

The Role of the Government's Development Budget on Afghanistan's Economic Growth over the Years (2003 to 2018)

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Abstract

This study aims to investigate the effective impact of the development budget on the country's economic growth, the factors affecting Afghanistan's economic growth and the weight of the development budget in the country's long-term growth. To improve the work and plan of government policies, the type of research is practical. In this research, the VAR time series model and the conventional least-squares method have been used and the CUSUM test and other tests have been used to measure the stability of the model. According to the VAR time series model, a positive shock in the development budget has increased the level of economic growth (GDP) in the second period, the third period decreased and it has been relatively stable since the fourth and fifth periods, and the seventh period is increasing, as well as fluctuating sharply in the following periods. Also, a positive shock in the development budget has reduced the same variable in the third period and increased almost from the fourth period onwards to the fifth period, decreased in the sixth period, increased in the seventh period, decreased again and then increased in the ninth period. Thus, the scale of positive shocks in economic growth reduces the variable development budget to less than the second year, decreases in the third period, increases to the sixth period, and decreases in the seventh period and finally takes the upward trend. Also, with a positive shock in economic growth, the same variable decreases in the second period and follows the normal change trend after the fourth period. Also, a positive shock in the development budget affects the variables of the non-optional development budget in this country, both in the short- and long-term. However, the optional development budget variable is less in the short-term, but in the long-term, it is relatively relative, and the impact of shocks in both the short- and long-term has statistical validity and fluctuating movements. The results of the regression show that the relationship between development budget variables and economic growth has been significant.

Keywords: Budget, Development Budget, Economic Growth, GDP

INTRODUCTION

GDP and economic growth rate are the most important performance indicators of macroeconomics, while the rate of production and per capita income indicates the growth rate of the economy and welfare in society. The rate of economic growth shows the rate of increase or decrease in GDP by the rate of improvement or decrease in the level and enjoyment of the people. Indicators such as unemployment and poverty are also generally affected by production and economic growth, with higher economic growth leading to lower unemployment rates and poverty levels in the long-term. Given the importance of production and economic growth in any society, one of the concerns of governments and nations has been to achieve higher production and higher growth rates. Therefore, one of the most important goals of macroeconomics, which is emphasized by all governments and economic planners in the countries of the world, is to achieve sustainable economic growth.

Annual budgets are one way for the government to influence economic growth. An important part of the tasks of governments in various economic systems is implemented through the budget channel. If the process of preparing and compiling the budget, the executive system and the method

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of monitoring and controlling it is efficient, it will be possible to better perform the tasks assigned to the government.

The government's budget is one of the most important issues in the economy, which plays an important role in achieving the goals of society. In general, the role of the government budget can be divided into three areas: revenue collection, expenditure, and budget imbalance management, each of which has an impact on economic growth.

Economic growth in most countries is a major concern for policymakers. Economic growth shows an increase in some products in the territory of a country, the most important indicator of which is the country's GDP. The country's GDP has fluctuated sharply and has been declining, and the country's national budget has declined steadily in recent years. From a macroeconomic perspective, the national budget is one of the most important elements of economic growth.

Regarding the impact of government spending financing resources on GDP and economic growth, it can be stated that considering that government budget constraint is a limiting factor in government performance, investigating the impact of government spending financing methods on GDP and economic growth is important for policymakers.

Regarding the impact of government funding on GDP and supply growth on the supply side, it can be said that taxes (whether in the form of taxes or total tax revenue) on invention, management skills, people's choice between work and leisure, the allocation of resources through changes in relative prices as well as the transfer of resources from the private sector to the public sector; and finally, it will change the investment in the private sector, production capacity, total supply and economic growth.

Budgeting institutions have played a significant role in the gradual process of countries moving towards good governance and accountability. Many developed and developing countries are trying to bring their budgeting system closer together in a process of improvement, transparency, adaptability and thus provide credible and reliable information support for the government and parliamentary budgeting policies; because a budget is a strategic tool for the economic and financial discipline of governments, and in its current form, it provides a good and accountable governance framework, expands the level of production and economic growth, and enables citizen participation. The most important goals of governments are to achieve economic growth and development and public welfare. To achieve these goals, the duties of governments must be defined along with the duties of the people and non-governmental organizations. Determine the structure of government and plan to achieve the goals. To realize the plans, budgeting is done and the government duties are performed by allocating resources.

In developing countries, budgeting institutions are new and are essential tools for legal oversight and management. The budget can be considered as a management tool as a program to determine whether the government has achieved the strategic goals and policies developed during the fiscal year by using resources.

Studies show that some hints have been implicit in identifying and ranking the factors influencing the development of development budgets in Afghanistan.

Younes Rahyab, a graduate student at the Faculty of Economics of Kabul University, has studied the allocation of the budget and its consumption in 2016. This researcher has stated that one of the reasons for the lack of proper budget implementation in departments can be the lack of realistic forecasting and miscalculation of expenditures for the implementation of development programs and projects and the lack of active, trained and experienced experts ^[1].

