



The Role of Sukuk and Mortgages in Financing Azad University Projects

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Abstract

The existence of various financial instruments in the securities market brings more motivation and participation of people in financing long-term economic activities. There are different ways to finance business activities that different organizations can use to finance them. Therefore, the purpose of this study is to investigate the role of sukuk and mortgage securities in financing Azad university projects. The statistical population is all employees in the field of headquarters, financial management, credit management, investment department, managers and deputies of the Islamic Azad University, which in the time frame of the research in 2020 was conducted by a probabilistic method and was estimated at 145 people. In order to collect data, a questionnaire was used which confirmed the face validity of the case and 93.9% reliability and was analyzed by SPSS and PLS software. According to the opinions of experts, the results of rank and importance about sukuk instruments and mortgages as well as the results of the structural model of sukuk have the highest direct effect and the futures contract has the lowest effect on the financing of Islamic Azad University development projects. The results of research hypotheses indicate the impact and significant role of Sukuk and mortgage instruments in the development projects of Islamic Azad University.

Keywords: Development Projects, Islamic Azad University, Mortgages, Sukuk Instruments.

Introduction

Expanding and complexity of economic activities and rapid and increasing transformation of commercial transactions in today's world, whether domestic or international trade and the need for companies to maintain capacity by developing activities and plans have investing to maintain or increase

competitiveness in the field. Domestic and global companies have increased the need for financial resources of these companies, and the ability of the company to determine the potential financial resources to prepare investments and prepare appropriate financial plans, is one of the main factors for the company's growth and development. In such a situation, it is more necessary than

ever to use the techniques of financial managers in managing the affairs of companies. Financial leverage has been introduced as a determinant of a company's financial ability and it is believed that financial leverage increases the degree of financial distress. Developing the right financial policy strengthens the company's ability to achieve strategic goals. Obviously, for companies, long-term success requires the production of higher quality goods, lower costs and sales at reasonable prices, which requires the production of financial resources at an acceptable cost. In most countries of the world, the capital market is considered as one of the most important tools for achieving economic growth and development. Although Iran is a country with many visible and hidden capabilities, most Iranian companies suffer from a lack of capital. In addition, the structure of the country's capital market in terms of equipping and allocating financial resources is weak and does not operate effectively and efficiently. Investors have become an important issue due to the public awareness of financing methods and financial decision-making processes. Numerous factors increase the amount of capital required by companies. One of the most important factors is the implementation of projects and development plans. In the competition scene, successful companies are successful that in addition to continuing their activities and keeping their capital from the market, also take steps towards growth and development.

Problem Statement

The existence of various financial instruments in the securities market brings more motivation and participation of people in financing long-term economic activities. The variety of financial instruments attracts different groups in terms of the combination of risk and return, the nature of profit and the way of risk sharing. However, a different approach to financial instruments is not a solution without identifying the types and contexts of their use. There are different ways to finance business activities that different organizations can use to finance them. The best form of financing long-term investments is realized from the savings and liquidity of the private sector and through the stock exchange. The stock market can play an important role in directing small savings to productive investments, attracting stagnant savings in production, reforming the structure of economic sectors, increasing national income, increasing government revenue, and so on. Achieving these goals requires the expansion of the securities market, which in turn depends on the diversification of financial instruments. Existence of diversity in securities leads to the efficiency of the capital market and the optimal allocation of capital and provides the possibility of participation of a wide range of members of society in investing (Soroush, 2008).

Resource consumption is their use in various economic activities of society, both commercial and productive. In the conventional system of the Azad University,



the main uses of resources are credit and investment participation. There are different ways to finance business activities that different free universities can use to finance them; and one of the basic preconditions for success in business is access to sufficient financial resources, proper management of financial resources and their optimal use. Financing methods are divided into two general types (1) debt-based and (2) capital-based. For financing, it is necessary to know the exact sources of financial resources and their characteristics, as well as to know the required financial expenditures.

Shareholders' contributions to the promotion of consumption project activities and profits are also fully and in the future distributed among shareholders (Ismailzadeh & Amiri, 2015).

Undoubtedly, survival and continuity of activity in the current complex and competitive business environment requires profitable activities such as investing in projects, so that companies invest in projects by considering various factors such as risk and expected rate of return. How companies provide the financial resources needed to invest in these activities shapes the capital structure of companies. The ability of the company to determine the potential financial resources, both internal and external, to be used in investments and to prepare appropriate financial plans is the main factors for the growth and development of a company. Therefore, financing decisions are one of the main decision-making areas of companies' financial managers (Kashanipour & Mo'meni Yansari, 2010). Over the past two decades, market liberalization has

emerged as a major issue affecting international business. After years of government intervention in the economy, a general consensus was reached on the greater role of the private sector in achieving dynamic economic growth. As a result, most developing countries have put in place market reform programs aimed at reviving sustainable economic development and growth. The reform agenda focused on four key factors: liberalizing foreign direct investment, a regulatory framework, improving physical infrastructure, and economic stability, including reducing deficits, and restructuring public and private corporations. One of the many reasons for the policy change is that the debt crisis in the early 1980s led to a reduction in total borrowing capital available to developing countries and, for some heavily indebted developing countries, to an absolute shortage of new borrowing capital (Faraji & Farahani, 2011).

