Sci. Educ. Innov. Context Mod. Probl. P-ISSN: 2790-0169 E-ISSN: 2790-0177
Issue 3, Vol. 8, 2025, IMCRA

Article

The Differential Matrix of Islamic Finance Instruments and Their Role in Financing Budget Deficits

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Received: 01.01.2025 ; Accepted: 17.03.2025 ; Published: 30.03.2025
doi: 10.56334/sei/8.3.83[1]

Abstract

Islamic financial instruments, based on a participation economy and utilizing a differential matrix for financing budget deficits, enable the selection of the most suitable methods for funding individual or combined budgetary shortfalls. When a state employs the Salam instrument, it fosters economic growth by leveraging human and natural resources across various sectors and activities while addressing all societal needs. Similarly, Ijarahsukuk ensure medium- to long-term financing, serving as an optimal alternative to public debt bonds for funding the acquisition of fixed assets for productive and service-oriented government projects.

Keywords: Budget deficit, Financing, Salam, Ijarah, Differential matrix.

Citation. Madji A., Samir G., Bouaita A. (2025). The Differential Matrix of Islamic Finance Instruments and Their Role in Financing Budget Deficits. *Science, Education and Innovations in the Context of Modern Problems*, 8(3), 1350-1358. doi: 10.56352/sei/8.3.83. https://imcra-az.org/archive/358-science-education-and-innovations-in-the-context-of-modern-problems-issue-3-volviii-2025.html

Introduction

Reliance on the differential matrix for financing budget deficits compels public entities to make rational choices among various funding structures and instruments. These include equity-based formulas and debt-based formulas. It's important to note that these contracts or formulas are not limited to the conventional or well-known financial instruments found in jurisprudential traditions. Instead, they extend to all derivative, generated, and innovative financing contracts within the Islamic financial industry. These instruments can be leveraged across all economic and social sectors, fostering sustainable development and ensuring periodic returns to finance any budget deficit. This document will focus on two specific instruments: ***Salam*** (an equity-based instrument) and ***Ijarah*** (a debt-based instrument). We will also attempt to enumerate all known financing tools and assess their viability for financing budget deficits in a table we term the "Differential Matrix."

The central problem addressed here is:

What is the role of Islamic finance tools in financing budget deficits?

This main problem branches into the following sub-questions:

- What is the position of the Salam instrument within the differential matrix for financing budget deficits?
- What is the role of Ijarahsukuk in reducing the general budget deficit?

Based on the foregoing, the following hypotheses can be proposed:

- The Salam instrument contributes with sufficient financial capacity to finance any type of budget deficit.
- Ijarahsukuk contribute to financing the budget deficit to a limited extent.

I. Budget Deficit

1. Concept of Deficit

The issue of the general budget deficit has undoubtedly received considerable attention from financial thinkers. A budget deficit describes a situation where public expenditures exceed public revenues. This is a characteristic observed in most countries, whether developed or developing.

Ancient Muslim scholars did not directly address this topic. However, many established jurisprudential rulings from the first four centuries of the Islamic state alluded to the *Bayt al-Mal* (public treasury) and its deficit, which can be analogized to the general budget deficit (Al-Qari, 2000, p.13).

2. Types of Deficit

There are several types of deficits, which can be categorized as follows:

- **Overall Deficit:** This represents the total deficit related to the central government, local groups, and public sector institutions (Qaddi, 2005, p.208).
- **Current Deficit:** This measures the difference between current expenditures and current revenues (Bagous, 1999, p.95). Some measure it as the difference between total expenditures and revenues for all government bodies, minus government spending allocated to repay accumulated debts from previous years (Qaddi, 2005, p.201).

