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Consistent financing methods for government expenditures through Islamic financing instruments

*Gholam Reza Askarzadeh Dareh**
Assistant professor of financial engineering, Islamic Azad University, Yazd, Iran.
**Corresponding Author*

Gholam Abbas Nazari Fathabad
PhD Candidate in financial engineering, Islamic Azad University, Yazd, Iran.

Seyed Ali Reza Zakipour Dezfooli
PhD Candidate in financial engineering, Islamic Azad University, Yazd, Iran.

Ruhollah Irvani
PhD Candidate in financial engineering, Islamic Azad University, Yazd, Iran.

ABSTRACT
Financial instruments as one of the key elements of fiscal system in any country play a key role in financing government expenditures. Use of Islamic financial instruments was developed in 1980s as sukuk for financing public expenditures and budget deficit. The purpose of this study is to find the most appropriate sukuk consistent with religious doctrines in Iran and also to identify the government needs more conveniently able to be financed by the methods. The results have indicated that Islamic treasury bonds possess the highest applicability in government costs mainly in covering budget deficits and that the securities of Istisna and Jialah are the most flexible for that. The findings have also documented that the government expenses for buying goods and services can more consistently be provided via the Islamic instruments. It can be argued that different government expenditures shall be suitable to particular financing methods and each of the costs should be financed through a given set of the securities.
Keywords: Islamic financing instruments, sukuk, budget deficit, government expenditures

Introduction
Financial instruments are one of the most important elements of financial system in any country. The financial instruments are documents based on liabilities and also interpreted as financial and intangible assets (Kamrul et al., 2020; Abdo Tabrizi, 1997). In recent years, there have been debates about the growth in public expenses, financing for them and the effect they have on the economy. The variety of sources for financing the public costs can affect growth in different ways (Syedah et al., 2020). But the main question is; which source of financing has the least deviation and the most adaptation to economic conditions? This

question has attracted a lot of attention in recent years. However, no consensus has been reached on the relative importance of the different funding sources. Based on the study by Sterley et al. (2007), it is expected that the appropriate financial strategy among countries depends upon the volume of revenues, the level and composition of expenditures, the debt, natural resources, public institutions and a wide range of other special characteristics of each country. Therefore, dependent upon the unique conditions of each country, applying various methods of financing could have different effects on the economic growth of countries. This is more important in developing countries; because despite the various ways of providing these funds, today most developing countries have high levels of public debt accumulating annually (Chira, 1992). Moreover, most developing countries still have the needs to build and expand their economic infrastructure. Thus, they have to provide the required funds from national and international sources. However, government revenues in these countries have often been severely curtailed due to the weak efficiency of the tax system and some structural problems of the economy; Therefore, how to provide the funds for the budget deficit is one of the main issues and concerns of governments in developing countries. (Mirzet et al., 2020)

It is noteworthy that so far different methods have been considered to cover the budget deficit in conventional economies, such as domestic and foreign borrowing. In addition, each of these methods has advantages and disadvantages. Thus, to select the best method involves its consistency with special economic circumstances. One of the most common ways for governments to cover budget deficit is to issue bonds. Undoubtedly, due to religious considerations, this financing instrument cannot be implemented in the Islamic society. Today, there is a wide range of services and products in the Islamic financial market that can fill the bond gap in financing the budget deficit. One of the efficient instruments is sukuk in a sharia compliant manner in Islamic financial markets. The purpose of this research is to examine the most suitable application (flexibility) of Islamic securities for financing government expenditures in the conventional budgeting structure.

In this study, a variety of Islamic securities have initially been addressed to examine different costs of the financing methods for governments. The capabilities, costs and efficiency of the securities will be analyzed by the results. It should be noted that the basic prerequisite for application of the financial instruments is that they should be capable of exchange in an active secondary market. This causes the mentioned securities to be offered in the capital market to provide fund for the government budget deficit with the public capital.

Literature review

Today, the government is not only the legal entity governing the country, but it is also an economic unit whose activities play a decisive role in the overall economic direction. In general, the government enforces its policies by legitimizing laws and making restrictions in other sectors of community. Government costs, especially on infrastructure, education and health, can strengthen the economic growth trend.