Islamic debt instruments usually referred to sukuk. Sukuk is one of the most important financial instruments in accordance with Islamic law, which provides an alternative source of investment, especially for giant companies and powerful entities compared to conventional bonds. Sukuk is an innovative debt security that is similar to conventional bonds in terms of cash flow and risk. The past decade has seen an unprecedented rise for Sukuk, especially before the global financial crisis. In recent years, the Sukuk market has witnessed a growth rate of approximately 10% -15% to reach US \$ 170 billion in outstanding assets at the end of the third quarter of 2011

(Godlewski Turk Ariss, 2011). This market accounts for approximately 14.3% of global Islamic financial assets. The rise of Islamic banking and the financial industry in modern economies, especially in the Persian Gulf and some Southeast Asian governments, reflects an attempt to build a quasi-independent financial system under the dominant system. This feature has also defined the creation of Islamic capital markets within the dominant conventional markets. An unspoken truth about their experience in sukuk and bonds in the same markets is albeit with separate rules in accordance with Sharia. Irrespective of the basic concepts of Shari'a that underlie the various structures of sukuk, the performance of contracts is generally modeled after conventional bonds. This does not dispel the controversy and myth about the differences between sukuk and conventional bonds. While Miller and others believe in sukuk and their returns, they ridicule conventional bonds, and Work and Vote state that sukuk differs from bonds, especially when one offers a variety of benefits. Considering, that they reduce asset inventory risk (Kusnadi, 2015). In addition, sukuk can be an effective tool for investment. The price behavior of sukuk is different from that of conventional bonds, so if it is placed in an investment portfolio, it reduces the risk due to both diversification and different price behavior. This issue is considered by all investors. Also, sukuk bonds are a suitable and available tool to direct the stray liquidity of the society towards productive investment (Zakaria & Isa, 2013).

After World War II, as demand for housing increased, banks and financial and credit institutions faced high demand for mortgages. Therefore, a lot of effort was made to attract more financial resources and, in this way, to provide more facilities. At that time, the financing of these loans was mainly from deposits. Therefore, the sources of financing of banks were limited to this case. Hence, banks (especially American banks) turned to the capital market and the secondary mortgage market for financing and used new financial instruments to finance them. Mortgage-backed securities were one of the most important of these instruments (Myers, 1977). Mortgage bonds are bonds issued by a issuer to participate in the purchase of a mortgage facility. Mortgage facilities are also bank facilities based on religious assets with a maturity of more than one year, which have been granted for the purchase of land and buildings (Alam et al, 2013). Mortgage bonds are bonds issued by a issuer to participate in the purchase of a mortgage facility. The issuer (intermediary) is any legal entity that issues mortgage bonds in its own name. In this type of bond, the issuer is typically an investment firm. Banks, leasing companies and non-bank financial and credit institutions under the supervision of the Central Bank, which have provided facilities in the form of installment sales contracts, can use this method to finance themselves. Legal entities that finance in this way are called sponsors. The operational process of issuing these bonds is such that first the issuer (Investment Company) collects cash



from the people and buys debt on their behalf. By selling the bonds, the lawyer-client relationship between the issuer and the buyer of the bonds is realized. The issuer, on behalf of the bond buyers, is only allowed to purchase the claims arising from the mortgage facility from the founder (Khazaei et al., 2017).

Based on the above, the present study seeks to investigate the role of sukuk and mortgage bonds in financing free university projects.

Literature Review

(Henke & Burghof, 1998) studied Credit and Derivatives Security: Financial Instruments and Credit Risk Management List of Intermediate Market Loans. They believe that in recent years, the development of markets to provide credit security and derivatives has provided new credit risk management tools. In the aforementioned market segment, however, the issues of conflicting choices and problems with moral hazard are quite severe. The potential and successful application of securities and derivatives securities management for credit risk management of the middle market commercial credit list depends on the development of incentive-compatible structures that resolve or at least mitigate conflicting selection issues and ethically risky issues.

