Examining the Influence of Sukuks Utilization as a Financing Mechanism ….

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Examining the Influence of Sukuks Utilization as a Financing Mechanism on Economic Development in Egypt

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Abstract

This research paper investigates the impact of sukuks, a form of Islamic bond, on economic development and GDP in Egypt. Despite the growing popularity of Islamic finance, empirical evidence on sukuks' influence on Egypt's economic growth is limited. This study aims to assess sukuks' role as financial tool in economic development, evaluate their current utilization, analyze their effectiveness, and propose policy recommendations. A mixed-methods approach is employed, combining literature review, policy document analysis, and quantitative analysis of economic indicators and sukuks issuances. The findings aim to enhance understanding of sukuks' contribution to economic growth and provide insights for policymakers, investors, and market participants. This research seeks to inform decisions on integrating Islamic finance instruments into Egypt's economy.

Keywords

Sukuks, financial tools, economic development, SMEs, GDP, economic growth, economic indicators

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الخلاصة

تتناول هذه الورقة البحثية تأثير الصكوك، وهي أحد أشكال السندات الإسلامية، على التنمية الاقتصادية والناتج المحلي الإجمالي في مصر. وعلى الرغم من تزايد شعبية التمويل الإسلامي، إلا أن الأدلة التجريبية على تأثير الصكوك على النمو الاقتصادي في مصر محدودة. تهدف هذه الدراسة إلى تقييم دور الصكوك كأداة تمويل في التنمية الاقتصادية، وتقييم استخدامها الحالي، وتحليل فعاليتها، واقتراح توصيات سياسية. ويتم استخدام نهج مختلط الأساليب، يجمع بين مراجعة الأدبيات، وتحليل وثائق السياسات، والتحليل الكمي للمؤشرات الاقتصادية وإصدارات الصكوك. وتهدف النتائج إلى تعزيز فهم مساهمة الصكوك في النمو الاقتصادي وتقديم رؤى لصانعي السياسات والمستثمرين والمشاركين في السوق. ويسعى هذا البحث إلى إثراء القرارات المتعلقة بدمج أدوات التمويل الإسلامي في الاقتصاد المصري.

كلمات مفتاحية : الصحوك ، الأدوات المالية ، التنمية الاقتصادية ، المؤسسات الصغيرة والمتوسطة ، الناتج المحلى الإجمالي ، النمو الاقتصادى ، المؤشرات الاقتصادية .

Introduction

Islamic finance, adhering to Shariah law, has seen significant growth, with sukuks becoming a key financing tool. Egypt, leveraging its strategic location and Islamic heritage, aims to diversify its financial sector and attract foreign investment through sukuks. Unlike conventional bonds, sukuks represent ownership in an asset or project, ensuring compliance with Islamic principles. They offer potential benefits such as attracting a broader investor base, enhancing financial inclusivity for

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SMEs, and promoting long-term investment stability. However, there is a need to test its effectiveness on economic growth and GDP, and on economic development as a financial tool.

Research Problem

Despite the strategic focus on Islamic finance in Egypt, there is limited empirical evidence on the impact of sukuks on economic growth and GDP. This study aims to fill that gap by assessing sukuks' influence on economic development in Egypt.

Research Questions

What is the impact of the value of Egyptian sukuks on economic development?

What is the relationship between sukuks issuance and key economic indicators such as GDP growth, employment, and investment in Egypt?

Research Objectives

Assess current trends in sukuks utilization in Egypt.

Examine sukuks' contribution to economic development and key economic indicators.

Evaluate sukuks' effectiveness in stimulating economic growth.

Propose legal and regulatory frameworks to support sukuks.

Provide policy recommendations for enhancing sukuks utilization and impact.

Study Methodology

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A descriptive analytical method is employed, using statistical methods to analyze data on sukuks values, GDP, foreign direct investment, inflation, and unemployment rates from 2011-2022.

Study Population and Sample

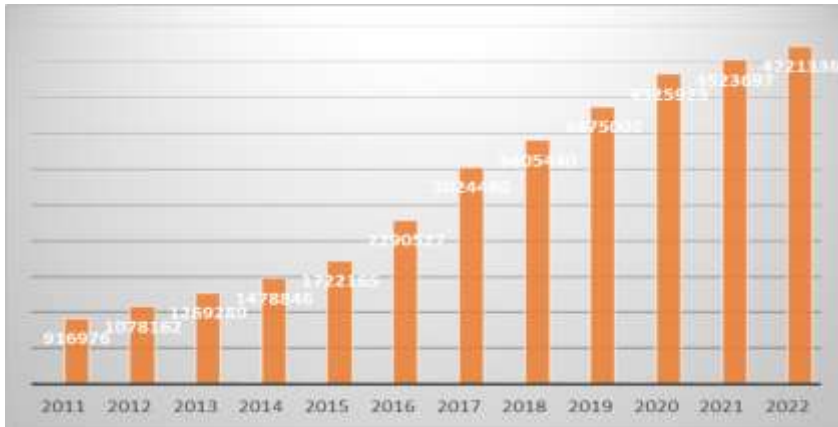The study analyzes data on the value of sukuks, GDP, FDI, inflation, and unemployment rates in Egypt from 2011-2022.