The Institute for Equality for Peace and Democracy (2017) has used the inference method, which is included in the experiences of service recipients, to facilitate views from bottom to top in budgeting. Therefore, the findings of this report are based on information gathered from interviews, budget documents and current debates in this document. Documents on the national budget have been reviewed, there have also been group discussions and exclusive interviews with government service providers, civil society organizations and the public at the district level to document the major challenges of budgeting at the community level. Fieldwork has been done to gather information in eight provinces: Balkh, Bamyán, Herat, Kandahar, Nangarhar, Kunduz, Uruzgan, and Kabul. When the information was collected, two stages of qualitative coding were performed separately for the subject of the interview. These samples were later compared with the findings of the document and the information about the national budget, which provided the framework for this report ^[2].

Since budgeting is of particular importance at all levels, whether at the level of public or private organizations, whenever in the process of budgeting incorrect estimates, the lack of a clear and efficient formulation that is not in line with the conditions of society, the vital policy may not achieve its practical and applied aspect. The implementation of the budget or its consumption at the level of government ministries paves the way for job creation and economic growth in the country. If the budget is not used in time, it will reduce growth.

People's complaints about unemployment and poverty, insecurity, corruption, lack of government sovereignty, conflicts between the people and the government, popular uprisings, the impeachment of ministers for their inability to use development budgets, etc. indicate that unfortunately the growth and development of this country is slow. The national

budget is a major indicator of a country's development, and its inability to consume is considered an important problem, which, unfortunately, has always involved Afghanistan. According to a report by the World Bank on GDP, the growth rate of GDP has been declining since 2003. This country has always suffered from budget deficits and the internal financial resources of this country have well met our domestic needs, which are considered a big problem.

Another challenge that has always been raised in Afghanistan is the reduction in the development budget. The study seeks to examine the role of the national budget in economic growth.

MATERIALS AND METHOD

The country's national budget reflects the country's normal and developmental budget, reflecting the government's financial actions and practices (financial policy) in economic and non-economic affairs. By studying the resolutions of the national budget of this country from 2003 to 2018, the budget of this country has been briefly reviewed.

This research is practical because it explores the nature of objects, phenomena, and relationships between variables, principles, laws, and the construction or testing of theories, and focuses on the development of the frontiers of knowledge in science. To improve the work and plan of government policies, the type of research is practical. After reviewing the national budget and the development and gross production budget of the country based on library studies, documents, evidence in the relevant departments, the data were evaluated through Eviews software for causal relationships and correlation between variables and indicators. In this research, the VAR time series model and the conventional least-squares method have been used and the CUSUM test and other tests have been used to measure the stability of the model.

RESULTS

Investigating the country's national budget and the development budget

The government's financial reports from 2005 to 2018 show that budget agencies did not spend large sums of money from the budgets requested by these units and provided by the Ministry of Finance. This may be due to poor management of resources and facilities, or that managers have not been able to adequately analyze that they have not been able to estimate and predict correctly according to their capacities while setting up their plans, or that unexpected factors may have caused the ministry's budget not to be spent. The realization of the budget from 2005 to 2016 shows that in 2005 the amount of 29.4 billion Afghanis, in 2006 the amount of 30.8 billion Afghanis, in 2007 the amount of 39.5 billion, similarly, in 2014, the amount of 85.9 billion Afghanis, in 2015, the amount of 106.873 billion Afghanis, and in 2016, the amount of 90.307 billion Afghanis, etc., has been a low-

consumption budget for many years (Ministry of Finance, Government Financial Statements from 2005 to 2018).

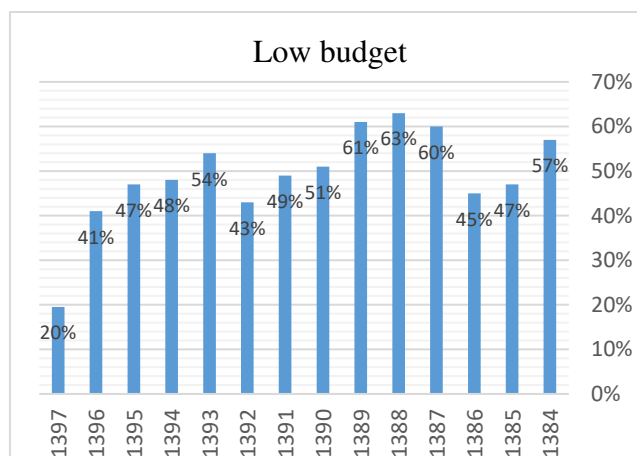


Figure 1: Percentage of non-budget expenditures by budget units

Figure 1 explains that from 2005 to 2018, about 48% of the total budget allocated was spent and the remaining 52% was not spent, which indicates that the budget was not spent more than 50% during these years.