(Shao & Yeager, 2007) examined the effects of derivatives on the risk structure, capital, and lending of US banks. Their results suggest that derivatives are useful and flexible tools in banks' risk management

software. Relying on strategy, derivatives allow the bank to reduce or increase the risk by purchasing non-performing backups and generate additional base income by selling non-performing backups.

(Zakaria & Isa, 2013) This researcher examined sukuk, classification and risk of non-payment of debt. He stated that Sukuk is a vital and lasting source of Islamic investment for economic and social development. The sukuk consists of different types - depending on the purpose of each instrument. The growth and acceptance of sukuk has been sustained over the years and around the world. However, the growing number of unpaid sukuk is one of the concerns because it is precisely related to credit risk. The issuance of sukuk still needs to undergo a similar rating process as other bonds. Through this credit rating assessment, on the one hand, sukuk may be seen as a credible instrument of other contractual debts.

(Alam et al, 2013) studied whether Islamic bonds are different from conventional bonds. Evidence from Capital Market Tests They argued that much of the discussion of sukuk on religious law compliance and capital market issues with limited literature focused on the common financial perspective of Islamic bond issues. This study investigated the comparative effect of assets of Sukuk and conventional bonds on inventory returns to the main Islamic financial market.

Fitras & Mahmoudi, (2008) studied sukuk, a suitable tool for bond substitution. The results of this study show that sukuk is a new, tested and suitable tool for the

financing process, both for state-owned companies and non-governmental companies. While Sukuk is a legal, acceptable and efficient tool that can be used in Iran, however, it needs to provide the infrastructure that, in short, includes standardizing the assets used in Sukuk and facilitating their issuance process. Rating sukuk bonds and establishing rating agencies and creating a suitable secondary market for buying and selling sukuk bonds was facilitated their liquidity.

(Masoumi Nia & Shahidi Nasab, 2010) studied the jurisprudential study of derivatives. In fact, this article examines derivatives with a jurisprudential perspective. He concluded that derivatives were invented for risk management; ut traders also use them to make a profit. Derivatives can be divided into four types: specific futures contracts, identical futures contracts, option trades and exchanges. Most experts have considered these tools illegitimate to express the Shari'a ruling. A small group also voted to correct them. In this article, the main reasons of both groups were examined and the necessity of research was that suitable religious ways can be found to further correct various types of futures contracts and options; But tools such as stock index futures, index trading options and common swaps are incorrigible.

(Nazarpour & Sadeghi Fadaki, 2010) studied the jurisprudential and legal nature and profit on account of participation bonds. Some of the rules of the partnership contract are not implemented in the participation bonds, and this issue has caused religious

ambiguities about the legitimacy of the partnership agreement. Despite the fact that the participation papers were designed based on the proposal of the jurists of the Guardian Council; however, there are ambiguities and doubts in its implementation that will be addressed in this research. The research method is analytical-descriptive method using library resources. According to the authors, participation bonds are in the form of a company contract and the profit on account of it has jurisprudential legitimacy.

(Faraji & Farahani, 2011) examined new financing instruments: the use of money loaned without interest (flat), usury, rent and Istisna (construction order) in the banking system. In this article, in order to finance and increase liquidity and reform the structure of banks' balance sheets based on the principles and standards governing Islamic banking, new financing instruments in the form of flat as non-profit instruments and usury bonds, rent, istisna (construction order) It was introduced as a for-profit tool with a certain return and the benefits and implementation process of each tool were described separately for implementation in banks and financial institutions. They argued that the use of financing instruments had many benefits for banks and financial institutions, including increased liquidity, improved risk management, increased diversification of financing sources, increased shareholder wealth, and improved the bank's ability to match the maturity of assets and liabilities. Improving financial ratios and earning money by are playing the role of agent and freeing up the financial



resources of banks in order to provide facilities to profitable sectors, etc.

(Ismailzadeh & Amiri, 2015) examined new financing instruments and ways to implement them in Tejarat Bank. The main purpose of the research was to identify the types of new financing instruments in Tejarat Bank and the statistical population of the research. The study period is from September 2013 to the end of February 2013. In this study, sukuk, mortgage bonds, futures, derivatives, certificates of deposit and participation bonds were selected and reviewed as new financing instruments. To achieve the purpose of the research, a questionnaire was developed and the respondents were asked questions about the effects of new tools and their applicability in Tejarat Bank. Thus, six hypotheses were compiled and the relevant data were collected through a questionnaire and analyzes showed that in the opinion of the respondents, all new banking tools are feasible.