First: Descriptive analysis results

Descriptive statistics measures, represented by the arithmetic mean, standard deviation, highest value, lowest value, shapes, graphs, and rate of increase or decrease, were used to describe the study variables, which are (value of sukuks, value of gross domestic product, value of medium and small enterprise loans, value of foreign direct investment, inflation rate, Unemployment rate) during the period (2011 - 2022) and the results were as follows:

1- The value of Egyptian sukuks during the period (2011-2022):

It is clear from Table (1) that the mean of the value of the Egyptian Sukuks during the study period amounted to 2719320.2500 million pounds, with a standard deviation of 1430381.14561 The highest value reached 4721336.00 million pounds in 2022, and the lowest value reached 916976.00 million pounds in 2011, as shown in figure (1) and the value of the increase rate reached 16.3% during the period (2011-2022).

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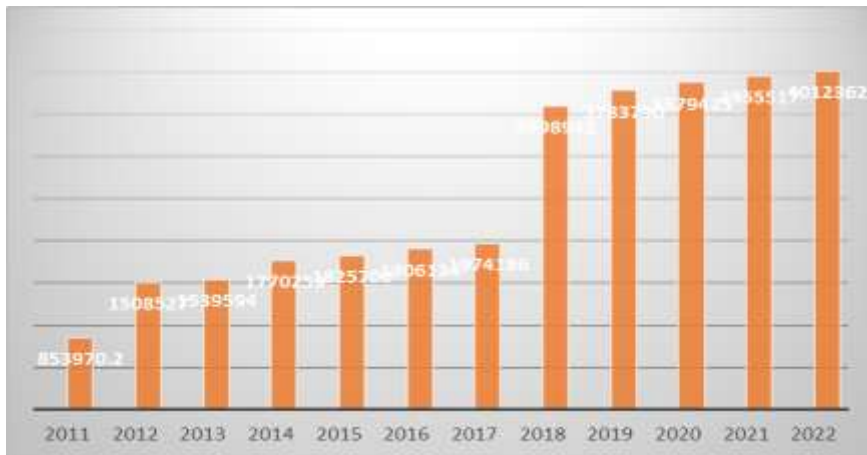
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Figure (1) Development of the value of Egyptian Sukuks during the study period (2011-2022)

2- Value of gross domestic product

It is clear from Table (1) that the mean of the value of the gross domestic product during the study period amounted to 2550700.5167 million pounds, with a standard deviation of 1181859.00422 The highest value reached 4012362.00 million pounds in 2022, and the lowest value reached 853970.20 million pounds in 2011, as shown in figure (2) and the value of the increase rate reached ١٣.3% during the period (2011-2022).

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Figure (٢) Development of the value of gross domestic product during the study period (2011-2022)

3- Value of foreign direct investment

It is clear from Table (1) that the mean of the value of the foreign direct investment during the study period amounted to 79852.1667 million pounds, with a standard deviation of 54974.33727 The highest value reached 150944.00 million pounds in 2022, and the lowest value reached 6050.00 million pounds in 2011, as shown in figure (3) and the value of the increase rate reached ٢٥% during the period (2011-2022).
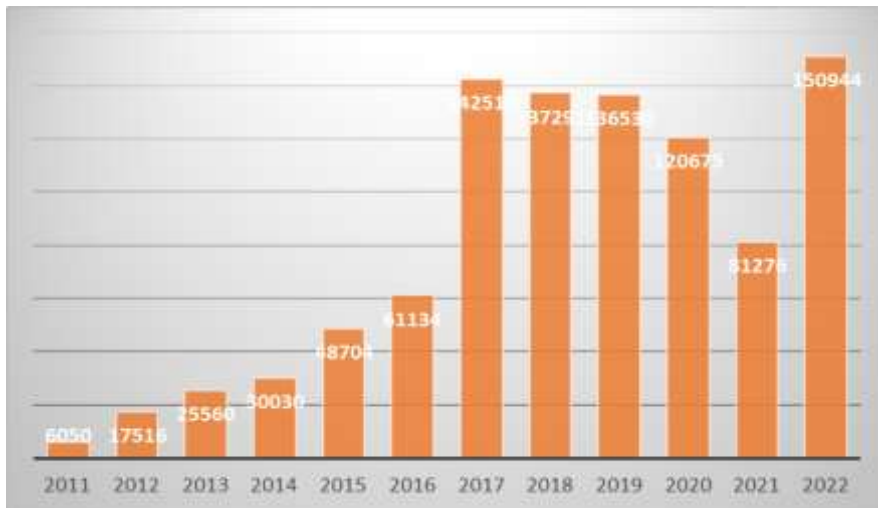
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Figure (3) Development of the value of foreign direct investment during the study period (2011-2022)