There are many studies about the relationship between financing government costs and economic growth. This is a significant part of the empirical and theoretical studies involved in identifying components of public expenditures and its relation to economic growth. The studies of Barrow (1990), King and Reblo (1990), Palivus and Yip (1995), Ternovsky (1996), Photagomi et al. (2008), Christie and Rioja (2012), all deal with the effects of different government fund provision methods including taxes, debt instruments such as bonds, and borrowing from the central bank. However, since this study is about Islamic financial instruments to cover the government budget deficit, the research background focuses more on Islamic financing. Nazarpour and Khazaei (2015) in their work about secondary securities markets operations of Islamic securities (Sukuk) examined the formation of an active secondary market for these securities from the perspective of Islamic figh and its existing mechanisms. Moghaddasi (1994), in his research, suggests that a private financial institution buys the goods required by the government, sells them to the government at a higher price on credit, and the government, in return for their purchase, issues securities with certain denomination with maturity. The securities are delivered to the seller and the bondholders can sell them in the secondary market. Salehabadi (2005), in an article about Islamic bonds in Malaysia from the perspective of Imamiyeh figh analyzed the condition of redemption in the sale and in the collusion to examine the validity of the Al-Aineh sale (money sale). He concluded that the kind of sale was invalid according to principles of Imamiyeh sect; thus, from the perspective of Imamiyeh figh, it is not allowed to issue Islamic bonds including Islamic treasury bonds in Malaysia. Nazarpour (2005), in an article explained Istisna securities (construction order) as a tool for monetary policy and discussed the Istisna contract introduced this kind of sukuk as an alternative to bonds. Mousavian et al. (2008) declared the conditions of Jialeh Securities (Sukuk); as a tool for the development of the tourism industry. They initially examined the situation of tourism industry and economic barriers to the development of this industry and also the potential role it can play in the economy; then, they suggested operational models of financing the industry through sukuk. They stated that all types of forgery expressed in the article are correct or correctable according to Imamiyeh jurisprudence. The holder of these securities can either keep them and benefit from their interests or sell them in the secondary market whenever he wants. Farahanifard (2009) studied Salaf Sukuk (futures) using the experiences of other Islamic countries and presented an operational model for issuing futures in accordance with Imamiyeh figh and the regulations of the Iranian capital market, while emphasizing that the primary market transactions of these securities are not a problem. He stated that secondary market transactions, although correctable according to the rules of Sharia and the legal structure of transactions, but it is not accepted according to the views of the figh. To overcome these problems, he suggested solutions such as parallel futures securities, delegation and peace of sale bonds. Mousavian (2009), in an article on Murabaha Sukuk, a suitable sharia compliant financial instrument for the Islamic money and capital market, categorized the Murabaha bonds in four groups: (1) Murabaha bonds for financing, (2) Murabaha bonds to provide liquidity, (3) Murabaha bonds to form the capital of commercial companies, (4) Mortgage bonds to be securities for bank receivables and leasing. The study examined the types of Murabaha bonds in complying with religious norms and economic criteria and indicated that the first and fourth types of them are allowed only according to popular Shiite figh and can be published in the country; the third type, due to coordination with Shiite and Sunni figh is suitable for both domestic and international cases; But the second type is strongly prohibited in jurisprudential view and cannot be published in country. All these kinds of bonds can be published in the secondary market if they do not have a legal problem. Mousavian et al. (2011), in their work on Jurisprudential feasibility of designing Islamic treasury bonds in Islamic financial markets, examined the types of Islamic treasury bonds in accordance with Islamic law. They concluded that the Islamic treasury securities are allowed if government debt to the bank, private and public companies and institutions is made through buying real goods and services, such as contract agreements. Therefore, it was finally said that based on the assumption the governments can issue low-risk short-term securities called Islamic treasury bills.

There was no study to introduce the most applicable financial instruments among all types of the Islamic financial instruments; this study is the first to analyze all Islamic financing tools and suggest the best for different types of government expenditures. The main purpose of this research is to introduce those Islamic securities that are used to finance government expenditures; an issue that has not been investigated so far. All the previous studies have often introduced an Islamic financial instrument and discussed the jurisprudential and legal aspects of the bonds. The present study seeks to fill this fundamental gap and to use the results of previous studies to introduce the most applicable Islamic financial instruments (Sukuk) with optimal potential of financing in Islamic markets usin to provide the needs of the government and also make a ranking of the needs in terms of ease of financing by these bonds.

Contribution of sukuk to Islamic financing

The term sukuk originally derived from the Arabic word Sak and is an Islamic financial instrument that can be an alternative for bonds. The holder of the securities has a common right to certain assets (both financial and physical) or a property to which these bonds have been issued. They show indebtedness of the bond issuer to the holder. Although sukuk is commonly referred to as "Islamic bonds", due to its nature, it is better called "Islamic securities"; the securities of equal denomination representing individual ownership interests in a portfolio of eligible existing or future assets. In the securities the issuer owes the holders a debt and (depending on the terms of the bond) is obliged to pay them interest (the coupon) or to repay the same fund at a later date, termed the maturity date.