- **Primary Deficit:** This deficit excludes interest on previously borrowed debts. Therefore: **Primary Deficit = Current Deficit – Interest on previously contracted loans** (Qaddi, 2005, p.207).
- **Operational Deficit:** This deficit includes the amount of interest paid on state debts, linking these debts to the general price level.
- **Temporary Deficit:** This deficit is linked to the level of economic activity and economic fluctuations affecting it, such as a deflationary state in national income due to a decrease in activity levels (Al-Douri, Al-Janabi, 2000, p.40).
- **Structural Deficit:** This deficit continuously arises from expenditures exceeding revenues, or from the growth rates of public expenditures consistently surpassing the growth rates of public revenues (Andraos, 2005, p.205). This indicates an imbalance in the financial system and hinders the national income's ability to bear burdens that do not increase at the same rate as public spending (Al-Douri, Al-Janabi, 2000, p.43). One manifestation of this is the escalating problem of increasing public expenditures coupled with insufficient public revenues, making it impossible for individuals to bear any tax increases on their incomes. Rationalizing public expenditures in this area also plays a crucial role in reducing the severity of the deficit, especially if the increase in public spending is directed towards boosting production.

Many developing countries have suffered from this deficit, forcing them to seek loans from the International Monetary Fund, which has its own reform philosophy to curb deficits within programs that obligate debtor countries, such as economic stabilization policies and structural adjustment policies.

3. Causes of Deficit

Modern financial scholars believe that the real increase in public spending in a state is due to economic growth and progress. This was a subject analyzed by IbnKhaldun, and later by the German scholar Adolph Wagner, who observed this phenomenon after studying the evolution of public expenditure volume in several European countries. He formulated a law stating that the evolution of public expenditure increases is proportional to the state's pursuit of economic development and its assigned tasks (Shabbat, 1997, p.199). However, some attribute the budget deficit primarily to increased public spending, increased subsidies, and public sector losses. The deficit in the general budget is due to:

- **Economic reasons:** For example, the state's transition from a guardian state to an interventionist state.
- **Political reasons:** Such as diplomatic relations with friendly countries or the emergence of internal conflicts or wars with unfriendly countries. In this context, a new concept in state policy emerged called "armed peace" (*La PaixMilitarisée*) (Bagous, 2000, p.117).
- **Social reasons:** Such as social demands for increased wages and social security, and the emergence of a new concept for dealing with populations, termed "buying social peace" by public authorities.

I. Funding through Debt and Equity Instruments:

Islamic economics shares some public budget deficit financing methods with conventional economics, which proposes instruments like issuing public bonds. According to equilibrium theory, these bonds are considered hedging tools against future taxes (Bruno, 1999, p. 44). In Islamic economics, the state can utilize QardHasan (benevolent loan) or various permissible sales contracts for financing.

1. Funding through Salam (Debt Instruments):

Debt instruments in Islamic economics are well-known and diverse; here, we will focus on the Salam contract.

Salam Contract: This is a sale where the commodity is delivered at a future date in exchange for an upfront payment (Mohammed, 1998, p. 249). Its pillars include the Musallim (the financier), the MusallamIlayh (the seller of the commodity), the MusallamFihi (the commodity), and the Salam capital (the price paid in advance by the Musallim to the MusallamIlayh) (Al-Sartawi, 1999, p. 253).

The state can take several steps in the Salam framework to finance budget deficits by initiating projects in various sectors such as roads, ports, hydrocarbons, and public utilities. This can be done by issuing Salam sukuk (Islamic certificates). Some researchers have proposed petroleum bonds, where the state sells a specified quantity of petroleum or a certain number of barrels to the bondholder, to be delivered at a predetermined future date. The bond's value is paid at the time of sale through an agency on behalf of the bondholder (Qahf, 1997, p. 65).

The state can also use Salam within its agricultural framework. It can contract with private entities and contractors to develop commercial centers with specific characteristics, such as capacity and number of floors, within defined timelines. The financier (Musallim) would benefit from the revenues of this center for a specified period, while the underlying asset (the commercial center) remains state property. Similarly, the state can employ the Salam contract for constructing technical facilities and other similar projects, within the previously mentioned conditions of Salam. As Salam is permissible for commodities, it is also likely permissible for services for financing if the projects can be accurately described (Al-Qari, 2000, p. 24).

The applications of Salam are broad; it finances various agricultural operations and is also used in commercial and industrial financing (Khoja, 1994, p. 45). This highlights Salam's capacity to foster economic growth across different sectors and activities, optimize the utilization of human and natural resources, and activate fixed capital without incurring prior burdens or additional costs, all while contributing positively to the national economy.

