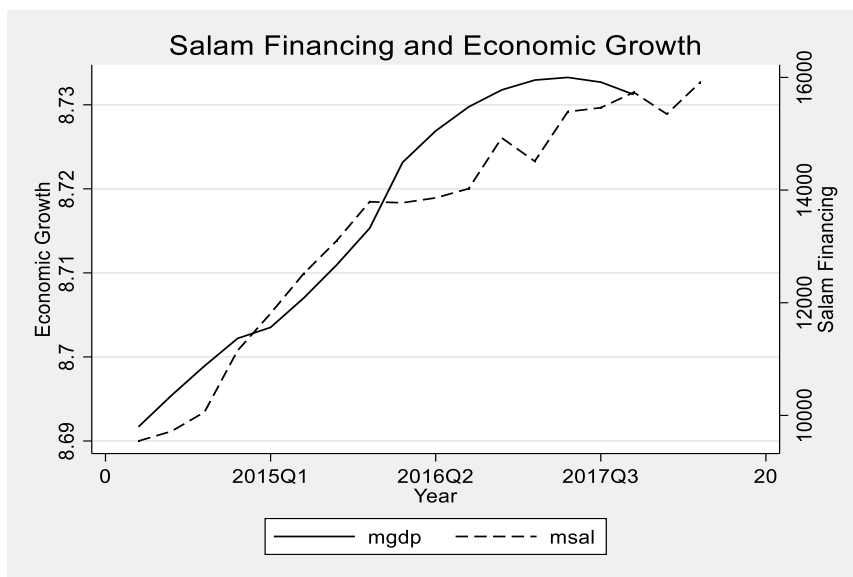
Islamic Financing Portfolio and Welfare

The nexus between Shari'ah compliant financing and economic welfare has gained much attention in the literature. Rahman ([2010](#)) was of the view that Qard ul Hasan, Murabaha and Ijarah have a greater potential to alleviate poverty, especially via an increase in the depositors' income (Kalim & Arshed, [2018](#)). These mentioned contracts can be more resourceful to uplift micro-entrepreneurs and the poor's class. On the contrary, while talking about the risk-sharing characteristics, Mudarabah and Musharaka can be considered as competitive financing tools. Yusuf

and Bahari (2015) suggested that the corporate social responsibility practiced by the IFIs is not only a tool which enhances the image of the Islamic banks but it is also a great source to alleviate poverty in the country.

Figure 7

Line chart of Salam Financing and Economic Growth



Sadeq (2002), while talking about the role of Wakf in developing countries, suggested that Wakf has a great potential to uplift the economy of the developing countries. At the same time, it is equally capable of curtailing the source of poverty in a country. Haneef et al. (2015) narrated that in Bangladesh, as compared to the contemporary conventional banks, Islamic banks are more vigilant in terms of poverty reduction. They further suggested that Ushr, Zakat, Wakf and microinvestment tools have a great potential to alleviate poverty in the country.

Abu Hussain and Al-Ajmi (2012) narrated that in Bahrain, Islamic banks face more risks. However, the degree of country liquidity, residual liquidity and operational risk is a bit high as compared to conventional banks. Waemustafa and Sukri (2015) found that in Malaysia, the vital factors which affect the credit risk for conventional banks are size, regulatory capital, earning management, liquidity, and loan loss provision, whereas in the case of Islamic banks only inflation and M3 are considered as the most vital factors in terms of credit risk.

Model Estimation

Islamic Banking Financing and Growth

This study explores the growth potential of the popular financing options which Islamic banks utilize in their capital structure. Unlike the conventional banking system where one lending based product can be suitable for all financing needs; Islamic finance has developed a portfolio of financing options. These financing options are not perfect substitutes of each other. Hence, each one of these products has its role in the path of growth.