4- Inflation rate

It is clear from Table (1) that the mean of the value of the inflation rate during the study period amounted to 11.2333‚% with a standard deviation of 6.61243 The highest value reached 29.50 % in 2017, and the lowest value reached 5.00 % in 2020, as shown in figure (4) and the value of the increase rate reached 0.8 % during the period (2011-2022).

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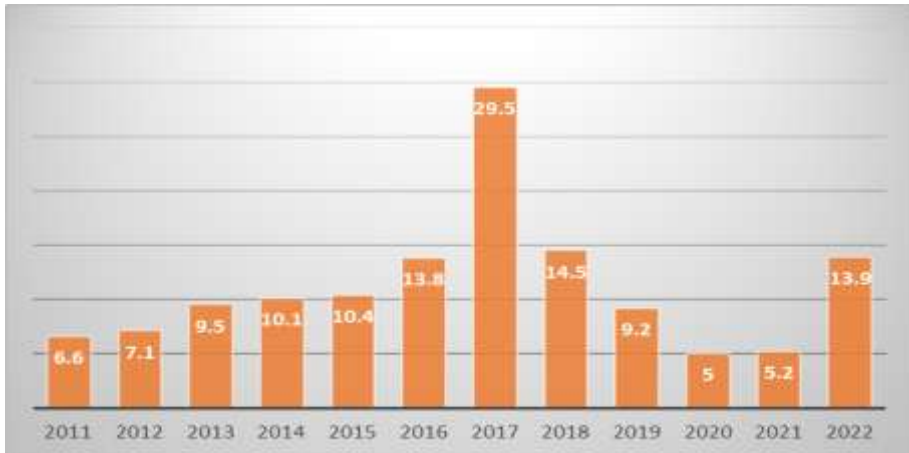
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Figure (4) Development of the value of inflation rate during the study period (2011-2022)
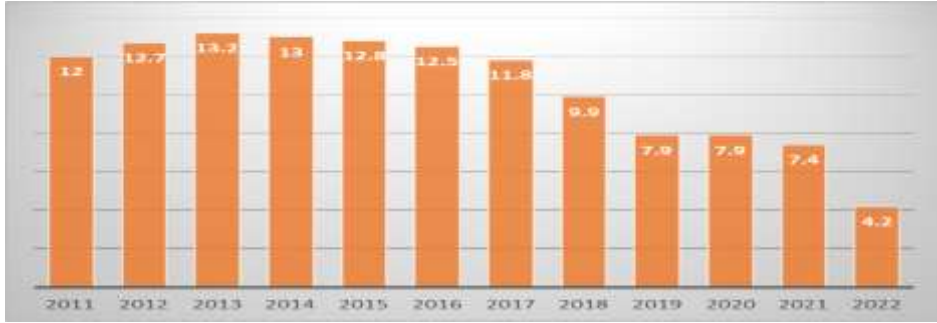

5- Unemployment rate

It is clear from Table (1) that the mean of the value of the unemployment rate during the study period amounted to 10.4417 %with a standard deviation of 2.93489 The highest value reached % ١٣.٢٠in 20١٣, and the lowest value reached ٤.٢٠ % in ٢٠٢٢, as shown in figure (5) and the value of the decrease rate reached ٨.٢ % during the period (2011-2022).

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Figure (5) Development of the value of unemployment rate during the study period (2011-2022)

Table (1): The development of the study variables during the period (2011-2022)

Years	Sukuk (million pound)	gross domestic product (million pound)	foreign direct investment (million pound)	inflation rate %	unemployment rate %
2011	916976	853970.2	6050	6.6	12
2012	1078162	1508527	17516	7.1	12.7
2013	1269289	1539594	25560	9.5	13.2
2014	1478846	1770259	30030	10.1	13
2015	1722165	1825700	48704	10.4	12.8
2016	2290527	1906134	61134	13.8	12.5
2017	3024480	1974186	142516	29.5	11.8
2018	3405440	3598942	137291	14.5	9.9
2019	3875002	3783790	136530	9.2	7.9
2020	4325923	3879425	120675	5	7.9
2021	4523697	3955517	81276	5.2	7.4
2022	4721336	4012362	150944	13.9	4.2