2. Funding through Ijarah (Equity Instruments):

These methods are alternative financing formulas to traditional ones, enabling the state to influence the direction and course of the economic situation. They do not constitute a debt on the state's public budget, as they represent external financing, thus having positive effects as an alternative to inflationary formulas and tools (Salhi, 2001, p. 106).

Ijarah (Leasing): This is a contract for permissible usufructs that are consumed gradually (Al-Kubaisi, 2002, p. 419), or it is the transfer of ownership of permissible usufructs for a known period in exchange for compensation. Ijarah is divided into two types: ordinary Ijarah and Ijarah leading to ownership.

Ordinary Ijarah involves periodic payments over a known period for a known asset, such as renting a dwelling in equal installments. A key characteristic of Ijarah for the lessee is that it is off-balance sheet financing, meaning the asset is purchased by the lessor, and the lessee's commitment to pay rent is not considered a capital expenditure. As for **Ijarahsukuk**, which some researchers call Ijarah bonds, they refer to certificates of equal value representing ownership of leased assets, usufructs, or services, based on the Ijarah contract as defined by Islamic Sharia (Qahf, 1995, p. 37).

Ijarah facilitates sound planning and programming of expenses and serves as a good protection against inflation, especially when linked to a fixed-rent Ijarah contract for a long time. For the financier, it represents another financing option, expanding their choices, and carrying less risk than Mudarabah (profit-sharing) and Musharakah (partnership), because the financier owns the leased asset and receives stable, predictable income. The scope of Ijarah is broad, allowing the state to finance its deficit through various forms, particularly in real estate that it owns and wishes to sell to the private sector (Manzoor, 1995, p. 364), while the state retains operational control over the investment activity through a specified annual or monthly rental installment. This is a form of partial privatization (Salhi, 2001, p. 112), and the state retains freedom in making decisions regarding this real estate asset, thus ensuring cash liquidity to finance its deficit. In this area, the state can adopt several forms of Ijarah application, including:

Ijarah Muntahia Bil Tamleek (Lease-to-Own):

The state can utilize this type in residential leasing. Before the leasing process, it can issue Salam sukuk to private entities for the construction of these residences, with an accelerated payment of the project value and defined specifications. The state then benefits from this project through residential leasing, which provides the state with monthly financing for several years, with citizens having the option to acquire ownership at the end of the term after the state has held it.The state can issue Ijarah sukuk for purchasing machinery and equipment for self-employed professionals, such as doctors and engineers, with monthly installments paid by the lessee over several years. This type of leasing encourages investment in small and medium-sized industries, providing the state with a significant source of funding if this Ijarah is widespread. On the other hand, it helps alleviate unemployment, especially among highly qualified university graduates who require resources, thus enabling these professionals to employ other workers who have suffered from unemployment. This, in itself, reduces the burden of public expenditures related to support and care for the unemployed and ensures financing for the budget deficit. At the end of the Ijarah period, the lessee can pay the present and remaining value of the leased asset, deducting the paid rents, or make the lease term equal to the economic life of the leased asset (Talkhan, 1997, p. 106).

Ijarah of Public Utilities:

This type of Ijarah is based on the sale of usufructs primarily derived from providing public services. The state, with its capabilities, can issue ownership certificates for assets leased to the public, which are readily purchased. The buyer of such a certificate benefits from the rent. For instance, after establishing commercial centers, the state can issue certificates to citizens who subscribe to them at equal and defined prices. These shops are then leased to merchants and craftsmen who pay monthly rents, which represent the returns on these certificates and can be traded. If the government prefers to buy real estate rather than build it, it can contact a bank to issue certificates to purchase the property and then lease it to the government for several years, thereby easing the financial burden on the state budget for constructing real estate and government buildings.It can be stated that Ijarah sukuk for leased assets possess important characteristics, including stable returns and tradability. There are other forms of Ijarah, such as Ijarahsukuk for services, which are primarily based on providing a service for a specific and known period, such as teaching for a certain number of hours in one of the state's educational centers, like the higher education sector, or providing a service in the form of an Ijarah certificate for land or air transport.