According to AAOIFI (Accounting and Auditing Organization of Islamic Financial Institutions) defines sukuk as securities of equal denomination representing individual ownership interests in a portfolio of eligible existing or future assets and indicate the payment of the nominal amount by the buyer to the issuer and the holder is the owner of one or a set of assets, the benefits of an asset, the beneficiary of a particular project or investment activity (Pahlavan and Razavi, 2007). In Imamiyeh figh, sukuk can be published in a transaction and contract such as the contract of istisna as a means of paying funds, and after publication, it indicates the responsibility of the publisher (Nazarpour and Khazaei, 2010). We can now see an increasing use of sukuk in world markets, so that some western countries, in order to attract the resources of Islamic countries, issue sukuk, which does not have any suspicion and use it for their investment projects. Although the volume of these bonds was small at first, they expanded rapidly in economic systems. It should be noted that the figures mentioned in Figure (1) are only related to sukuk issued in international markets. Significant figures can be seen if the sukuk issued in the domestic markets of the countries. (Table 1)

Table 1: kinds of sukuk corporate, quasi-sovereign, international sovereign financial institution (in million USD)

	Quasi-sovereign	Financial institution sukuk	Sovereign sukuk	Corporate sukuk
2001-2009	5486	1933	8939	28440
2007				
2008				
2009	1016	*	3050	1167
2010				
2008-2010	2000	*	4839	5871
2011				
2012				
2009-2012	7672	*	14667	18278
2013				
1014				
2013-2014	17162	*	15508	17026
2015	9060	*	3803	8017
2016	15706	3775	8450	3278
2010-2016	51934	19273	36917	27889
2017	14055	2618	18100	2875
2018	12719	4287	9222	6760

Source: IIFM Sukuk Database

The growth of Sukuk market in recent years is mainly resulted from its role in creating and expanding investment in profitable economic projects. This is because of the fact that the provision of appropriate financial instruments for investment can promote economic growth and, on the other hand, it can lead to the expansion of Islamic financial markets; two necessary and vital factors for development of Islamic societies. In addition, the Sukuk can be used as a tool to control liquidity and to implement expansionary and contractionary monetary policies.

Another function of the Sukuk is application of these financial instruments to finance the government budget deficit. If the securities are used for this purpose, they can be helpful to reduce the issuance of money (borrowing from the central bank) as financing tool for the government budget deficit. Thus, it can help to avoid expansion of the monetary base and its subsequent negative impacts on inflation and other economic problems. In general, sukuk can be divided into two general categories: non-profit sukuk and for-profit sukuk.

The issuance of non-profit sukuk, e.g., consecration or non-profit prest, is only with benevolent intentions and the issuers and buyers of these bonds, by owning these bonds for a certain period of time, just want to do charitable deeds. Thus, these kinds of securities cannot be considered as a suitable financing tool for the government. The for-profit sukuk can be divided as follows:

i: sukuk based on trading Debt: A group of Islamic securities such as Istisna, Murabaha and Islamic treasury bonds are designed for return in such a way that they are sold in initial issuance in a price lower than the nominal price labeled on. Thus, the owner of those bonds achieves a certain profit, within a certain period of time, which is the difference between the purchased price and the nominal price at maturity. ii: sukuk based on trading assets: Trading of this type of Islamic securities in the secondary market is based on the purchase and sale of assets. The securities are including rent on the provision of ownership, participation, Mudaraba, and cooperation in farming and orchard. The yield of these bonds can be a fixed rate per month or variable profits depending on the type of contract in which they are used.

iii: sukuk based on trading profit: The example of this group is profit sukuk. The owners of these bonds share in the benefits of using an asset.

iv:Sukuk based on buying and selling future assets: The buyer of these bonds (futures sukuk) will be actually the owner of the assets that are to be built and delivered to him in the future.

Due to the flexibility of sukuk for financing a variety of economic and development projects, these bonds can be used as a necessary instrument for financial support in various economic sectors of society, including industry, agriculture and services. The securities can meet the financial needs of the government in these sectors. However, it is required to develop the theoretical efforts of researchers in this field, because the efforts can identify the functions and economic issues of the bonds and design a large number of the securities to cover those functions and fill the gap in the issuance of the bonds.

Analysis

- **Islamic Treasury bond**

Islamic Treasury bills are financial instruments based on government debt to the banking system, stakeholders and resource providers. The securities are usually issued by the General Treasury of the Ministry of Economic Affairs and Finance. The government can finance its bonds by signing contracts related to real exchanges (Bidabad and Alhayarifard, 2010). The government (ministries and state-owned companies) can make long term bargains with true or legal persons for commercial transactions such as purchase of goods and services, construction of development projects, financing of current expenses, and payment of previous debts to other institutions and enterprises. In the long-term trade, the government, instead of paying conventional debt securities to them, can deliver them standardized debt documents called Islamic treasury bonds. The parties received the treasury bonds instead of conventional debt documents can wait until maturity and gain the nominal amount or, in case they need cash, they can sell the securities on the stock exchange or other secondary markets in an agreed price depending on the remaining period until maturity.