Source:

- **Central Bank of Egypt, annual report, various issues during the period (2011-2022)**

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- **Central Agency for Public Mobilization and Statistics, annual report, various issues during the period (2011-2022)**
- **World Bank, Economic Reports for the Arab Republic of Egypt, various issues during the period (2011-2022)**

Second: Studying the standard relationships between the independent variables (value of sukuks, value of foreign direct investment, inflation rate and Unemployment rate) and dependent variable (value of gross domestic product) during the study period (2011 - 2022)

• Unit root test:

To measure the stability of the model variables, the developed Dickey-Fuller test (ADF) was used, and it was found that the Egyptian Sukuk value chain (X1) was unstable at its level, and stability occurred after taking the second difference, so the series became integrated of the second order, and it was also shown that the GDP value chain was unstable. (Y1) at its level and stabilization occurred after taking the first difference, so the series becomes integrated of the first degree. Because the two series are not integrated at the same degree, Ardel cointegration is used in order to conduct the cointegration test between them.

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Table (٢) Results of the developed Dickey-Fuller (ADF) test for the relationship between value of Egyptian sukuks and value of gross domestic product

Variables	Level			1st Difference			2nd Difference		
	ADF	Sig.	Result	ADF	Sig.	Result	ADF	Sig.	Result
X1	٠.١٧١٢	٠.٧١٥	No stationary	-0.6654	0.403	No stationary	-3.014	0.007	stationary
Y1	1.3305	0.942	No stationary	-2.765	0.011	Stationary			

Source: E-views calculation results

• Causality Test

It is clear that there are no two-way causal relationships between the value of the Egyptian Sukuks and the GDP at a significance level of 0.05, as the one-way causal relationship directs from the value of the Egyptian Sukuks to the GDP at a significance level of 0.05 during the period (2011-2022)

Table (٣) Causality Test between value of Egyptian sukuks and value of gross domestic product

Null Hypothesis:	Obs	F-Statistic	Prob.
Y1 does not Granger Cause X1	10	0.25954	0.7812
X1 does not Granger Cause Y1		6.52684	0.0404

Source: E-views calculation results

• Bounds Test

It turns out that there is a cointegration between the value of Egyptian sukuks and the value of GDP at a significance level of 0.05 during the period (2011-2022)

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Table (٤) Co-integration test between value of Egyptian sukuks and value of gross domestic product

Test Statistic	Value	K
F-statistic	6.808005	1

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	4.04	4.78
5%	4.94	5.73
2.5%	5.77	6.68
1%	6.84	7.84

Source: E-views calculation results

• Test the number of time lags

It turns out that the optimal number of time lag periods is one time period for the value variable of the GDP, and there is no time lag period for the value variable of the Egyptian Sukuks during the period (2011-2022)

Table (5) Testing time lag periods between values of Egyptian sukuks and value of gross domestic product

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Y1(-1)	0.187161	0.299113	0.625722	0.5489
X1	0.616013	0.247988	2.484043	0.0379
C	476356.0	285364.6	1.669289	0.1336

R-squared	0.903073	Mean dependent var		2704949.
Adjusted R-squared	0.878841	S.D. dependent var		1105626.
S.E. of regression	384844.5	Akaike info criterion		28.78607
Sum squared resid	1.18E+12	Schwarz criterion		28.89458
Log likelihood	-155.3234	Hannan-Quinn criter.		28.71766

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F-statistic	37.26824	Durbin-Watson stat	2.051610
Prob(F-statistic)	0.000088		

Source: E-views calculation results

• Long-run and short-run error correction vector model:

In order to determine the value of the relationship parameters in the long run and the short run, the error correction vectors were estimated, and it turns out that the error term correction factor reached a value of ٠.٨١٢٨٣٩, which is significant at a significance level of 0.05, meaning that there is a correction from the short run to the long run with a speed of ٠.٨١٢٨٣٩, while the long-run equation indicates that there is an effect For correction in the long run because X1 is significant at a significance level of 0.01

Table (٦) Error correction vector test results between value of Egyptian sukuks and value of gross domestic product

	Cointegrating Form			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(X1)	0.616013	0.247988	2.484043	0.0379
CointEq(-1)	-0.812839	0.299113	-2.717498	0.0264

Cointeq = Y1 - (0.7579*X1 + 586040.1779)

	Long Run Coefficients			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	0.757854	0.108902	6.959021	0.0001
C	586040.177929	374822.139200	1.563515	0.1566

Source: E-views calculation results

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The standard relationship between the value of foreign direct investment and the dependent variables (value of gross domestic product) during the study period (2011 - 2022)

• Unit root test:

To measure the stability of the model variables, the developed Dickey-Fuller test (ADF) was used, and it was found that the value of foreign direct investment (X2) was unstable at its level, and stability occurred after taking the first difference, so the series became integrated of the first order, and it was also shown that the GDP value chain was unstable. (Y1) at its level and stabilization occurred after taking the first difference, so the series becomes integrated of the first degree. Because the two series are integrated at the same degree, Ardel cointegration is used in order to conduct the cointegration test between them.