Variables and Data Sources

The following table provides the symbols, construction and data sources for all the variables under consideration in this study. The dependent variable was estimated using the natural logarithm of the Gross Domestic Product (GDP). Whereas, the controlling variables included Labor Resource (L) and Physical Capital (K) in their natural logarithm form. The data of these variables was extracted from the World Development Indicators (WDI). While the data of country-level aggregate Islamic banking and financing was extracted from the IFSB database. The quarterly data was collected for 9 countries whose data was available for the period 2014Q1-2017Q4. The list of the countries is provided in Table 2.

Table 1

Construction of Variables

Variable Name (Symbol)	Construction	Source
Gross Domestic Product (GDP)	Natural log	WDI
Labor Force (L)	Natural log	WDI
Capital (K)	Natural log	WDI
Musharaka Financing (MUSF)	% of Total Financing	IFSB
Mudarabah Financing (MUDF)	% of Total Financing	IFSB
Murabaha Financing (MURF)	% of Total Financing	IFSB
Ijarah Financing (IJAF)	% of Total Financing	IFSB
Salam Financing (SALF)	% of Total Financing	IFSB
Istisna Financing (ISTF)	% of Total Financing	IFSB
Wakalah Financing (WAKF)	% of Total Financing	IFSB
Others Financing (OTHF)	% of Total Financing	IFSB

Table 2*Sample Countries*

Iran	Nigeria	Saudi Arabia
Jordan	Oman	Sudan
Malaysia	Pakistan	UAE

Model and Estimation of Stochastic Equation

Based on the research objectives and the variables used are discussed in table 1, the following is the stochastic equation proposed by this study. The model proposed in this study originates from the Solow growth model, whereby labor and physical capital are considered as crucial inputs for economic growth. Furthermore, this study extends the impact of Islamic financing on growth by splitting Islamic financing in terms of different products.

$$GDP_{it} = \alpha_0 + \alpha_1 L_{it} + \alpha_2 K_{it} + \alpha_3 MUSF_{it} + \alpha_4 MUDF_{it} + \alpha_5 MURF_{it} \\ + \alpha_6 IJAF_{it} + \alpha_7 SALF_{it} + \alpha_8 ISTF_{it} + \alpha_9 WAKF_{it} + \alpha_{10} OTHF_{it} \\ + \varepsilon_{it}$$

Here i represents Islamic banks and t represents the time periods. While ε_{it} denotes the randomly distributed factors which could determine growth and are not included in the study with the assumption of having a negligible effect on growth.

Estimation Approach

This study proposes the pattern in which the dependent and independent variables are changing historically also show association patterns. Regression analysis compares these changes and calculates the weights for the effects of independent variables on the dependent variable. The composition of the data signifies that it varies across countries and across time periods and this two-dimensional variation is not manageable under ordinary least squares (OLS). The unobserved heterogeneity of cross-sections is usually tackled under a fixed effect or a random effect setup (Gujarati & Porter, 2009) but this model only allows the intercept to be a cross-section variant¹. Furthermore, new developments in econometrics resulted in a new type of estimation approach called feasible generalized least squares (FGLS). Whereby cross-sectional differences are accounted for using cross-section variant standard errors of the slope coefficients

¹This means that FE and RE model assume that all cross-sectional differences are only accounting for the differences in the way other non-included variables effect the model. While included variables behave homogenously.

(Greene, 2012). The advantage of this model is that the cross-sectional variant variance-covariance matrix can be modified to make the model robust to heteroscedasticity and autocorrelation. Studies like Hassan et al. (2020) used this model to estimate when the number of countries per cross-sections is less than 20.

Descriptive Statistics

Table 3 of descriptive statistics shows that the mean value is greater than the standard deviation in the case of GDP, L, K, and MURF, which shows that the data is well represented by the mean values. It also shows that the other variables have a standard deviation higher than the mean indicating that the cross-sections are heterogeneous and are not well generalized by one mean.

When comparing the growth rates, other than WAKF which has a growth rate of 0.06, all the other variables showed growth rates not significantly different from zero. Lastly, the significant values of Jarque and Bera (1980) test showed that either the data is skewed or it has a non-standard kurtosis value, which led us to conclude that overgeneralized Pooled OLS model may not provide an appropriate representation of the data. This study assumed that the data is asymptotically normal as the overall sample size was above 30 (Lind et al., 2006).