- **Istisna**

An istisna or contract for construction is a contract between two persons, whether true or legal, for building a particular good or execution of a project with specific characteristics in the future. The constructor is obliged to receive in exchange for agreed amounts in cash or in installments, proportional to the physical progress of the work or even independent of it, based on short-term or long-term schedule (for example one to ten years) to purchase the raw materials and goods needed to implementation of the project. The party is required to deliver the desired product or project to the customer (holders of the bonds) at the specified time, and the customer will receive it if the project fully complies with the specifications declared in the contract (Komijani and Nazarpour, 2007).

Istisna sukuk as the certificates of equal denomination are indicative of the fact that after completion of the underwriting operation the buyer paid the nominal value to the publisher and show indebtedness of the bond issuer to the holders. Istisna sukuk has a function similar to Islamic bonds with zero coupons. Although it does not receive any interest payments or coupons, the interest rate is hidden in the difference between the nominal price of the bond and its discounted value. Islamic bonds are designed in the form of a sale contract (Salehabadi, 2006). The istisna resembles redemption agreements in that an investor as the owner of the securities sells the bonds to the other party by transaction and at the same time agrees to repurchase them later at a fixed or higher price (Hall, 2005). In istisna, the issuer calculates the present value of the construction costs and determines the future value of the construction contract based on the delay in payment until the due date. Therefore, in most types of Istisna Sukuk, the buyer knows that he will receive the nominal value at the time of maturity, and this value is more than that he has bought from the market or the price he has been treated according to that. For this reason, istisna sukuk can be considered similar to redemption agreements (Nazarpour and Khazaei, 2012). The buyers of the bonds have merely purchased the debt, which is the property of the manufacturer or seller under the contract, but they do not own the design or the goods in question. Due to the nature of Istisna securities, they can meet the government's financial needs for the construction of new development projects as well as the completion of under construction projects. On the other hand, if the government needs to provide capital assets of special characteristics, it can order the construction of those assets to contractors and finance its construction costs.

- **Murabaha**

Due to the differences between the types of Murabaha bonds, it is hard to give a comprehensive and accurate definition of these securities. In general, it can be said that Murabaha bonds are securities whose holders are the common owners of financial (religious) property that has been obtained under the Murabaha contract. These bonds have a fixed yield and can be sold in the secondary market (Monetary Banking Research Institute, 2018). Murabaha securities are approved by Shiite figh and can be generally divided into two categories:

i: Murabaha Asset Purchase Bonds: In this type, the founder chooses or establishes a financial institution for his own financing with a special purpose called intermediary. The intermediary institute collects the funds of financial investors (people) by issuing Murabaha bonds through financing institute and on their behalf buy the goods required by the founder from the producer in cash and sells them in higher price on credit to the founder. The founder is required to deliver the commodity value to the bondholders through the financing institute at a given maturity. Holders of bonds can either wait until maturity and gain the Murabaha profits or sell their bonds in the secondary market before maturity.

ii: Murabaha mortgage bonds: In this method, the founder who has transferred the assets in the form of Murabaha (installment sale) mortgage to enterprises and households can gain his resources by converting the receivables from Murabaha facilities into securities. For this purpose, it establishes an intermediary institute to collect investor’s funds by issuing Murabaha bonds.

According to the definitions of the two types of bonds, we can only consider the issuance of Murabaha bonds to purchase assets for financing government expenditures; Because Murabaha mortgage bonds can just be used when the government, in the position of the founder of the bonds, asks someone to issue the bonds in order to become a liquidator of its claims. However, this kind of murabaha mortgage bonds for financing government expenditures is excluded from the analysis of this research.

- **Ijarah providing ownership**

Ijarah bonds are securities in which the holder jointly owns a part of the property that has been transferred under the lease agreement (Mousavian and Farahanifard, 2014). The method of working in leases is that the financial institution, after obtaining the necessary license, publishes the securities under the title of leases and collects the necessary resources by handing them over to the people. Then, using those resources, he buys durable capital and consumer goods and lends them to the applicants with a lease agreement. He collects their rent on the prescribed receipts and gives it to the bondholders as a profit (Mojtahed and Hassanzadeh, 2005).