Table (7) Results of the developed Dickey-Fuller (ADF) test for the relationship between value of foreign direct investment and value of gross domestic product

Variables	Level			1st Difference			2nd Difference		
	ADF	Sig.	Result	ADF	Sig.	Result	ADF	Sig.	Result
X2	٠.٣٩٧٨	٠.٧٨٠	No stationary	-2.735	0.012	stationary			
Y1	1.3305	0.942	No stationary	-2.765	0.011	Stationary			

Source: E-views calculation results

• Causality Test

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It is clear that there are no two-way causal relationships between the value of the Egyptian Sukuks and the GDP at a significance level of 0.05, as the one-way causal relationship directs from the value of foreign direct investment to the GDP at a significance level of 0.05 during the period (2011-2022)

Table (8) Causality Test between value of foreign direct investment and value of gross domestic product

Null Hypothesis:	Obs	F-Statistic	Prob.
X2 does not Granger Cause Y1	10	15.2260	0.0075
Y1 does not Granger Cause X2		0.13912	0.8734

Source: E-views calculation results

• Bounds Test

It turns out that there is a cointegration between the value of foreign direct investment and the value of GDP at a significance level of 0.01 during the period (2011-2022)

Table (9) Co-integration test between value of foreign direct investment and value of gross domestic product

Test Statistic	Value	K
F-statistic	8.872694	1

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	4.04	4.78
5%	4.94	5.73
2.5%	5.77	6.68
1%	6.84	7.84

Source: E-views calculation results

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• Test the number of time lags

It turns out that the optimal number of time lag periods is one time period for the value variable of the GDP, and there is no time lag period for the value variable of the foreign direct investment during the period (2011-2022)

Table (10) Testing time lag periods between value of foreign direct investment and value of gross domestic product

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Y1(-1)	0.709637	0.167541	4.235605	0.0029
X2	5.618658	3.660684	1.534866	0.1634
C	502814.0	333863.4	1.506047	0.1705

R-squared	0.867369	Mean dependent var	2704949.
Adjusted R-squared	0.834212	S.D. dependent var	1105626.
S.E. of regression	450179.1	Akaike info criterion	29.09968
Sum squared resid	1.62E+12	Schwarz criterion	29.20820
Log likelihood	-157.0482	Hannan-Quinn criter.	29.03127
F-statistic	26.15892	Durbin-Watson stat	2.604392
Prob(F-statistic)	0.000309		

Source: E-views calculation results

• Long-run and short-run error correction vector model:

In order to determine the value of the relationship parameters in the long run and the short run, the error

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correction vectors were estimated. It turns out that the error term correction factor is not significant at a significance level of 0.05, meaning that there is no correction from the short run to the long run, while the long run equation indicates that there is no effect of the correction in the run. Long because X^2 is not significant at a significance level of 0.05

Table (11) Error correction vector test results between value of foreign direct investment and value of gross domestic product

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(X2)	5.618658	3.660684	1.534866	0.1634
CointEq(-1)	-0.290363	0.167541	-1.733090	0.1213

Cointeq = Y1 - (19.3504*X2 + 1731672.3319)

Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
X2	19.350445	9.776388	1.979304	0.0831
C	1731672.331948	994522.163180	1.741210	0.1198

Source: E-views calculation results

The standard relationship between the inflation rate and the dependent variables (value of gross domestic product) during the study period (2011 - 2022)

• Unit root test:

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To measure the stability of the model variables, the developed Dickey-Fuller test (ADF) was used, and it was found that the inflation rate (X3) was unstable at its level, and stability occurred after taking the first difference, so the series became integrated of the first order, and it was also shown that the GDP value chain was unstable. (Y1) at its level and stabilization occurred after taking the first difference, so the series becomes integrated of the first degree. Because the two series are integrated at the same degree, Ardel cointegration is used in order to conduct the cointegration test between them.