(Khazaei et al., 2017) investigated the effect of financing through debt instruments on the performance of manufacturing enterprises in the country. For this purpose, panel data of 141 manufacturing firms active in the Tehran Stock Exchange in the form of 20 industries during the period 1379-1392 were used. To examine the performance of firms, the variables of total factor productivity, return on assets and sales return have been used. In order to estimate the total productivity of production factors, (Hirtle, 2007) methodology was used and then based on the approach of multilevel panel data, while considering the effects of industry

level (second level) and separation of oil-related industries (third level). The effect of financing through debt instruments on the performance of firms has been tested. The results indicate the confirmation of the research hypothesis that the positive and significant effect of financing through debt instruments on the performance of manufacturing firms. The results also indicate the negative and significant effect of financing through internal sources (cash flows) on the performance of the companies under review and also the negative and significant effect of implementing the law on targeting subsidies and increasing the exchange rate on the productivity of companies.

Research Hypotheses

As one of the new financing tools, sukuk plays an important role in financing the development projects of Islamic Azad University.

Mortgages as one of the new financing tools have an effective role in financing the development projects of Islamic Azad University.

Methodology

This research is experimental and comparative in the field of behavioral research. The research method is inductive deductive, which means that the theoretical foundations and literature review has been done through library studies, articles and sites by analogy and collecting information and data to test hypotheses in inductive

form. Since the results of this research can be used in the decision-making process, this research is applied in terms of research purpose. The study population in this study is all employees in the field of headquarters, financial management, credit management, investment department, managers and deputies of the Islamic Azad University, which will be in the scope of the research in 2020. Because research on all members of society is time consuming and not cost-effective, the researcher has to take samples. An example is a set of symbols that are selected from a larger section, group, or community so that it identifies the quality and characteristics of that larger section, group, or community, usually denoted by (Hull John, 2005).

Sampling is the process of selecting a sufficient number of members of the statistical community so that by studying the sample group and understanding the characteristics or features of the subjects of the sample group, these characteristics can be reported to members of the statistical community that all staff, financial management, The credit affairs department, the investment department, the directors and deputies of the Islamic Azad University, and they form a very large community, he generalized. In this study, simple random sampling method and Cochran's formula with a limited population of 350 people were used to determine the sample.

$$n = (t^2 pqN) / [(N-1) d^2 + t^2 pq]$$

T: The standard statistic is a normal distribution with a 95% confidence level of 1.96.

N: is the size of the statistical population that represents all members of the statistical population.

P: The probability of success in sampling and q is the probability of failure, which in most cases researchers uses the probable method and declares the amount of p and q in their research to be 0.5.

D: is the probability of measurement error, which usually varies between 0.08 and 0.05, and the researcher changes the value of d depending on whether he or she wants to choose a small or large sample size. In this way, if a small value of d is selected, the sample size will increase and vice versa.

According to the formula, the minimum required sample of 350 people was determined and a questionnaire was distributed and 145 samples of the questionnaire were collected for the test.

Data Gathering Tools

In this research, a questionnaire is used to collect information. A questionnaire is a set of questions by which the researcher obtains basic information from the subject. Questionnaire questions should be formulated in such a way that it is not out of the scope of the subject and provides the most accurate information possible. The questionnaire questions are designed in such a way that the respondents mark the options based on a five-point Likert scale (very low, low, medium, high, and very high).



Table 1. Qualitative traits and numerical values of the questionnaire options

The whole range	I completely disagree	I disagree	No idea	I agree	I quite agree
Numerical value	1	2	3	4	5

The questionnaire, which is used for data collection tools, is distributed in person among the respondents and consists of two parts, the first part is related to personal characteristics and the second part consists of 32 questions, 26 of which are related to the independent variables and its 6 questions are related to the dependent variable (Table 1).

Validity and Reliability of the Questionnaire

In this study, content validity was used to assess the validity of the questionnaire. First, the questions were designed in accordance with the theoretical foundations and then were given to the supervisors, consultants and experts, and after their final approval, the questionnaire was designed as follows. To calculate the reliability, various methods are used. In this study, Cronbach's alpha method was used to determine the reliability of the questionnaire, which was calculated by SPSS software for a set of questions related to each variable. In practice, to calculate the reliability coefficient of

Cronbach's alpha method, first a prototype including 30 pre-test questionnaires was used and then the Cronbach's alpha coefficient was calculated using the obtained data. To calculate the Cronbach's alpha coefficient, we must first calculate the variance of the scores of each questionnaire subset and the total variance. Then we calculate the value of alpha coefficient using the following formula.

$$r_a = \frac{j}{j-1} \left(1 - \frac{\sum s_j^2}{s^2} \right)$$

ra: The reliability coefficient of the whole test

J: Number of questionnaire questions

S_{2j}: The variance of all subjects' answers to the questions

S₂: Variance of total test scores

(Table 2) shows the reliability of each of the research variables based on Cronbach's alpha test.

