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RELATIVE EFFECTIVENESS OF FISCAL AND MONETARY POLICIES ON ECONOMIC GROWTH IN SAUDI ARABIA

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Abstract:

This study investigates both short run and long run relationships among fiscal policy represented by government expenditure, monetary policy represented by money supply and economic growth represented by non-oil GDP in Saudi Arabia. This study uses annual time-series data over a study period from 1980 to 2018 by employing the autoregressive distributed lag (ARDL) Bounds method and Error Correction Model (ECM). Findings show a positive relationship between both policies and economic growth in the long-run, while the monetary policy is more effective. In the short-run, there is no effect of fiscal policy while the monetary policy has a positive effect and once has negative effect with economic growth lagged for one period has a positive effect on its current value. The error correction coefficient about 40 percent of the disequilibrium will be corrected immediately and the speed of adjustment takes about 2.5 years for equilibrium to be restored. Accordingly, the results of the study are consistent with the economic theory. Consequently, the study implications is that the Kingdom's pursuit of its objectives depends more on monetary policy in order to enhance its efficiency, especially with developments in world oil prices.

***Keywords**: fiscal policy, monetary policy, KSA, ARDL.*

1.1 Introduction

Economic growth is considered one of the most important issues for both developed and developing countries, and one of the most important targets of economic policies, which include fiscal policy and monetary policy. Therefore, the effectiveness of fiscal and monetary policy on economy growth has been the center of debate between Keynesians and the Monetarists for a long time.

The concept of fiscal policy is the role of the government of using taxes and government expenditures to influence the citizens' and businesses' disposable incomes, as well as the overall business environment. Whereas, the objective of monetary policy is to control the growth of money supply to stabilize prices, achieve full employment, redistribute income and raise the rate of economic growth (Alhabib, 2011).

Economists' opinions on the effectiveness of government policies in achieving economic stability are divided into two directions: first, monetarists: they believe in monetary policy actions and effectiveness, and it has a greater impact than fiscal policy on achieving economic goals; (Milton Friedman and Meiselman, 1963). The second trend is that the proponents of fiscal policy (Keynes, 1964) believe fiscal policy is more important, and government spending has the upper hand in directing the economy (Ayoub & Al-Hiti, 2012). Nevertheless, modern economists believe that both policies have an impact on economic stability and that means that the implementation of both policies simultaneously can complement each other (Noman & Khudri, 2015).

However, the effectiveness of both policies depends on several factors, the most important of which are the structure of the economy, its degree of development, openness to the outside world and the degree of development of the financial sector, which affects economic growth and capital efficiency (Ayoub & Al-Hiti, 2012). In addition, to ensure the success of monetary policy or fiscal policy or both, in order to achieve economic stability in the community, there must be coordination between the two policies so as not to work each other in the opposite way and thus lose their effectiveness in achieving their goals (Alhabib, 2011).

Until recently, oil revenues have characterized the Saudi economy as well as the biggest source of its budget deficit/ surplus. Therefore, the Kingdom has sought to reduce its dependence on oil by adopting many macroeconomic reforms. The inevitability of these economic transformations has shown other characteristics of the nature of the relevance between the fiscal and monetary policies, which focused on the objectives and effects of each of them on economic growth.

The primary objective of this study is to assess how fiscal and monetary policies influence economic growth in Saudi economy and which policy is more effective on economic growth. On the other hand, the paper addresses the following questions:

Do fiscal policies affect economic growth in Saudi economy?

Do monetary policies affect economic growth in Saudi economy?

In addition to the abstract and the conclusion, the study consists of three main sections. Section one contains an introduction, literature review and the study design. Section two provides the descriptive analysis and the methodology of the study. The finals section presents both the interpretation and results of the study.

The primary contribution of the study is that it assists decision makers about the proper fiscal and monetary policies that enhance economic growth in Saudi Arabia.