Optional and non-optional development budget

According to the reports, the funds provided in the development budget for the years 2005 to 2018 were mostly non-optional, so that in 2005 the amount of 40.5 billion Afghanis, in 2007 the amount of 57.2 billion Afghanis, in 2008 the amount of 54 billion, in 2009, the amount of 44.8 billion Afghanis, in 2010, the amount of 65.6 billion Afghanis, in 2011, the amount of 55.5 billion Afghanis, in 2012, the amount of 76 billion Afghanis, in 2013, the amount of 112.27 billion Afghanis, in 2015, the amount of 124.177 billion Afghanis, and in 2016, the amount of 120.418 billion Afghanis, have been approved and allocated for non-optional development budgets (National Budget Approvals of 2015 to 2018 AH).

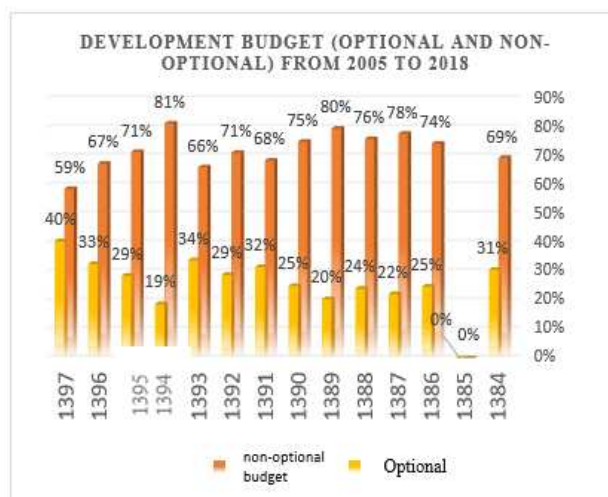


Figure 2: Optional and non-optional budget

In total, the development budget is 27% optional and the remaining 73% is non-optional.

The GDP in recent years

The GDP provides a perspective on the country's economy and calculates the composition of economic activities and the relationships between them. This index is one of the most important indicators for measuring the growth of the country's economy.

According to the World Bank, Afghanistan's GDP has been declining from 2003 to 2016.

According to the Central Statistical Organization, GDP growth has grown by about 3.6 percent over the past few years. The country's average annual GDP growth has increased by an average of about 6.98 percent from 2007 to 2016. The highest growth rate in 2009 was about 17.20 percent and the lowest rate in 2015 was -1.80.

According to the Central Statistical Organization, the growth rate of GDP is highly volatile, which can be said that the growth rate of GDP, which includes the construction sector, industrial products, mining services, GDP in transport, the facilities in the country's national products are declining (negative), as shown in Figure 3.

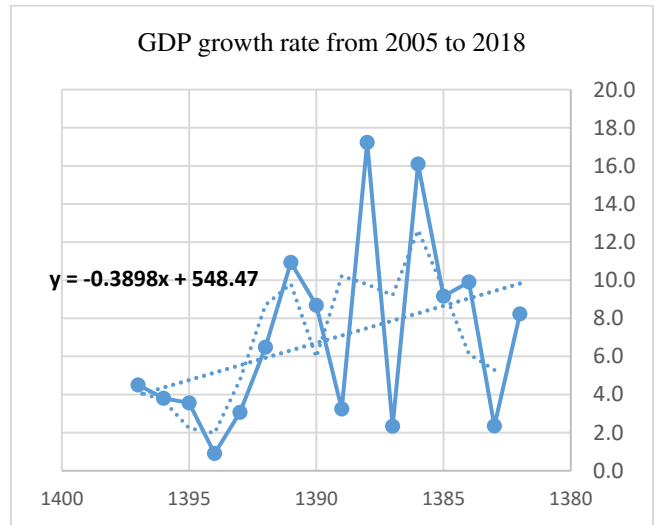


Figure 3: The growth rate of GDP in recent years

Variable normality test

According to the output of Eviews software, the normality measurement of the SK coefficient is between (± 2) in all variables. This indicates that the data has a normal distribution. Therefore, all data can be estimated. The following figures show the four variables.