Table 2. Reliability of the questionnaire questions

Variable	Number of questions	Cronbach's alpha in percent
Sukuk	5	85.09
Mortgages	4	77.07
Future contract	4	84.27
Derivatives	4	79.88
Certificate of deposit	5	85.46
Bonds	4	74.80
The role	6	90.59
Total	32	93.9

Considering the value of Cronbach's coefficient which is more than 0.75, it can be concluded that each of the sub-indices of the questionnaire has good reliability.

Descriptive statistical methods and inferential statistical methods have been used to analyze the data obtained from the sample. In fact, first using SPSS software, each variable is described in the form of tables and statistical indicators, and then data analysis, hypothesis testing and in general to generalize the results from the sample to the statistical community using the equation modeling method. The structure is used by PLS software. Based on the contents of the research hypotheses, analysis

of variance and regression statistical tests are used to analyze the hypotheses.

Results

Description of demographic variables

In this step, we provide explanations about the demographic variables of the research according to the obtained information. In the present study, the collected data were analyzed with 145 research questionnaires, which are described below the relevant information and characteristics of the respondents based on the questions of the first part of the questionnaire.

Gender of respondents

Table 3. Gender frequency distribution of respondents

Gender	Absolute frequency	Frequency
Female	36	24.8
Male	109	75.2
Total	145	100

According to the (Table 3), 109 respondents are male and 36 are female. In terms of

percentage, 75.2% of respondents are male and 24.8% are female.



Age of respondents

Table 4. Frequency distribution of respondents' age

Age	Absolute frequency	Frequency
Below 35	11	7.6
35-40 years old	22	15.2
40-45 years old	53	36.6
Over 45 years old	59	40.7
Total	145	100

According to the (Table 4), 11 respondents are under 35, 22 are 35-40 years old, 53 are

40-45 years old and 59 are over 45 years old.

Education of respondents

Table 5. Frequency distribution of respondents' education

Education	Absolute frequency	Frequency
Bachelor	12	8.3
Masters	79	54.5
Doctorate	54	37.2
Total	145	100

According to the (Table 5), 12 people have a bachelor's degree, 79 people have a master's

degree and 54 respondents have a doctorate degree.

Respondents' Field of Study

Table 6. Frequency distribution of respondents' field of study

Field of study	Absolute frequency	Frequency
Accounting	71	49
Management	47	32.4
Economy	17	11.7
Other	10	6.9
Total	145	100

According to the (Table 6), 71 people are engaged in accounting, 47 people in

management, 17 people in economics and 10 people in other fields.

The job position of the respondents

Table 7. Frequency distribution of respondents' job position

The job position	Absolute frequency	Frequency
Deputy Finance	27	18.6
Financial manager	29	20
Credit Manager	5	3.4
Faculty member	14	9.7
Financial Expert	29	20
Other	41	28.3
Total	145	100

According to the (Table 7), the frequency distribution of the job positions of the respondents includes 27 financial assistants,

29 financial managers, 5 credit managers, 14 university faculty members, 29 financial experts and 41 other job positions.

Respondents' work experience

Table 8. Frequency distribution of respondents' work experience

Resume	Absolute frequency	Frequency
Less than 10 years	16	11
10-20 years	53	36.6
Over 20 years	76	52.4
Total	145	100

According to the (Table 8), 16 respondents have a history of cooperation of less than 10 years, 53 have 10-20 years and 76 have more than 20 years.

Description of research variables

In this step, we provide a description of the statistical sample of the research according to the information obtained:



Table 9. Descriptive statistics of research variables

Variable	Minimum	Maximum	Average	Standard deviation	Skewness	Kurtosis
Sukuk	0	4.40	1.5283	.75890	1.231	3.670
Mortgages	0.25	4.25	1.5603	.79619	1.376	2.585

For example, the average score of the Sukuk variable in terms of the sample is 1.5283 and the standard deviation is 0.7589. Also, the lowest score for the employee Sukuk variable is equal to zero and the highest score is equal to 4.4. On the other hand, the amount of skewness observed is equal to 1.221 and is in the range (2, -2); That is, in terms of skewness, the variable is normal and its distribution is symmetric. Also, its elongation value is 3.67 and it is not in the range (2, -2); This indicates that the variable distribution does not have a normal elongation. In general, the data do not have a normal distribution if the skewness and elongation are not in the range (-2, 2) in (Table 9).