These instruments also contribute to mobilizing necessary resources to finance many government projects and expenditures, ensuring medium and long-term funding. These sukuk can be used as an Islamic alternative to public loan bonds or treasury bonds to finance the acquisition of fixed assets for government projects, whether productive or service-oriented (Qahf, pp. 95, 100).This instrument is considered a good alternative to treasury bonds in the central bank's monetary policy, as it can buy government Ijarahsukuk from the market when it wishes to increase the money supply and sell them when it wishes to reduce the quantity of money. If the state uses this financing tool, it ensures advantages and benefits:

- **Attracting idle funds** for rational investment, i.e., reducing hoarded or stagnant liquidity.
- **Increasing the volume of financing** and directing it towards productive projects or structural base projects.
- **Achieving profits for the private sector**, thereby enhancing trust and cooperation within the framework of **public-private partnership**.

III. Differential Matrix for Public Budget Deficit Financing:

Before any financing operation, the state must consider certain indispensable factors across all sectors, especially in the financial domain. These factors relate to good governance, aprominent characteristic that significantly contributes to reducing budget deficits. They include:

- Rationalizing Public Expenditure:

The state should forgo all recreational spending during times of crisis or deficit. The fundamental principle in Islamic and any other economic system is the balance between revenue and expenditure (Qahf, 1997, p.42). Therefore, any deficit appearing in the budget is an abnormal situation, stemming either from a decrease in state revenue collection or a natural increase due to economic and technological development, as predicted by IbnKhaldun and later by Wagner. Consequently, regardless of the cause, the state must address or reduce its deficit in the short term by curtailing its spending to mitigate the severity of the deficit using the following approaches:

- Rationalize government spending by focusing, during deficit periods, on compressing public budget expenditures (Salama, 1995, p.55) to cover only necessities and essential needs, while excluding luxuries or non-essentials.
- Eliminate subsidies on luxury consumer goods to reduce consumption and redirect a portion of individual incomes towards saving. This increases aggregate supply through investment, leading to higher economic growth and an increase in the number of workers.

- Partial Privatization and Combating Economic Corruption:

The state can privatize certain projects that it can divest by selling them to private entities, provided these sales do not jeopardize its future, and are conducted over successive periods. This allows the state each year to sell some institutions that are not achieving desired societal objectives or are suffering significant financial losses, in order to cover its budget deficit (e.g., road maintenance companies, transport companies, etc.). The state must also combat economic corruption in all its forms, such as bribery and nepotism. In this context, the International Monetary Fund has emphasized rationalizing the state's social expenditures.

In the event of a public budget deficit, the state works to prevent it and find possible solutions to contain and eliminate it. It has several options for financing its deficit. Conventional economics has developed financing alternatives to overcome deficits, while Islamic economics also offers its own derived solutions and financing options.

The state can differentiate between methods of financing the budget deficit, choosing the tool it deems most effective and fastest for eliminating the deficit. It can also measure the efficiency of this tool based on several factors, such as the period over which it provides sufficient financing, or it may select a tool based on the absence of retroactive effects on the state and society, or choose it for its large financial yield. Sometimes, the state may not intervene in this financing, as it lacks authority over it, such as in the case of endowments (waqf) or aid, both of which are purely voluntary financing sources. The state can only rarely predict them accurately, especially endowments. Individuals have complete freedom to earmark their funds whenever they wish and to include endowments in budget deficit financing. This is because it is an act of worship frequently performed voluntarily by individuals in Islamic countries, and also due to its significant yield, which contributes substantially, albeit indirectly, to the public budget. It should be noted that this analysis largely concerns new endowments. As for old endowments, their effects on the deficit can be anticipated through special reports prepared by their administrators and endowment officials.

The following are the methods for financing the budget deficit:

Funding Methods	Penalties (Financial Sanctions)				Equity Financing					Debt Financing		
	Compulsory Cooperative Financing			Optional Cooperative Financing	Installment Sale	Murabaha	Ijarah and Muzara'aSukuk	MusharakahSukuk	Mudarabah, Musaqah, and MugharasSukuk	Sale by Manufacture	Salam sale	Interest-free loans, accelerated Zakat payments, and currency issuance
Types of Deficit	By Financial Penalties	fees	Taxes									
Overall Deficit	M*	M	M*	M	M	M	M	M	M	M	M	M
Current account deficit	M*	M	M*	M	M	M	M	M	M	G	G	G
Primary Deficit	M*	M	M*	M	M	M	M	M	M	G	G	G
Operating deficit	G	G	G	M	M	M	M	M	M	G	G	G
Temporary deficit	G	G	M	M	M	M	M	M	M	M	M	M
Structural Deficit	M	M	M	M	M	M	M	M	M	M	M	M

Source: Prepared by the Researchers

- "M" signifies that financing is desired for this deficit.
- "M*" signifies that financing is desired for this deficit, with certain necessary precautions.
- "G" signifies that financing is not desired for this deficit.