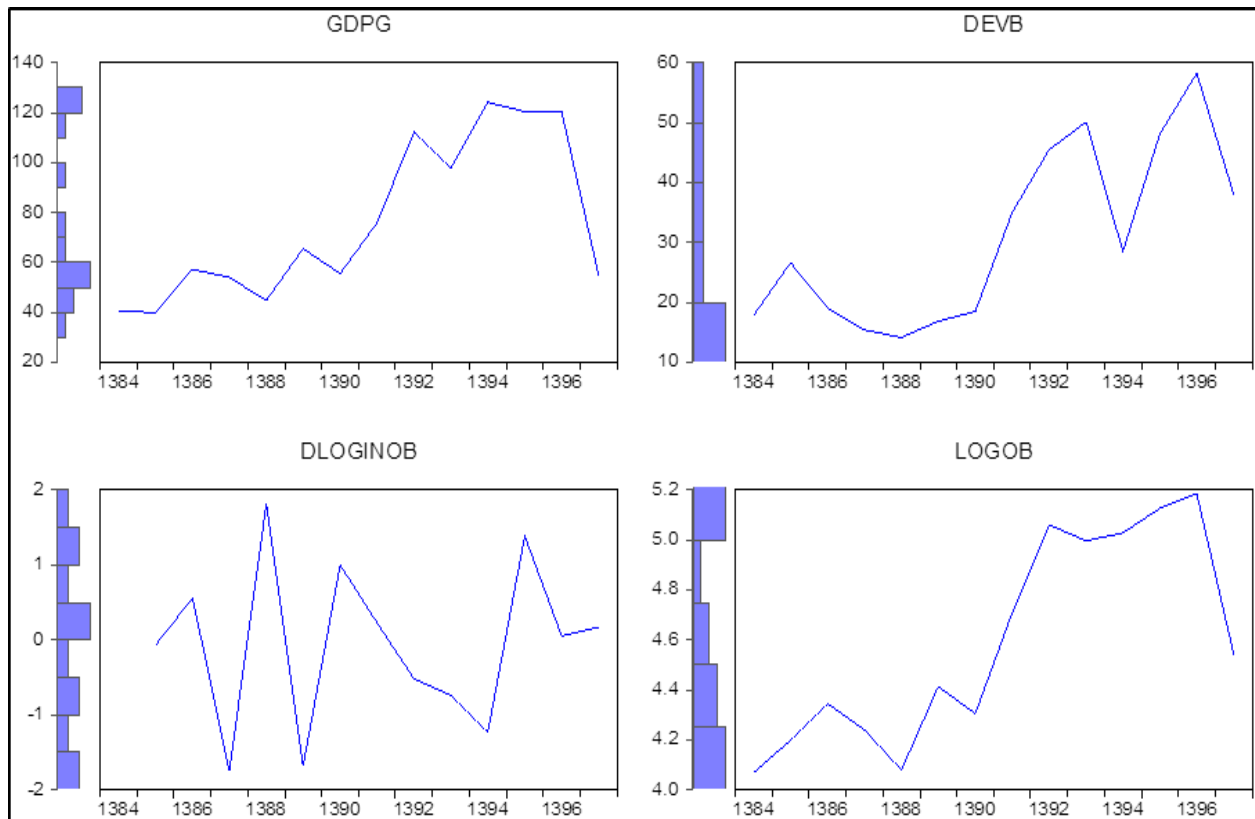


Figure 4: Descriptive Statement of Variables (Optional Budget Growth Rate, Optional Development Budget Growth Rate, Development Budget Growth Rate)

In Figure 4, the GDP is the economic growth rate, DevB is the development budget, LOGOB is the optional budget growth rate and Dloginob is the non-optional budget growth rate.

In this research, the impact or role of the development budget in economic growth is in terms of time and time-series pattern. To estimate the time-series pattern, it is necessary to test the stability of the variables. The following autocorrelation function and its correlogram have been measured using Eviews software.

Date: 12/26/19 Time: 07:06
 Sample: 1384 1397
 Included observations: 14

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
		1	0.731	0.731	9.2080	0.002
		2	0.518	-0.035	14.221	0.001
		3	0.356	-0.022	16.807	0.001
		4	0.113	-0.281	17.094	0.002
		5	-0.171	-0.330	17.825	0.003
		6	-0.293	0.022	20.231	0.003
		7	-0.390	-0.090	25.106	0.001
		8	-0.449	-0.024	32.626	0.000
		9	-0.315	0.260	37.067	0.000
		10	-0.256	-0.216	40.735	0.000
		11	-0.226	-0.129	44.535	0.000
		12	-0.131	-0.075	46.450	0.000

Figure 5. Autocorrelation function and its correlogram

Figure 5 shows the autocorrelation function between variables, which is the abbreviation AC, which indicates significant over the years.

Investigation of Vector Auto Regression (VAR)

In this section, the VAR model is estimated using annual data from 2005 to 2018. VAR modeling is an alternative approach

to examining the relationships between macroeconomic variables that economic theory cannot sufficiently justify. The variables used are product growth rate (GDP RATE) and development budget growth rate (BUDGET RATE).

It should be noted that this test is stable based on the output of the Eviews software with a single interval, and according to the results, the coefficient Jarque-Betra > 1.96 and prop> / f / <0.05 is equal to 0.0289; so we can say that this model is stable.