Confirmatory Factor Analysis (CFA)

The most appropriate way to assess the validity of the structure is to use factor analysis. Confirmatory factor analysis is a way to build questionnaires to measure concepts (hidden variables). In confirmatory factor analysis, which aims to confirm the specific factor structure of the researcher, hypotheses about the number of factors are clearly stated and the fit of the desired factor structure in the hypothesis with the covariance structure of the measured variables is tested. In confirmatory factor analysis, the researcher's basic premise is

that each factor is related to a specific subset of variables. The minimum necessary condition for confirmatory factor analysis is that the researcher has a certain assumption about the number of factors in the model before performing the analysis (Fama & French, 2002). Also, path models are models that can be used to explain and predict various phenomena. In the path model, all the main variables are of the observed variables type. There is often more than one internal variable in the path model. Therefore, hidden path variables that are measured using a set of reagents are not present in path models (Kamali, 2002). According to the research method of the third chapter, in the present study, the collected data with 145 research questionnaires were analyzed by factor software PLS No. 3, which is presented below.

Test the hypotheses of confirmatory factor analysis

Preliminary tests of factor analysis assumptions have been performed for the validity and reliability of the questionnaire and model. Typically, sampling adequacy indices, Kaiser-Meyer-Olkin Measure of sampling adequacy (KMO) indices and Bartlett test, are performed using confirmatory factor analysis. Using the two

indicators of Kaiser-Meyer-Olkin (KMO) and Bartlett test, the adequacy of the samples and the appropriateness of using factor analysis for the model were investigated. The general results are shown in the following tables.

Index (KMO)

This test fulfills the first purpose of factor analysis. This test determines whether the variance of the research variables is influenced by the common variance of some latent and fundamental factors. In other words, can we say that the variance of the set of variables is due to a series of hidden and fundamental factors and not all of these variables? The statistical value of this test varies between zero and 1. Therefore, higher values (ie close to 1 and usually values higher than 0.7 indicate that factor analysis is possible for the data in question and the data can be reduced to a series of latent factors. Therefore, lower values This statistic also indicates that it is not possible to perform factor analysis for this data or that the results obtained from factor analysis of this data are not useful. The latter case is especially true for values less than 0.5 and it

is recommended to avoid factor analysis when the KMO test value is less than 0.5.

Bartlett test

Before using the factor analysis method, it should be ensured that the sample size is sufficient for factor analysis. As mentioned earlier, sample size is a determining factor in the accuracy of Nasser clustering with factor analysis technique. One of the methods for examining sample adequacy for factor analysis is to calculate the sample adequacy index. The sample adequacy index has been innovated by Kaiser, Meyer and Ulkin and is therefore represented by the KMO symbol. This index should be above 0.7, but between 0.5 and 0.7 is also acceptable with caution (Fama & French, 2002).

In Bartlett test, the null hypothesis states that the correlation matrix is a single matrix that, if any, is unsuitable for identifying the structure (factor model). If the significance level of the Bartlett test is less than 0.5 (rejecting the null hypothesis), factor analysis is appropriate to identify the structure (factor model). Because the assumption of the correlation matrix is known is rejected.

Table 10. KMO and Bartlett index for sample adequacy

	KMO	0.677
Bartlett pattern	Index level	533.8
	The significance level	0.000



According to the (Table 10), the results show that the level of KMO index is 0.677. As a result, the results of factor analysis are valid for the data and also due to the significance level of 0.000 Bartlett test is less than 0.05. In other words, factor analysis is appropriate to identify the structure (factor model).

Confirmatory factor analysis of research variables

The strength of the relationship between the factor (hidden variable) and the visible variable is indicated by the factor load. The factor load is a value between zero and one. If the factor load is less than 0.3, a weak relationship is considered and ignored. Operating load between 0.3 / 0.6 is acceptable and if it is greater than 0.6 is very desirable. Once the correlation of the variables is identified, a significant test should be performed. To evaluate the significance of the relationship between variables, t-value or t-value is used. Because significance is checked at the error level of 0.05, so if the amount of factor loads observed by the t-value test is calculated less than 1.96, the relationship is not significant and will be displayed in red in the software (Soroush, 2008).

Model fit analysis

To analyze the fit of the first part, ie the fit of the measurement model, three analyzes are performed: index reliability, convergent validity and divergent validity. The

reliability of the index is measured by three criteria: Cronbach's alpha; combined reliability and operating load coefficients. In the third chapter, Cronbach's alpha criterion for research structures was reviewed and their reliability was confirmed. In the following, two other criteria of structural reliability and convergent and divergent validity are examined.