Table (12) Results of the developed Dickey-Fuller (ADF) test for the relationship between inflation rate and value of gross domestic product

Variables	Level			1st Difference			2nd Difference		
	ADF	Sig.	Result	ADF	Sig.	Result	ADF	Sig.	Result
X3	٠.٧١٢٦	٠.٧٨٠	No stationary	-3.2338	0.005	stationary			
Y1	1.3305	0.942	No stationary	-2.765	0.011	Stationary			

Source: E-views calculation results

• Causality Test

It is clear that there are no two-way causal relationships between the inflation rate and the GDP at a significance level of 0.05, as the one-way causal relationship directs from the inflation rate to the GDP at a significance level of 0.05 during the period (2011-2022)

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Table (13) Causality Test between inflation rate and value of gross domestic product

Null Hypothesis:	Obs	F-Statistic	Prob.
Y1 does not Granger Cause X3	10	0.13810	0.8742
X3 does not Granger Cause Y1		33.3553	0.0013

Source: E-views calculation results

• Bounds Test

It turns out that there is a cointegration between the inflation rate and the value of GDP at a significance level of 0.01 during the period (2011-2022)

Table (14) Co-integration test between inflation rate and value of gross domestic product

Test Statistic	Value	K
F-statistic	8.287951	1

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	4.04	4.78
5%	4.94	5.73
2.5%	5.77	6.68
1%	6.84	7.84

Source: E-views calculation results

• Test the number of time lags

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It turns out that the optimal number of time lag periods is one time period for the value variable of the GDP, and there is no time lag period for the value variable of the inflation rate during the period (2011-2022)

Table (15) Testing time lag periods between inflation rate and value of gross domestic product

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Y1(-1)	0.877796	0.145968	6.013602	0.0003
X3	-2546.664	24636.56	-0.103369	0.9202
C	612274.7	528241.6	1.159081	0.2798

R-squared	0.828542	Mean dependent var		2704949.
Adjusted R-squared	0.785677	S.D. dependent var		1105626.
S.E. of regression	511849.8	Akaike info criterion		29.35645
Sum squared resid	2.10E+12	Schwarz criterion		29.46497
Log likelihood	-158.4605	Hannan-Quinn criter.		29.28805
F-statistic	19.32928	Durbin-Watson stat		2.035967
Prob(F-statistic)	0.000864			

Source: E-views calculation results

• Long-run and short-run error correction vector model:

In order to determine the value of the relationship parameters in the long run and the short run, the error correction vectors were estimated. It turns out that the error term correction factor is not significant at a significance level of 0.05, meaning that there is no correction from the short run to the long run, while the long run equation indicates that there is no effect of the correction in the run. Long because X3 is not significant at a significance level of 0.0°

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Table (16) Error correction vector test results between inflation rate and value of gross domestic product

	Cointegrating Form			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(X3)	-2546.664096	24636.559935	-0.103369	0.9202
CointEq(-1)	-0.122204	0.145968	-0.837196	0.4268

Cointeq = Y1 - (-20839.4190*X3 + 5010260.0477)

	Long Run Coefficients			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
X3	-20839.418989	197166.795306	-0.105694	0.9184
C	5010260.047702	3638928.823596	1.376850	0.2059

Source: E-views calculation results

The standard relationship between the unemployment rate and the dependent variables (value of gross domestic product) during the study period (2011 - 2022)

• Unit root test:

To measure the stability of the model variables, the developed Dickey-Fuller test (ADF) was used, and it was found that the unemployment rate (X4) was unstable at its level, and stability occurred after taking the second difference, so the series became integrated of the second order, and it was also shown that the GDP value chain was unstable. (Y1) at its level and stabilization occurred after taking the first difference, so the series becomes integrated of the first degree. Because the two series are not

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integrated at the same degree, Ardel cointegration is used in order to conduct the cointegration test between them.

Table (17) Results of the developed Dickey-Fuller (ADF) test for the relationship between unemployment rate and value of gross domestic product

Variables	Level			1st Difference			2nd Difference		
	ADF	Sig.	Result	ADF	Sig.	Result	ADF	Sig.	Result
X4	-1.5657	٠.١٠٧	No stationary	0.6412	0.832	No stationary	-4.5788	0.001	stationary
Y1	1.3305	0.942	No stationary	-2.765	0.011	Stationary			

Source: E-views calculation results

• Causality Test

It is clear that there are no two-way or one-way causal relationships between the unemployment rate and the value of GDP at a significance level of 0.05. During the period (2011-2022)

Table (18) Causality Test between unemployment rate and value of gross domestic product

Null Hypothesis:	Obs	F-Statistic	Prob.
Y1 does not Granger Cause X4	10	0.05351	0.9484
X4 does not Granger Cause Y1		0.81273	0.4947

Source: E-views calculation results

• Bounds Test

It turns out that there is no cointegration between the unemployment rate and the value of GDP at a significance level of 0.05 during the period (2011-2022) during the period (2011-2022)

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Table (19) Co-integration test between unemployment rate and value of gross domestic product

Test Statistic	Value	K
F-statistic	0.615464	1

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	4.04	4.78
5%	4.94	5.73
2.5%	5.77	6.68
1%	6.84	7.84

Source: E-views calculation results

• Test the number of time lags

It turns out that the optimal number of time lag periods is one time period for the value variable of the GDP, and there is no time lag period for the value variable of the unemployment rate during the period (2011-2022)

Table (20) Testing time lag periods between unemployment rate and value of gross domestic product

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Y1(-1)	0.338953	0.306713	1.105115	0.3012
X4	-220907.7	115383.1	-1.914559	0.0919
C	4160769.	1899186.	2.190817	0.0598
R-squared	0.882260	Mean dependent var		2704949.