Due to the nature of the lease bonds, these bonds can be used to finance the purchase of capital assets required by the government. In this way, the financial institution issuing the lease bonds can use the resources obtained from the transfer of the bonds to purchase the capital assets required by the ministries, institutions, and companies affiliated with the government and municipalities in the form of a lease contract. The assets are including land, buildings, schools, universities, airplanes, ships, dams, highways, parks, and etc.

- **Farming**

Farming sukuk are the common ownership bonds indicating that the holders of the bonds have certain arable lands considered for cultivation based on the farming contract. In the process of issuing the bonds, a legal entity such as the Ministry of Agriculture after identified suitable agricultural lands through initial studies establishes a special financial institution to obtain the needed funds to cover the costs of purchasing and preparation of the lands. Then, the entity issues the farming bonds and distributes them amongst the applicants through the investment bank. Then, those lands are bought and prepared for agriculture, and then the farms are given by a contract to the farmers without land for cultivation activities. At the end of the crop year, the crops obtained according to the contract are sold in market by the financial institution and the profits are divided among the bondholders proportional to their shares. This procedure is repeated every year until the financial institution is dissolved (Mousavian, 2016). As it is clear from the nature of these bonds, by issuing farming bonds, the government can provide the financial resources required to develop the agricultural sector and consumer goods of the community.

- **Mosaqat**

Orchard sukuk (Mosaqat) are the common ownership bond indicating that the holders of the bonds own certain gardens or orchards that have been assigned to the mosaqat contract for gardening. The issuance process in these securities is very similar to farming sukuk. In these papers, a legal entity active in the agricultural sector, with initial studies and identification of suitable horticultural lands, establishes a special financial institution, then obtains the necessary licenses, commensurate with, publishes mosaqat securities, proportional to purchase price and preparation costs of the garden, and sell the bonds to applicants by an investment bank. Then, the issuer buys the land and prepares it for gardening, then lends the garden to the gardeners under a contract to work on it, and at the end, gains the products according to the contract. After receiving the bondholders' share of the product, the financial institute sells them in the market and distributes the profits among the bondholders. This process is repeated every year until the financial institution is dissolved. Accordingly, the issuance of masaqat securities can provide the financial resources needed by the government to prosper the agricultural sector and provide the consumer goods needed in society.

- **Mudaraba**

Mudaraba bonds are the securities designed based on the Mudaraba contract. The issuer of Mudaraba bonds collects the applicants' money by issuing the bonds, uses the money in a profitable (commercial) economic activity. At the end of each bargain or at the end of each financial period, the profits are given to the bondholders based on the ratios written on the documents. Holders of the securities are the owner and issuer of the securities is the agent of the Mudaraba contract.

Mudaraba bonds can just be originated from the Mudaraba contract. There is a difference between Shiite and Sunni jurists in explaining the scope of the contract. According to popular Shiite jurists, Mudaraba is dedicated to trade and commerce and does not include other economic activities, such as agriculture, animal husbandry and industry. On the other hand, some Shiite jurists and well-known late Sunni jurists believe in the development of the realm of Mudaraba in all economic sectors (Bani Hashemi 1999). Therefore, if the bonds are to be published in a country like Iran and sold to the public, they must inevitably be in the realm of trade and commerce and not in other economic sectors. For those economic sections, participation bonds, farms, mosaqat or other Islamic securities can be used for financing (Mousavian 2007). Therefore, these bonds can only be effective in purchasing government consuming goods and capital assets, especially by imports.

- **Jialah**

Jialah bonds are documents indicating common ownership of assets (work or services) that have been committed and delivered under a Jialah contract. At the end of the trade (the subject of the Jialah contract), the bondholders will be the shared owners of the result of the trade. The result of the action may be service or physical property (Mousavian et al. 2008). Accordingly, through the issuance of Jialah bonds, it is possible to finance new development projects, complete under construction development projects, and purchase (contract) services. Within this framework, the government can, in the form of a Jialah contract, entrust the performance of an operation that may be construction, repair, or performance of a service to a contractor.

- **Benefit**

The financial instrument of benefit sukuk are securities representing the holder's ownership of a certain amount of services or future benefits from a durable asset transferred to him in return for a certain value of money. Some of the examples are including the certificates of the right to stay in a certain hotel for a given day, the right to use university educational services for a certain semester or year, the right to use a flight to a specific destination and the right to use Hajj services for a given year (Habibian, 2005). The government sometimes needs liquidity and might prefer to assign parts of the future benefits of its durable assets. The Islamic bonds can be utilized for this purpose, that is, the government issues bonds for a portion of its property benefits and hands them over to applicants for a determined value. The holders of the securities can either wait till the appointed time to benefit from the asset or they can sell them to others in an agreed price before the due date. Therefore, the necessary financial funds can be provided for the implementation of new development projects and the completion of under construction projects, and in return, the right to use the mentioned assets can be assigned to the holders for a certain period.