Combined reliability (CR)

Since Cronbach's alpha criterion is a traditional criterion for determining the reliability of the structure, the PLS method uses a more modern criterion than alpha called the composite reliability. This criterion was introduced by (Kashanipour & Mo'meni Yansari, 2010) and its advantage over Cronbach's alpha is that the reliability of structures is calculated not in absolute terms but according to the correlation of their structures with each other. As a result, both of these criteria are used to better measure the reliability of the PLS method. The value of composite reliability (CR) of a structure is obtained from a ratio in which the variance between a structure and its indices and in the denominator of the fraction, the variance of the structure with its indices plus the amount of measurement error. If the value for each structure is above 0.7, it indicates the appropriate internal stability for the measurement models and a value less than 0.6 indicates the lack of reliability (Faraji & Farahani, 2011). (Table 11) shows the output of PLS Graph software for calculating CR.

Table 11. Combined reliability of research variables

Variable	Minimum
Sukuk	0.891
Mortgages	0.850
Future contract	0.892
Derivatives	0.891
Certificate of deposit	0.893
Bonds	0.927
The role	0.927

As can be seen, the value of composite reliability (CR) for all studied structures is higher than acceptable (0.7).

Average Variance Extracted (AVE)

Convergent validity is the second criterion used to fit measurement models in the PLS method. The extracted mean variance (AVE) criterion represents the mean variance

shared between each structure and its indices. In simpler terms, the extracted mean variance (AVE) indicates the degree of correlation of a structure with its indices that the higher the correlation, the greater the fit. In the case of AVE, the critical value is 0.5; this means that AVE values above 0.5 show acceptable convergent validity (Faraji & Farahani, 2011). (Table 12) shows the output of PLS Graph software for calculating AVE.

Table 12. Convergent validity of research variables

Variable	Minimum
Sukuk	0.624
Mortgages	0.589
Future contract	0.674
Derivatives	0.705
Certificate of deposit	0.628
Bonds	0.471
The role	0.682

According to the results of PLS Graph software for calculating the AVE of structures in (Table 13), it can be concluded that except for the participation papers of all

research structures is more than 0.5 and shows high convergent validity.



Testing hypotheses

Statistical data after collecting the questionnaires, the ratings (very high, high, medium, low, very low) are numbered sequentially and along with general information through the given answers software is tested and examined. After explaining the suitability of the model and

determining that the model has good suitability, the research hypotheses are tested. The basis for confirming and rejecting the hypotheses is to compare the quantity t with 1.96 (the level corresponding to the normal distribution with). Therefore, for values greater than 1.96, the hypothesis will be confirmed and for values less than that, the hypothesis will be rejected in (Figure 1) and (Figure 2).

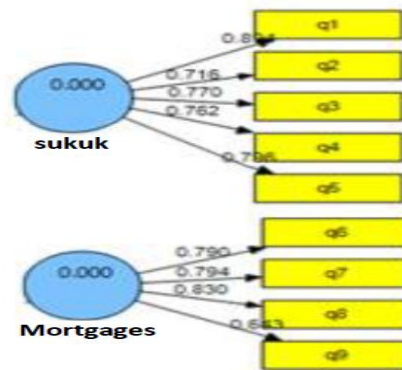


Figure 1. Confirmatory factor analysis of hypothesis research model in standard mode

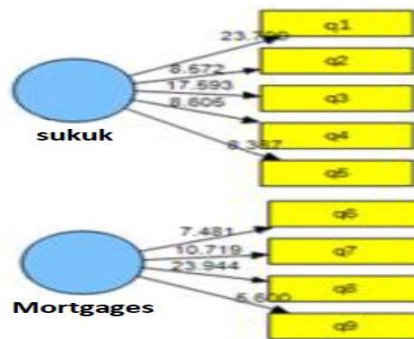


Figure 2. Confirmatory factor analysis of hypothesis research model in a significant way

Table 13. Calculates the direct and indirect effects of model variables on each other

Route checked	Impact coefficient	T-VALUE
Sukuk → Financing the construction projects of Islamic Azad University	0.528	4.438
Mortgages → Financing the construction projects of Islamic Azad University	0.486	2.454

According to the results obtained about new financing instruments in terms of Friedman rankings are important as follows.

Table 14. Friedman ranking test results

Dimensions	Average rating	Rank
Sukuk	3.69	1
Mortgages	3.63	2

According to the results of the (Table 14), the rank and importance of the respondents'

opinions about sukuk and mortgage bonds was showed.

Table 15. Results of the measurement model findings at a significance level of 0.05

Conceptual model assumptions	t Value	Standard coefficient	Result
First: Sukuk as one of the new financing tools has a significant role in financing the development projects of Islamic Azad University.	3.43	0.48	Confirmed
Second: Mortgages as one of the new financing instruments have an effective role in financing the development projects of Islamic Azad University.	2.39	0.35	Confirmed

Hypothesis 1: Based on the information in the (Table 15), Sukuk as one of the new financing instruments has a significant role in financing the development projects of Islamic Azad University. The equivalent of 0.528 is estimated to have a t value above 1.96 (ie 4.438). Thus, this hypothesis is

confirmed. Therefore, Sukuk as one of the new financing tools has a significant role in financing the development projects of Islamic Azad University.