Impulse response functions

An impulse response functions represent the responses that the system's endogenous variable gives to shocks caused by errors. In this way, I determine the relative importance of each of the variables about the other variables, which is expressed using the VAR test. For this purpose, the manner and process of shocks are considered.

$$X_t = a_0 + a_1x_{t-1} + \varepsilon_1$$

$$Y_t = b_0 + b_1x_t + b_2Y_t + \varepsilon_2$$

A change in ε_1 is the size of a standard deviation in the period $t = 0$ (shock is only for the period so it is called an impulse) through the model that affects other variables.

In the following periods, due to the feedback effects of other variables, it may have a greater effect on the main endogenous variables.

According to Figure 6, a positive shock in the development budget increased the level of economic growth (GDP) in the second period, decreased the third period and increased from the fourth and fifth periods in relative stability and the seventh period, as well as fluctuates in subsequent periods, and the effect of this shock has statistical validity both in the short- and long-term.

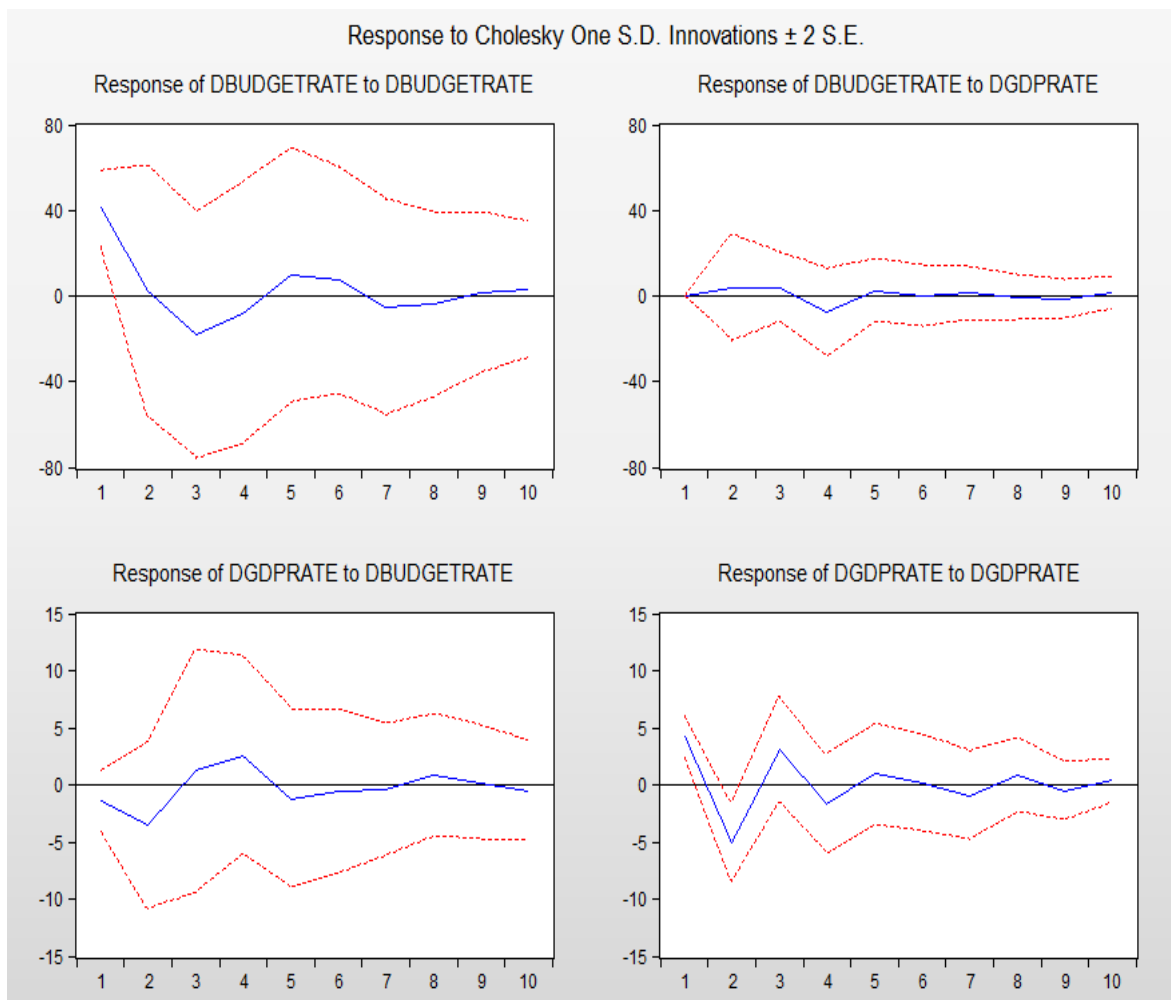


Figure 6: VAR test results

Also, a positive shock in the development budget has reduced the same variable in the third period and increased almost from the fourth period onwards to the fifth period, decreased in the sixth period, increased in the seventh period, decreased again and then increased in the ninth period. This shock has statistical validity both in the short- and long-term and shows oscillating movements.