- **Salaf**

Some governments employ forward sale of products and raw materials internationally to make up for the budget deficit; though this decision transfers some of the national added value to foreign countries; especially when the government needs financing due to severe financial needs and also due to the special political and economic situation in low price. In these cases, the government can sell products or raw materials to the people by issuing futures bonds. Then, at the maturity, the authority on behalf of the bondholders, gives the products or raw materials sold in cash in the world markets to the bondholders. In this way, the government budget deficit requirements are met and the difference between the price of cash and futures are given to the people of the country in the form of interests on futures. Accordingly, none of the costs incurred by the government can be financed through the issuance of these bonds.

Table 2: financing construction (CPs) projects by sukuk instruments

Construction projects / Sukuk		Execution of new CPs	Finishing the under CPs	Supply goods	Current expenses	Buying services	Paying off finished projects	Total
Trade of debt	Islamic treasury bonds	✓	✓	✓	✓	✓	✓	6
	Istisna	✓	✓	✓	-	-	-	3
Trade of assets	Lease providing ownership	✓	✓	✓	-	-	-	3
	Farming	-	-	✓	-	-	-	1
	Orchard	-	-	✓	-	-	-	1
	Mudarabah	-	-	✓	-	-	-	1
	Cooperation	✓	✓	-	-	-	-	2
	Murabaha	-	-	✓	-	-	-	1
	Jialeh	✓	✓	-	-	✓	-	3
Trade of profit	Profit	✓	✓	-	-	-	-	2
Futures	Salaf	-	-	-	-	-	-	0

- **Musharikah**

Participation bonds (Musharikaha) as the securities of equal denomination are usually applied to accumulate the necessary funds to launch new projects, develop existing projects or finance companies based on the company contract. The bondholders are owners of the plan and its assets proportional to their shares of the partnership. Thus, by issuing these bonds, the government can finance the necessary expenses for the implementation of new projects or completion of under construction projects. The discussions argued here can be summarized in Table (2). According to the table, Islamic treasury bonds have the most flexibility among other types of Islamic securities. In other words, all the financial needs of the government to compensate for the budget deficit can be financed through these bonds. After these papers, Istisna and Jialah bonds have the highest degree of flexibility. Finally, none of the costs can be financed through futures. The supply of goods required by the government is easily financed by various types of Islamic securities. The financial resources needed to implement new development projects and complete under construction projects are more accessible than other costs. In other words, the government has more financial instruments to finance these costs and faced with fewer restrictions.

Financing Government Expenditures

- **types of government expenditures and financing methods in conventional budgeting**

Exploring the government budget deficit in Iran and evaluating the financing methods since 1997 to 2016, we can understand that budget deficit financing via Islamic financial markets with a high degree of flexibility is able to reduce the negative effects of the budget deficit. According to the definition of the public budget of the government, it is presented in two parts: public revenues and payments. The general revenue sector includes revenues from taxes, oil and other income, and the payments sector includes current and development credits.

The difference between public revenues and payments in the form of revenue deficits compared to the payments is listed in the revenue section. In terms of accounting, the budget, like any other balance statement, always has to be in balance; but economically, government resources and expenditures may create concepts such as budget deficits or budget surpluses that can be analyzed from a variety of perspectives. In general, government resources come from tax revenues, the sale of assets and wealth (oil revenue), and the creation of debt (liability). On the other hand, government expenditures are made in three main forms of consumption expenditures (current and development), investment and debt repayments (Jafari Samimi et al., 2006).

- **The degree to which the government needs monetary and financial markets in budgeting**

A: Execution of new construction projects and completion of under construction projects:

Organizing new development projects has always been on the agenda of the government and the Islamic Consultative Assembly. It has been seriously pursued since the early five-year development plans in economic, social and cultural aspects. For example, we can refer to paragraph (b) of Article (5) of the Second Development Plan Act, Article (62) of the Third Plan Act and Article (32) of the Fourth Plan Act and Article (20) of the Sixth Development Plan Act. In the Article 215 of the Fifth Economic, Social and Cultural Development Plan Act, we can see a special attention paid to the issue of organizing new projects, so that the start of new projects during this program is dependent upon fulfillment of two conditions: "Approval of technical and economic feasibility studies with financial and environmental attention to passive defense" and "accurate estimation and assurance of providing required financial resources" (Vice President for Strategic Planning and Supervision). Therefore, a logical relationship between the number of ongoing construction projects and the amount of funds required is a necessary prerequisite for the implementation of the planned projects. According to the report of the Vice President for Strategic Planning and Supervision, during 2018, 72510 under construction development projects were being implemented at the national and province levels. By comparing the allocation of funds for ownership of capital assets via the Treasury bonds budget in the first six months compared with the first six months of 2017, we can see a growth of about 574 percent. (Figure 1)