Hypothesis 2: Based on the information in the (Table 15), mortgage bonds as one of the



new financing instruments have an effective role in financing the development projects of Islamic Azad University. Equivalent was estimated 0.469 with a t value above 1.96 (2.454). Therefore, this hypothesis is confirmed. Accordingly, mortgage bonds as one of the new financing instruments have an effective role in financing the development projects of Islamic Azad University.

Discussion

In this research, it is tested using factor analysis to answer the research question based on the results of research hypotheses. Analysis of research data has been done using appropriate statistical software and decisions have been made based on its rules.

Table 16. Frequency of research components questions

Variable	Questions	Spectrum of comments					Result
		I quite agree	I agree	No idea	I disagree	I completely disagree	
Sukuk	1	24	54	48	13	6	145
	2	16	51	50	20	8	145
	3	8	62	47	20	8	145
	4	16	83	34	6	6	145
	5	8	83	44	5	5	145
Mortgage	1	24	78	26	10	7	145
	2	3	76	36	21	9	145
	3	12	60	36	27	10	145
	4	16	80	23	17	9	145

According to the results of the (Table 16), the questions of the research components were assessed and most of the respondents answered yes to the option. Therefore, according to the above results, it can be said that new financing tools and executive strategies play an important role in construction projects of Islamic Azad University. Also, according to the results of research hypotheses:

Hypothesis 1: Sukuk as one of the new financing tools has a significant role in financing the development projects of Islamic Azad University was approved. In

this regard, (Zakaria & Isa, 2013), (Alam et al, 2013) stated that sukuk is a vital and sustainable source of Islamic investment for economic and social development. Sukuk consists of various types that depend on the goals of each instrument. The growth and acceptance of sukuk is sustainable over the years and around the world. (Faraji & Farahani, 2011) were also of the opinion that sukuk bonds are a suitable and useful alternative to bonds and participation bonds and emphasized the government's action to define, support and use this new financial instrument in the Iranian economy.

Hypothesis 2: mortgage bonds as one of the new financing instruments has an effective role in financing the development projects of Islamic Azad University were approved. In this regard, (Ismailzadeh & Amiri, 2015) believe that according to the country's economic system and the prevailing atmosphere of the country's economy, which is mainly financed through deposits, organizations can use mortgages as a tool. It advanced use to finance themselves. In line with the results, the following suggestions are presented: 1) It is suggested that organizations use new financing tools to achieve benefits such as increasing liquidity, improving risk management, increasing diversity in financing sources and increasing shareholder wealth. ; 2) Participation bonds alone cannot be a complete alternative to bonds and in addition to reviewing and eliminating its shortcomings, should seek to introduce and use new financial instruments that can be a suitable alternative to bonds and in addition to the legality of the problems Do not have participation bonds. 3) Organizations can standardize the assets used in Sukuk and their evaluation process and facilitate matters related to the issuance and ranking of Sukuk bonds and the establishment of rating agencies and finally create a suitable secondary market for buying and selling Sukuk bonds and Facilitate their liquidity to use this tool for financing. 4) It is suggested that the institutions supervising the process of issuing mortgage bonds, ie the Central Bank and the Exchange and Securities Organization, prepare specific rules and

requirements for the issuance of this tool. In this regard, the type of contracts concluded between the basic elements of publication is of great importance.

Also, during the present study, we encountered limitations that are as follows: 1) Lack of information culture about the indicators studied in the research in the Social Security Organization. 2) Limitations related to time that result from the limitation of the study period. 3) Some lack of cooperation and low spirit of cooperation in completing the questionnaire by the statistical sample.

Conclusion

The financing process is one of the most important topics in financial economics. There are various methods and tools for financing, each with own characteristics and properties. Depending on the needs, financial capacity, conditions of economic enterprises and the diversity of people's behavior in investing and facing risk, these tools and methods are explained and used. One of the most important methods of the financing process is the conversion of assets into securities. On the other hand, with the development of financial markets in the world, their importance and effectiveness in all aspects of human civilization, including economics and politics, has increased day by day. Financial crises caused by securities risks or a type of financial instrument in a country can easily create a chain of crises in a wide range of countries. Therefore, the



general purpose of this study is to investigate the effect of new financing tools on the financing of development projects of Islamic Azad University. In this research, the main question is whether the new financing tools and implementation strategies play a significant role in the development projects of the Islamic Azad University or not? To answer this question, two hypotheses have been proposed and examined using data from 145 samples. Research data were collected using a questionnaire and analyzed to achieve the objectives of the research.

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