Figure 8 of the scatter plots shows mixed results of the association of Islamic financing with economic growth. Here, it can be seen that while allowing for the quadratic pattern, Musharaka, Salam, Istisna, Wakalah and other financing modes have a positive association, while others have either a negative or no association with the economic growth of selected countries.

Table 3

Descriptive Statistics

Variable	Obs.	Mean	Std. dev.	Growth	Skewness	Kurtosis	JB Test
GDP	160	8.716	1.099	0.003 (0.87)	0.21	1.85	38.8 (0.00)
L	180	16.580	1.284	0.007 (0.69)	-0.03	1.94	29.9 (0.00)
K	160	3.0842	0.276	-0.001(0.91)	-0.32	1.93	28.5 (0.00)
MUSF	179	15.198	20.822	0.04 (0.89)	1.19	2.88	24.1 (0.00)
MURF	180	37.691	19.545	-0.17 (0.54)	0.29	1.91	35.6 (0.00)
SALF	180	2.845	7.338	-0.15 (0.14)	3.48	15.47	80.5 (0.00)
ISTF	180	3.082	5.651	0.03 (0.69)	1.96	5.98	56.46(0.00)
MUDF	180	1.313	2.037	-0.05 (0.11)	1.1	2.53	23.42(0.00)
WAKF	180	0.764	1.964	0.06 (0.02)	3.02	11.51	75.1 (0.00)
OTHF	180	10.986	17.897	-0.04 (0.86)	1.32	3.08	27.78(0.00)

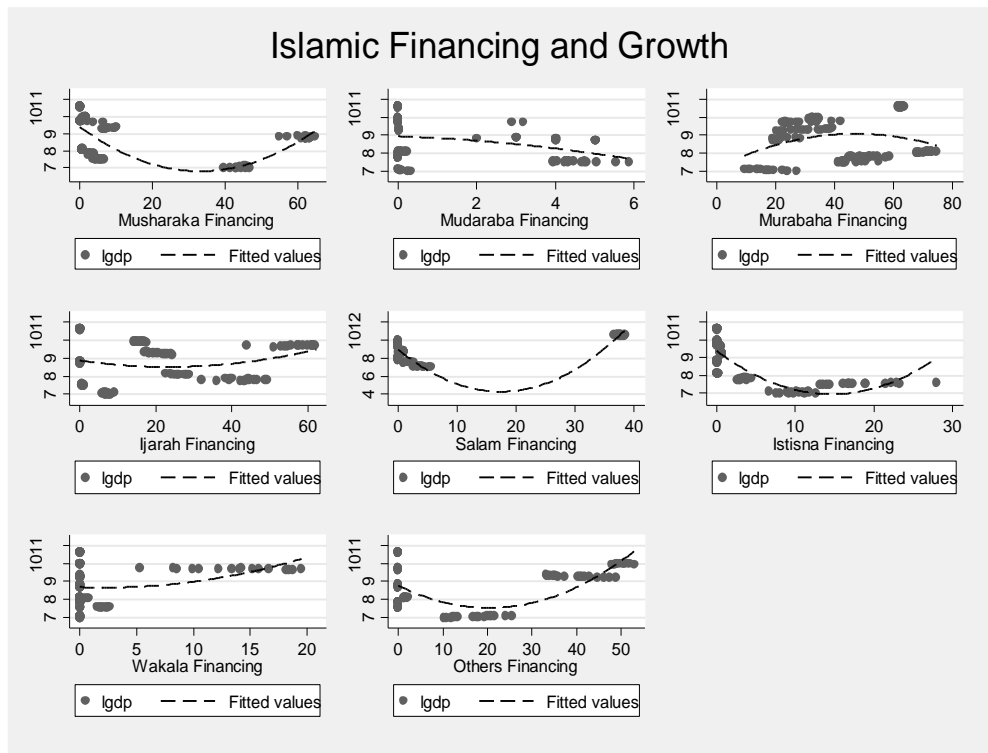
Estimation results are provided in Table 4. The probability value of the Wald test indicates that by using 144 country-year observations, the overall model is fit. Further, the intercept is positively significant which shows that the knowledge and technology component of the growth model positively affects growth.