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Adjusted R-squared	0.852825	S.D. dependent var	1105626.
S.E. of regression	424155.4	Akaike info criterion	28.98059
Sum squared resid	1.44E+12	Schwarz criterion	29.08911
Log likelihood	-156.3932	Hannan-Quinn criter.	28.91218
F-statistic	29.97319	Durbin-Watson stat	1.783269
Prob(F-statistic)	0.000192		

Source: E-views calculation results

• Long-run and short-run error correction vector model:

In order to determine the value of the relationship parameters in the long run and the short run, the error correction vectors were estimated, and it turns out that the error term correction factor is not significant at a significance level of 0.05, meaning that there is no correction from the short run to the long run, while the long run equation indicates that there is an effect of the correction in the long run. Because X^4 is significant at a significance level of 0.01

Table (21) Error correction vector test results between unemployment rate and value of gross domestic product

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(X4)	-220907.690630	115383.054581	-1.914559	0.0919
CointEq(-1)	-0.661047	0.306713	-2.155259	0.0633

Cointeq = Y1 - (-334178.7013*X4 + 6294214.2473)

Long Run Coefficients				

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
X4	-334178.701297	67144.551072	-4.977004	0.0011
C	6294214.247336	728477.422286	8.640232	0.0000

Source: E-views calculation results

Testing the study hypotheses

There is a statistically significant impact of the value of Egyptian sukuk on the gross domestic product during the period (2011-2022)

Table (22) impact of the value of Egyptian sukuk on the gross domestic product during the period (2011-2022)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	404062.0	234935.9	1.719882	0.1162
X1	0.789403	0.077162	10.23042	0.0000

R-squared	0.912787	Mean dependent var	2550701.
Adjusted R-squared	0.904065	S.D. dependent var	1181859.
S.E. of regression	366060.8	Akaike info criterion	28.61000
Sum squared resid	1.34E+12	Schwarz criterion	28.69082
Log likelihood	-169.6600	Hannan-Quinn criter.	28.58008
F-statistic	104.6615	Durbin-Watson stat	1.928336
Prob(F-statistic)	0.000001		

Source: E-views calculation results

The significance of the model as a whole was revealed, as the value of F was significant at the level of 0.01, and the impact of the variable of the value of the Egyptian sukuks on the variable of gross domestic product was significant at the level of 0.01. It was found that the independent variable (the value of the Egyptian sukuks) explains 90.4% of the dependent variable (the gross domestic product). It was found that whenever the value of

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Egyptian sukuks increased by 1%. The gross domestic product increased by 0.789403%.

Table (23) impact of the independent variables on the gross domestic product during the period (2011-2022)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	532734.0	1039816.	0.512335	0.6242
X1	0.534429	0.192859	2.771086	0.0277
X2	11.18935	4.641992	2.410463	0.0467
X3	-73797.06	20820.07	-3.544515	0.0094
X4	47901.92	70289.93	0.681490	0.5175

R-squared	0.970689	Mean dependent var	2550701.
Adjusted R-squared	0.953941	S.D. dependent var	1181859.
S.E. of regression	253644.3	Akaike info criterion	28.01959
Sum squared resid	4.50E+11	Schwarz criterion	28.22164
Log likelihood	-163.1175	Hannan-Quinn criter.	27.94479
F-statistic	57.95541	Durbin-Watson stat	2.013407
Prob(F-statistic)	0.000019		

Source: E-views calculation results

The significance of the model as a whole was shown, as the value of F was significant at the level of 0.01. It was shown that the independent variables explain 95.4% of the dependent variable (Gross Domestic Product). The significance of the impact of the variable of the value of the Egyptian sukuks on the variable of GDP was shown at a level of significance of 0.05. It was shown that the greater the value of the Egyptian sukuks by 1% the gross domestic product increased by 0.534429%. The impact of the variable value of foreign direct investment on the variable GDP was also shown to be significant at a significance level of 0.05. It

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was found that whenever the value of foreign direct investment increased by 1%, the gross domestic product increased by 11.18935%. It was also shown to be significant. The impact of the inflation rate on the GDP is significant at a level of 0.01.It was found that whenever the inflation rate increased by 1%, the GDP decreased by 73797.06%, while the impact of the unemployment rate variable on the GDP variable was found to be non-significant at a significance level of 0.05**.**

It is clear from the above that the hypothesis of the study is correct, which states that there is a statistically significant impact of the value of Egyptian sukuk on the gross domestic product during the period (2011-2022).