Figure 6 shows that the positive shock in the economic growth of the variable development budget is less until the second year, decreases in the third period, increases in the sixth period; decreases in the seventh period and finally has an upward trend. Also, with a positive shock in economic growth, the same variable decreases in the second period and follows the normal change trend after the fourth period.

Estimation and interpretation of the analysis model

The ordinary least squares (OLS) regression method is used to analyze the effects of evolution. As the Eviews software

output shows, the analysis model has a good fit, and the validity factor (Pr) is less than 5% (P.value <5%) and the coefficient of determination is 0.5656, which is close to one. Therefore, it shows that the analysis model has an excellent fit and is preferred. In other words, the development budget variable has a significant relationship with the economic growth variable.

Considering the possible residual value of the Godfrey Breusch model, it is 0.2936 larger than the alpha value of 0.05, therefore, we cannot reject the zero hypothesis that there is a serial correlation between the residuals, and yet we can conclude that the residues do not have a serial correlation.

The final hypothesis of this research is tested based on the Jarque-Bera test and the normal distribution of the variable data of the function is measured and to make sure that the original model of this research is correct. The hypothesis of this model is as follows:

$$\left\{ \begin{array}{l} H_0 = \text{Random disruption components have a normal distribution.} \\ H_1 = \text{Random disruption components do not have a normal distribution.} \end{array} \right\}$$

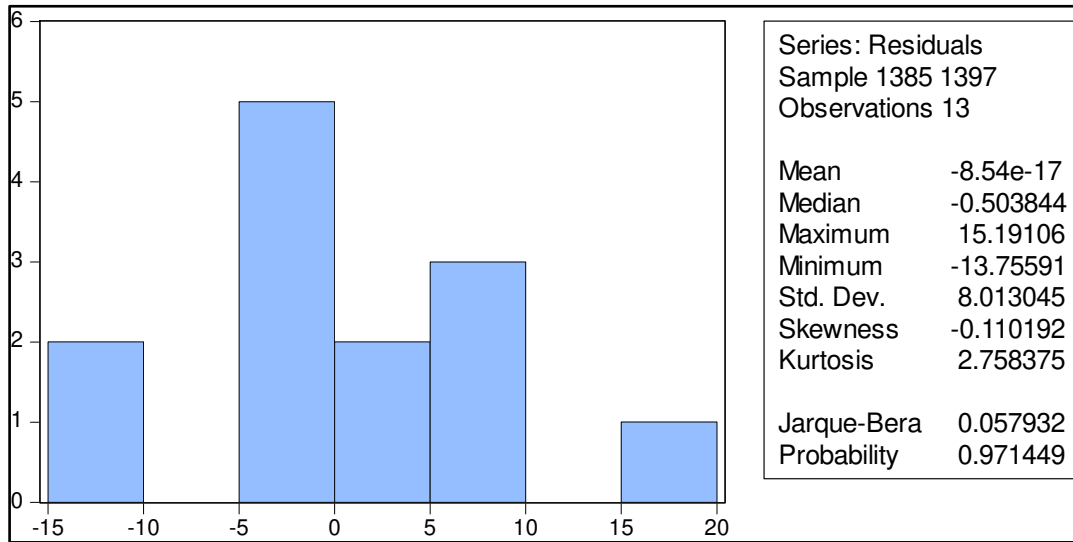


Figure 7: Residual normality test

Figure 7, which shows the test results of the normal residual distribution hypothesis, shows that the probable value of Jarque-Bera is 0.808, which is greater than the alpha value of 0.05, and in this case, the zero hypotheses, which is the normal distribution of residuals, cannot be rejected. However, we conclude that the remnants of the regression model have a normal distribution and the results of the regression model are reliable.

Stability of the regression model

To determine the stability of the regression model, we use the CUSUM test for both the model and each parameter.

As can be seen in Figures 8 and 9, the regression model did not exceed the red lines. Therefore, it can be concluded that the regression model is stable. Finally, it can be said that the research regression model is correct and verifiable in terms of its conditions and assumptions.