In the case of controlling factors, 1% increase in labor leads to 0.26% fall in the GDP, while 1% increase in capital leads to 0.58% increase in the GDP. These results are based on the fact that the selected countries are abundant in labor. Due to this fact, the labor shows decreasing returns and the capital shows increasing returns. While comparing the effects of different financing options on growth, it can be seen that only Istisna financing has a negative effect on it, such that 1% increase in Istisna financing leads to 0.02% fall in the GDP, while Mudarabah financing has an insignificant effect on the GDP. This is due to the fact that historically, Istisna financing has not shown any stable growth. All other types of financing have a positive and significant effect on economic growth. If there is 1% increase in Musharaka, then there is 0.014% increase in the GDP, correspondingly. Hence, participation in a joint venture by Islamic banks can potently add 0.01% to growth each year.

Table 4

Estimation Results

FGLS Regression Estimates – Dep. Var. Economic Growth		
Variables	Coefficients	Prob.
L	-0.265	0.000
K	0.581	0.002
MUS	0.014	0.000
MUR	0.011	0.001
SAL	0.062	0.000
IST	-0.022	0.000
IJA	0.012	0.000
MUD	0.006	0.767
WAK	0.031	0.000
OTH	0.030	0.000
Cons	9.948	0.000
Obs	144	
Cross sections	9	
Wald (prob)	1434.7	0.000

Figure 8*Non Linear Association of Islamic Financing and GDP*

Similarly, if there is 1% increase in Murabaha financing, then there is 0.011% increase in the GDP, correspondingly. Likewise, if there is 1% increase in Ijarah financing, then there is 0.01% increase in the GDP, correspondingly. This shows that trading-based financing has the potential to add 0.01% to the GDP growth.

If there is 1% increase in Salam financing, then there is 0.06% increase in the GDP, correspondingly. Surprisingly, when Islamic banks participate in food necessity production, it makes the highest contribution in the GDP growth. Iftikhar and Mahmood (2017) asserted the role of agri-financing on food security. If there is 1% increase in Wakalah financing, then there is 0.031% increase in the GDP, correspondingly. Lastly, if there is 1% increase in other types of financing, then there is 0.03% increase in the GDP, correspondingly. Indeed, when the bank facilitates the trading partners by using Wakalah or any other agreement, it can add 0.03% to the GDP.

From the estimation results, it is evident that out of all these financing options Salam financing has the highest positive effect on economic growth. This indicates that when Islamic banking facilitates the agriculture sector, it has the highest potency to facilitate economic growth. Hence, focusing on the Salam financing will help in promoting the primary and food production market, which in turn will assist in reducing the cost of food and agricultural goods and eventually stabilizing growth and inflation.

Conclusion and Policy Implications

The role of the financial sector, especially the banking sector, in economic growth is well versed in the literature. Indeed, the role of Islamic banking in growth is gaining momentum. This study envisages that unlike the conventional financing, the lending model can be applied to fulfil any need of the economy. On the other hand, Islamic banking products are specially designed based on assets to cater the needs of the economy. This denotes that the Islamic banking products are not perfect substitutes, which renders differences in their effect on economic growth. The current study explored the differences in the historical effect of the various Islamic banking products on economic growth.

Using the panel data of 9 economies, panel FGLS model was applied. The model was constituted on the value addition of the role of the banking sector on the Solow growth model. The results showed that other than Istisna financing, all other financing products have a positive effect on economic growth. The case of Istisna was different because of its volatile nature.

This led us to the conclusion that regardless of the financial product used in Islamic financing, though based on assets, all of them have a positive influence on the economy. Policymakers should use any Islamic banking product with the confidence that it has a growth promoting effect and it also removes the element of riba from the economy. Future studies can explore the markets of different Islamic banking products, in terms of their stability and to determine the options which can help in boosting the economy.

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