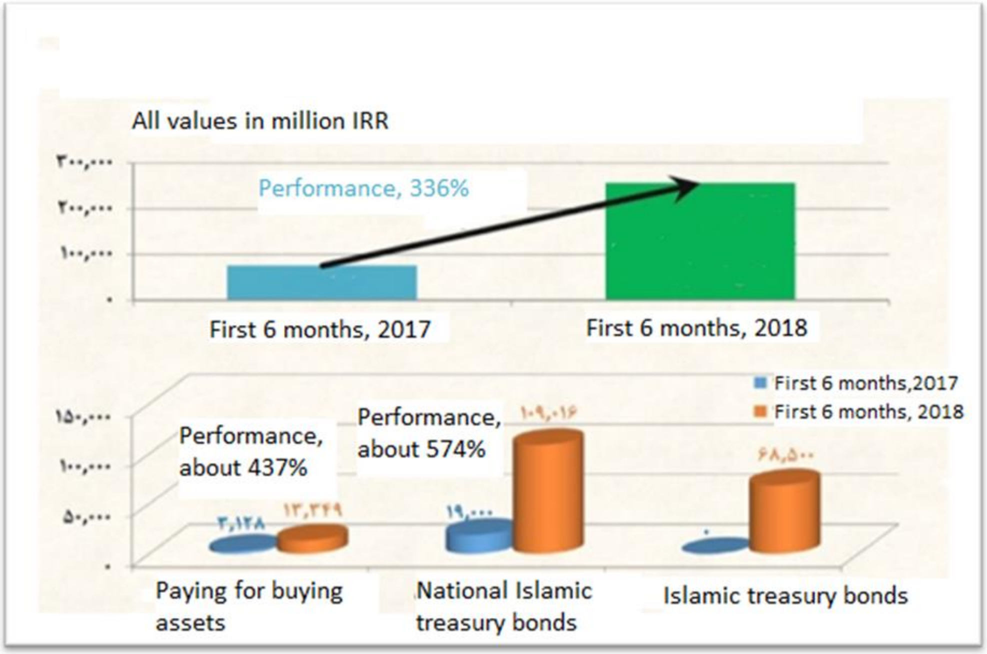

Figure 1: the allocation of funds in budget for ownership of capital assets in the first 6 months of 2017 and 2018

As it can be seen in Figure (2), the value of funds required for development projects has increased over the years, but according to the chart statistics, the government is not able to provide all the resources for implementation of the projects. It can be said that a significant part of that cannot be provided by the standard budget. According to the report of the General Treasury, the amount of Treasury payment for providing the credits was 35% of the approved values. (Figure 2)

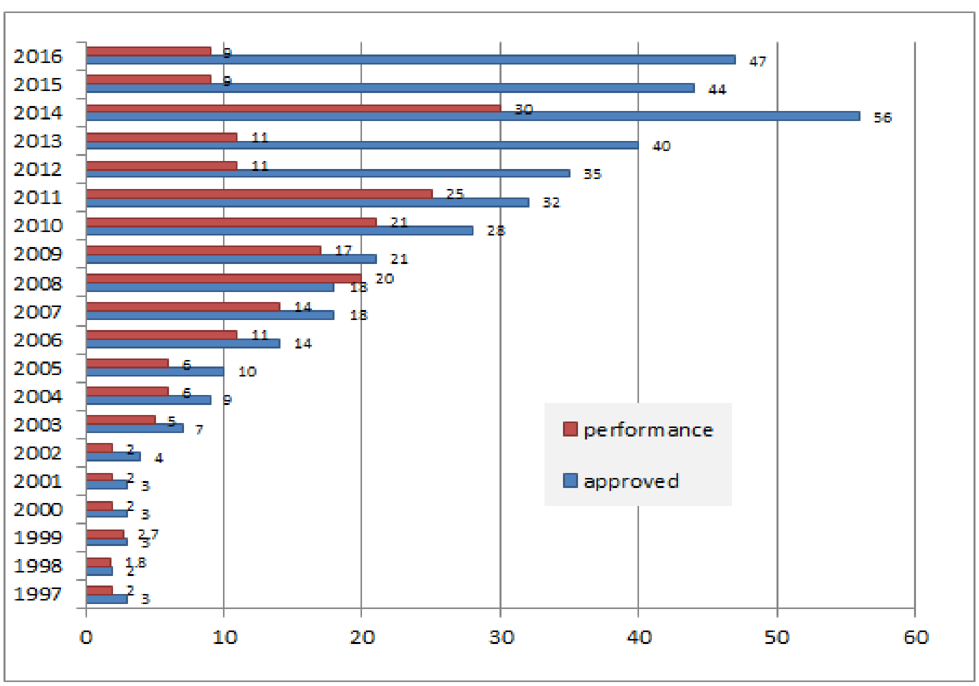

Figure 2: a comparison of the approved values for development projects in budget and government performance