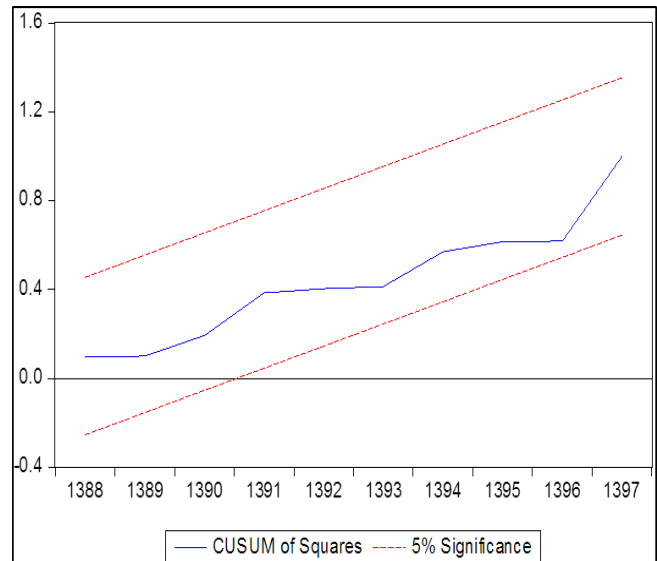


Figure 8: Stability measurement and regression stability test

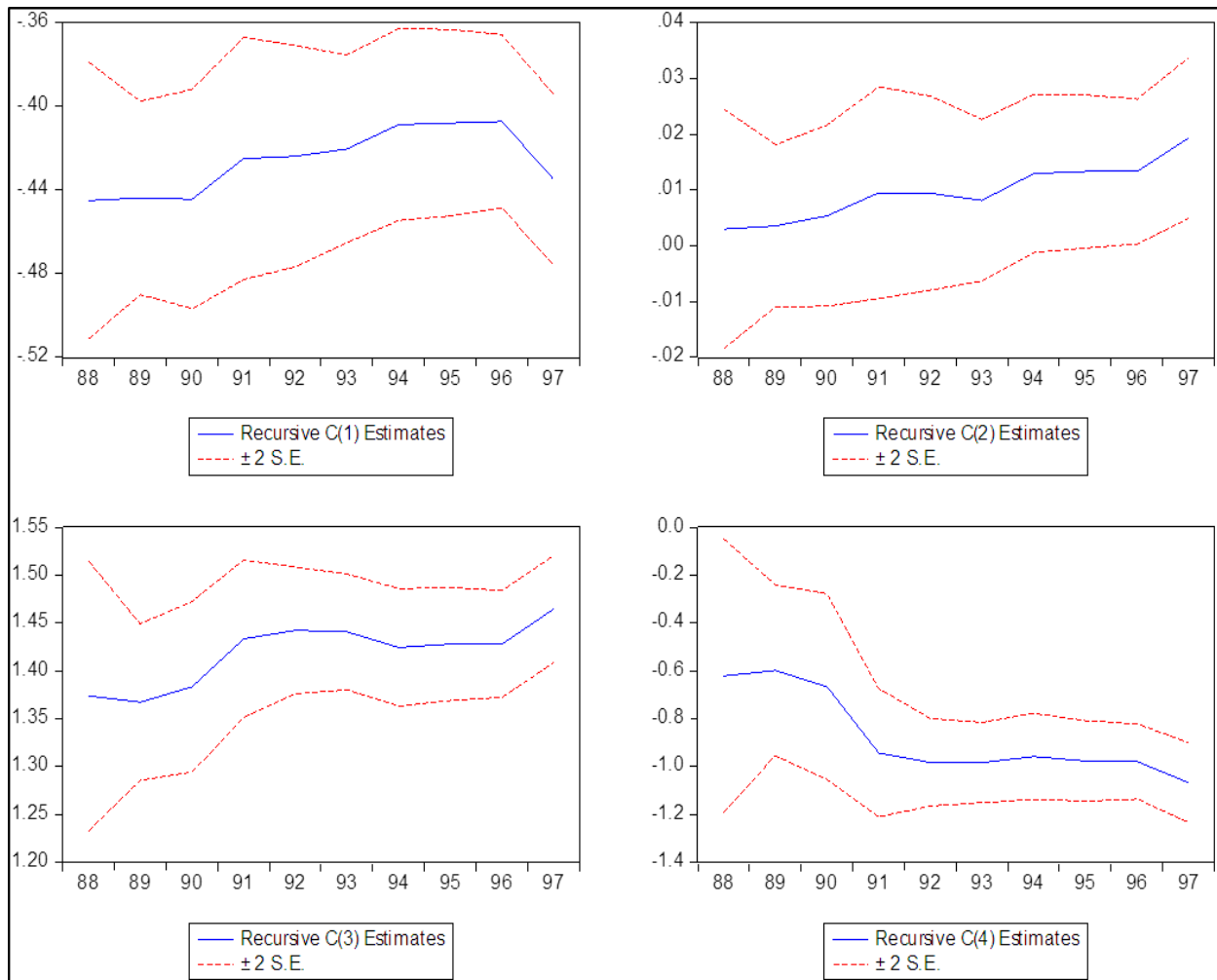


Figure 9: Stability test of the parameters of the study

DISCUSSION AND CONCLUSION

In terms of public administration, the budget is the main tool for creating and developing government plans and policies, and it is a request for funds to run the government. Thus, the budget indicates the revenues and other resources required (such as debts) for the appropriateness of expenditures (Ministry of Finance 2013: 52). In general, the purpose of the budget can be considered as the correct use of society's resources and financial resources to achieve public goals.