In the case of a comprehensive deficit, it can be financed using any of the funding methods listed in the table, which the state has the capacity to generate and utilize. (Of course, endowments and aid, for instance, are not under state control; they cannot be imposed on individuals.) The focus should be on reducing expenditures in vertical funding (i.e., funds from central government entities to local administrations). However, increasing taxes is not advisable during this period for this type of deficit, as it may primarily stem from administrative corruption, widespread tax evasion, and similar issues. For other financing methods, the state can test the speed of revenue generation using the Lutz investment classification scheme. This can be applied, for example, when implementing *Sukuk al-Ijarah* for specific projects. Planned projects are represented by benchmarks based on their productive lifespan, with gradations applied. Initial costs for these projects are indicated with a negative sign (-), and expected project revenues with a positive sign (+) along the entire benchmark. Subsequently, based on these benchmarks, the project that yields the highest return in the shortest time is selected.

The comprehensive deficit is amenable to all aforementioned financing methods because it encompasses all entities, administrations, and sectors. This diversity encourages the state to focus on most of these funding approaches to contain it, with an emphasis on productive privatization of non-strategic projects that do not generate any economic or social return.

The current deficit arises from government spending allocated to repay accumulated debts. It is not advisable for the state to rely on debt financing. Instead, it should move towards equity and cooperative financing methods, with caution in using taxes and financial penalties (punishments). This is to diversify government economic activities and link the exorbitant costs resulting from spending to the output generated from engaging in activities such as participation, *Mudarabah*, and so forth. The focus should also be on privatizing certain non-strategic sectors or those that do not jeopardize the nation's destiny.From an Islamic economic perspective, the operational deficit and the primary deficit have no justification, as paying interest on a loan is prohibited. Islamic economics proposes equity-based financing through aid and fees. Relying on debt is not advisable. It is sufficient for the state not to resort to monetary issuance and borrowing. It must work to eliminate the budget deficit through equity and cooperative financing, with a focus on specific sectors that might be forcing the state to borrow, such as the agricultural sector and the import of wheat and grains, etc.

The temporary deficit can be financed through various methods because the national economy experiences economic fluctuations that cause a state of contraction. Therefore, it is not advisable to finance it through taxes and financial penalties, as these would discourage individuals and industrialists from boosting production and raising its efficiency to revive the national economy on one hand, and to eliminate the deficit resulting from state support for individuals and institutions on the other. It is responsive to other financing methods.

The structural deficit affects all sectors, as revenue collections decline while successive increases in public expenditures escalate unusually. Consequently, it can be financed through various funding methods to overcome it. Additionally, this requires a focus on **economic and** financial reforms to enhance the efficiency of banks and encourage the private sector.

Conclusion:

The diversity of financial instruments available today means that countries can avoid using funding tools based on inappropriate and prohibited transactions in Islamic economics, which often have negative impacts on the state and society. Therefore, any country that utilizes Islamic finance tools will find ample flexibility to expand its funding options and innovate in its methods. The more a contemporary state applies these tools and collaborates with Islamic banks and other Islamic financial institutions in the field of Islamic finance, the more it will be able, in the medium to long term, to choose from various alternatives for financing budget deficits, measuring their effectiveness, and testing their efficiency without significant effort and at low costs. Achieving a state's desired objectives remains contingent on its prudence in public spending and fairness in revenue collection. If these are met, budget deficits will not have a significant impact on the state. This study has demonstrated the role of **Salam** in financing certain types of budget deficits, with the assistance of other financing tools like **Istisna'**. As for **Ijarahsukuk**, their potential for deficit financing may be broader, especially in the public service sector, though the effectiveness of this tool remains dependent on the existence of an active and efficient Islamic financial market.

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