Conclusion

- The impact of the variable of the value of the Egyptian sukuks on the variable of gross domestic product was significant at the level of 0.01. And It was found that whenever the value of Egyptian sukuks increased by 1%. The gross domestic product increased by 0.789403%.

- The significance of the impact of the variable of the value of the Egyptian sukuks on the variable of GDP was shown at a level of significance of 0.05. It was shown that the greater the value of the Egyptian sukuks by 1% the gross domestic product increased by 0.534429% The impact of the variable value of foreign direct investment on the variable GDP was also shown to be significant at a significance level of 0.05. It

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was found that whenever the value of foreign direct investment increased by 1%, the gross domestic product increased by 11.18935%. It was also shown to be significant. The impact of the inflation rate variable on the GDP variable at a significance level of 0.01. It was found that whenever the inflation rate increased by 1%, the GDP decreased by 73797.06%, while the impact of the unemployment rate variable on the GDP variable was found to be non-significant at a significance level of 0.05.

- The hypothesis of the study is correct, which states that there is a statistically significant impact of the value of Egyptian sukuk on the gross domestic product during the period (2011-2022).

Recommendations:

Based on the findings and conclusions of the study, the following recommendations are proposed:

1. Encourage the issuance of Egyptian sukuks: Given the significant positive impact of the value of Egyptian sukuks on gross domestic product (GDP), it is recommended to further promote and facilitate the issuance of sukuks in Egypt. This can be achieved by streamlining the regulatory framework, providing incentives for issuers, and enhancing investor awareness about the benefits of sukuk investments.

2. Promote foreign direct investment (FDI): The study highlights the significant positive impact of FDI on GDP. To attract more foreign investment, Egypt should continue its efforts to improve

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the business environment, simplify investment procedures, and provide incentives and protections for foreign investors. Strengthening partnerships with international financial institutions and actively promoting investment opportunities can also help to attract more FDI.

3. Effective inflation management: The study reveals a significant negative impact of the inflation rate on GDP. It is crucial for Egypt to maintain effective monetary policies and implement measures to control inflation. This includes prudent fiscal management, price stability measures, and targeted interventions to mitigate the adverse effects of inflation on the overall economy.

4. Address unemployment challenges: While the study did not find a significant impact of the unemployment rate on GDP, addressing unemployment remains a critical priority for Egypt's economic development. The government should focus on implementing policies and initiatives that promote job creation, enhance vocational training programs, and support entrepreneurship and SME development. This will help to alleviate unemployment and contribute to overall economic growth.

5. Continued research and monitoring: The study validates the hypothesis of a significant impact of Egyptian sukuk value on GDP. However, the dynamics of the financial market and economic conditions may evolve over time. Therefore, it is

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recommended to conduct further research and monitoring of the relationship between sukuk utilization and economic development in Egypt. Regular evaluation and analysis will provide valuable insights for policymakers and stakeholders to adapt strategies and policies accordingly.

Implementing these recommendations can contribute to strengthening the impact of sukuks as a financing tool on economic development in Egypt, attracting investments, stimulating GDP growth, and ensuring long-term sustainable development.

Scope for Future Research:

While this study has provided valuable insights into the impact of sukuks as a financing tool on economic development in Egypt, there are several areas that could be explored in future research:

1-Long-term analysis: Extend the study beyond the 2011-2022 periods to evaluate the sustained impact of sukuks on Egypt's economic development over a longer timeframe.

2-Sector-specific analysis: Investigate the contributions of sukuks to specific sectors, examining their impact on sectorial economic indicators such as employment, investment, and productivity.

3-Comparative analysis: Conduct comparative studies between Egypt and other countries using sukuks as a financing tool to

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identify best practices, lessons learned, and areas for improvement.

4-Investor perspectives and behavior: Analyze the motivations, risk appetites, and investment preferences of sukuks investors in Egypt to develop targeted strategies for attracting more investment.

5-Policy evaluation and recommendations: Assess the effectiveness of current policies and regulations related to sukuks, identify gaps, and provide recommendations for enhancing policy frameworks to support sukuks market growth.

6-Social and environmental impact assessment: Explore the social and environmental effects of sukuks, evaluating their contributions to sustainable development goals, social welfare, and environmental sustainability.

Addressing these research areas will deepen understanding of sukuks' impact on economic development in Egypt, offering valuable insights for policymakers, investors, and stakeholders to optimize the use of Islamic finance instruments.

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