The budget is one of the great links in the administrative system. In other words, the budget is one of the great systems of the administrative system. If the administrative system includes a set of tasks that force the government to act and exercise sovereignty or supreme authority to achieve a certain set of goals; therefore, reforming the budgeting system will be possible within the framework of reforming the administrative system.

To provide better services for citizens and to implement government goals and plans, the main tool for governments is the budget. The budget allows governments to generate

some revenue over some time and spend it on public spending and the best services. If the government's budget is not realized, the provision of services to citizens will be affected and governments cannot achieve their policies, goals, and policies. In the past, there has been a problem of budget non-consumption in Afghanistan, which has not been well addressed by academic institutions and experts, and the factors have not been identified to find a reasonable solution.

Since the budget is the most important legal document that defines the revenues and expenditures of the government, whenever it is implemented properly, the activities of the departments will undoubtedly be organized and the course of their activities will be determined. In particular, the development budgets of the ministries have been an important indicator and a development tool, and whenever the development budgets of the ministries are implemented in the best possible way, positive changes will take place. It reflects the level of activity and inactivity of the ministers and managers of the budget units. Unfortunately, the relevant ministers and officials are interrogated by lawyers in parliament every year because they have not spent the

planned and allocated budget. This is a major economic problem. Undoubtedly, every effect is caused by various factors and causes; therefore, the no consumption of development budget is caused by various factors such as incorrect administrative structure and environmental factors that affect it.

In this research, special attention has been paid to the issue of development budget planned for the years 2014 to 2018 AH. Development budgets include development spending plans and expenditures that are spent on long-term investments and in several financial periods can have significant effects on important economic variables such as economic growth. Thus, the first step in development budgeting is to fully understand the development costs, and the next step is to use the methods and techniques that can be used to select the best and most cost-effective investments. Development budgets are the integration of decisions with the goals of government financial management.

The development budget is one of the most important parts of management decision making. Careful analysis and valid judgments are necessary to examine the importance of the funds spent, as well as the time required to re-receive those funds through the collection of revenue. Development budget is the process of identifying, evaluating, planning and financially supporting major development projects in budget units. Development budget-related decision-making greatly affects the success of the budget unit in achieving its goals. Therefore, the development budget plays a major role in the long-term success of budget units. The low consumption of the development budget has led to several factors, some of which have been affected by the mismanagement of budget units, and which have been influenced by external factors.

In this study, the country's GDP is assumed to be the most important indicator of economic growth, so that the research findings show that there have been sharp fluctuations in the country's GDP from 2005 to 2018 and during these years it shows negative growth. This negative growth has many reasons such as inflation, famine, political conflicts, insecurity, lack of development budget, etc. which these issues have disrupted the growth and development of the country's economy, and the upward trend has turned into a downward trend.

In this research, the VAR time series model and the conventional least-squares method have been used and the CUSUM test and other tests have been used to measure the stability of the model. According to the VAR time series model, a positive shock in the development budget has increased the level of economic growth (GDP) in the second period, the third period decreased and it has been relatively stable since the fourth and fifth periods, and the seventh period is increasing, as well as fluctuating sharply in the following periods. Also, a positive shock in the development budget has reduced the same variable in the third period and increased almost from the fourth period onwards to the fifth

period, decreased in the sixth period, increased in the seventh period, decreased again and then increased in the ninth period. Thus, the scale of positive shocks in economic growth reduces the variable development budget to less than the second year, decreases in the third period, increases to the sixth period, and decreases in the seventh period and finally takes the upward trend. Also, with a positive shock in economic growth, the same variable decreases in the second period and follows the normal change trend after the fourth period.

Also, a positive shock in the development budget affects the variables of the non-optional development budget in this country, both in the short- and long-term. However, the optional development budget variable is less in the short-term, but in the long-term, it is relatively relative, and the impact of shocks in both the short- and long-term has statistical validity and fluctuating movements. Therefore, in general, it can be said that the shock received affects the variable of the development budget both in the short- and long-term of the variable of economic growth.

The results of the regression show that the relationship between development budget variables and economic growth has been significant.

Recommendation

- In the order of development budgets, the principles of budgeting should be used, and the nominal mention of projects in the budget document should be avoided.
- The government has revised the project system, allocating funds to major projects so that new projects can be designed from the proceeds.
- Before arranging the budget, first, the technical studies of the project should be done. These studies should be carried out by the Ministry of Economy, and after establishing that the project in question is feasible and that its objective-technical facilities are favorable, the funds should be allocated to it.
- To implement effective, timely and correct development projects, budget units should continue to prevent further deviations and implementations following the proposed objectives.
- The budgeting units, in agreement with the Ministries of Finance and Economy, in coordination with the Ministry of Justice, will formulate a specific law on monitoring the implementation of the budget.
- Professional employees in departments should be trained to monitor the implementation of budgets.
- Plan the development budgets according to the real needs and avoid taking extra-capacity budgets.

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