It should be noted that the financing the credits can just be applied to loans approved to be funded by public revenue. Credits from other sources can be spent by the authorities proportional to the realization of the revenue forecasts. In 2018, the proportions of public affairs in the credits are 0.9% and defense is 1.6%, health is 1.6% and social welfare is 0.1%. It is estimated that 4453 thousand billion IRR have been estimated for the implementation of 5892 construction projects in progress and their operations; a significant value of these costs have been provided by using Islamic financial instruments.

Table 3: implantation of new development projects and those in progress

Applicable contracts	Profit	Jialah	Participation	Ijarah providing ownership	Istisna	Islamic treasury bonds
Sit financial instruments	✓	✓	✓	✓	✓	✓

B: financing costs of consumption and capital assets

The government, in one hand, needs to provide a variety of goods for its executive affairs and, on the other hand, in most cases due to the budget deficit and lack of sufficient resources, it is not able to provide the necessary money in cash. In these cases, the government can issue various types of sukuk at various maturities.

Table 4: financing costs of consumption and capital assets

Applicable contracts	Murabahah	Orchard	Farming	Participation	Ijarah providing ownership	Istisna	Islamic treasury bonds
Seven instrument	✓	✓	✓	✓	✓	✓	✓

C: Purchasing (contracting) services

In order to pursue its development goals, the government sometimes requires planning for development projects and performing certain services. But the government is not able to do this directly when faced with a budget deficit. Therefore, in such cases, the government assigns these executions to other private enterprises and issues Islamic securities in return for its debts. In such cases, the government, despite its high executive power, sometimes refuses to undertake some of the plans and projects directly. The reasons for this decision are including insufficient cash, lack of specialized personnel in the executive body of the government, the need for outsourcing, and so on. Therefore, the government requests those who qualify to execute the aforementioned plans and pays for it in return. In this situation, the government achieves its goals through special contracts, and since it does not currently have the necessary cash to make its payments, it provides its resources through the capital market.

Table 5: Purchasing (contracting) services

Applicable contracts	Jialah	Islamic treasury bonds
Two instruments	✓	✓

D: Current expenses (cash)

The government occasionally faces a budget deficit for liquidity. For example, the government does not have the necessary cash resources to pay the salaries of the employees or parts of payables are nearly due and the government would not have sufficient resources to repay. In such a deficit, the government is in serious need for cash. For these problems, treasury bonds can be appropriate choice to meet the financial requirements.

E: funding retarded liabilities

One of the growing problems for business owners in the Iranian economy is the liabilities must be received from the government. The public sector buys goods and services to meet its needs in credit. Development projects are one of the activities that have been severely affected by the public debt. As the government and public sector institutions are the largest employers of the development and economic projects in Iran, remarkable financial commitments have been made in the public sector to the private sector. Financial chaos in the public sector and non-timely payment of private sector have numerous and bad consequences for business owners. For this kind of funding, Islamic treasury bonds instrument can be an applicable alternative for the expenditures.

Conclusion

According to the analyses argued in this study, four key findings can be suggested about the stated problems. The arguments have indicated that the most appropriate method to cover the government budget deficit is to issue bonds, but, according to religious considerations, the financial instrument is not allowed in Islamic society. Hence, a wide range of alternatives, Sukuk, have been introduced in the Islamic financial market, to fill the bond gap in financing the government budget deficit. According to the discussions in this research, the government expenditures can be divided as (1) implementation of new development projects, (2) completion of under construction development projects, (3) providing funds for consumption and ownership of capital assets, (4) current expenses, (5) Purchase of services, and (6) debts to private sector for previously completed projects. The results of this research have also indicated that Islamic Treasury bond are the most desirable among other types of Islamic securities. In other words, all the financial needs of the government to compensate for the budget deficit can be financed through these bonds. Following these securities, Istisna and Jialah bonds have the highest degree of desirability. Other types of securities are next in line. Finally, none of the costs can be financed through futures bonds in the Islamic society. Expenses related to the purchase of goods required by the government can be financed more easily. In the next ranks, there are the costs related to the implementation of new development projects and those for completing under construction projects.

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