1.2 Literature Review:

Many economists and researchers have carried out a number of empirical studies to examine which policy has proven a major effect on the economic activities. A sample of these studies including:

Tekilu Tadesse, Tesfaye Melaku (2019) investigated in their paper the relative effectiveness of monetary and fiscal policies in affecting economic growth by employing Auto-Regressive Distributive Lag Model (ARDL) for the time spanning from 1975 to 2017. The empirical results indicate that both the monetary and fiscal policies have equal statistically significant and positive impact on economic growth in Ethiopia with different significance level and magnitude. Besides of equal effectiveness, the elasticity of real output with respect to fiscal policy variable is greater than the elasticity with respect to money supply which show fiscal policy is more effective than monetary policy in influencing Real GDP in the long-run. However, in the short run, the fiscal policy is effective while that of the monetary policy proxy by money supply is ineffective in affecting output growth in Ethiopia.
Tabar et al (2016) discovered the relationship between Iranian economic growth, money supply, prices and the government expenditure. The study was conducted via the autoregressive distributed lag (ARDL) method during the years 1981-2011. The results confirmed that there was positive effect of government expenditure, prices level rising on economic growth, whereas money supply made a negative and significant impact on it. Similarly, Georgantopoulos and Tsamis (2013), explored the short-long run relationship between money supply, inflation, government expenditure and economic growth in Cyprus. The paper employed the Error Correction Mechanism (ECM) and Johansen co-integration test respectively for the case of Cyprus using annual data from 1980 to 2009. They found that public spending promotes economic growth. While the excess growth of money caused inflationary pressure, the inflation negatively affected economic growth. On the other hand, opposing results were obtained by Mohammad, et al. (2009) in their study on relationship btween money supply M2, inflation, government expenditure and economic growth in case of Pakistan. Their results showed that the government expenditure and inflation have a negative relation to economic growth while money supply had a positive relation to economic growth in the long run.

Rakić & Rađenović (2013) determined the efficiency of fiscal and monetary policy on the economic activity in Serbia. The study employed unit root and cointegration tests, as well as the regression analysis on the series of quarterly data for the period 2003-2012. The obtained findings showed that the monetary policy was more efficient in driving economic growth comparing to fiscal policy. In a similar line, Özer & Karagöl (2018) examined the relative effectiveness of monetary and fiscal policies on output growth in Turkey over the period 1998 and 2016. The study use some of the time series econometric techniques, such as

ARDL Bounds testing, structural break unit root tests and Granger causality tests. They found that monetary policy had only short-run effects on growth. However, the fiscal policy had an effect on growth in the long-run. Thus, the fiscal policy appears to be more impact than monetary policy. They also found that the crises in 2008 had a negative effect on growth.

Senbet (2011) examined the relative impact of fiscal versus monetary actions on output in the US economy using quarterly data between 1959:I and 2010:II. The study employed Granger causality tests and Vector Autoregressive (VAR) models. The results indicated that in affecting the real output growth, the monetary policy seems to be relatively better than fiscal policy. While in terms of nominal output, the fiscal policy actions have the most impact. In addition, Younus (2014) investigates the relative importance of monetary and fiscal policies in altering real output growth in Bangladesh. St. Louis equation is used to estimate the relative effectiveness of monetary and fiscal policies. The study found that the monetary policy was more effective than fiscal policy in altering real output. Also, Jawaid, et al. (2011) studied empirically examines the effect of monetary, fiscal and trade policy on economic growth in Pakistan using annual time series data from 1981 to 2009 using cointegration analysis. The study found that both of the two policies have a positive long and short run relationship with economic growth but trade policy had insignificant effect. The monetary policy was more effective than fiscal policy.

Abul Hasna et al. (2016) investigated the relative effectiveness of monetary and fiscal policy on economic growth in Bangladesh for the period from fiscal year 1974 to2015 employing cointegration and Vector Error Correction Model (VECM). The results showed that instruments of monetary policy were more effective to elevate economic growth in both short and long run. In contrast to this result, Bokreta & Benanaya (2016) obtained that the fiscal policy exacted greater impact on economic growth. The study applies panel data technique to real variables of some selected African countries with extended data from 1970 – 2012. Ajisafe & Folorunso (2002) studied the relative effectiveness of monetary and fiscal policy on economic activity in Nigeria through cointegration and error correction modeling techniques. The time series properties of the variables were investigated by conducting a unit root test using annual series data for the period 1970-1998. The results suggested that the monetary rather than fiscal policy had a greater impact on economic activity. Adefeso & Mobolaji (2010) using annual data from 1970-2007. The Error Correction Mechanism and Cointegration technique were employed to analyze the data and draw policy inferences in Nigeria. The authors confirmed the same result of the previous study. Furthermore, in both the short and long run the result suggests the trade policy has insignificant effect on economic growth.

Similarly, Batten and Hafer (1983) compared the relative impact of monetary and fiscal policies on economic activity for the following countries: UK, US, Canada, Japan, France, and Germany. They use a modified form of the “St. Louis equation” to assess the relative importance of monetary and fiscal actions on economic activity in several developed

countries. The findings emphasized greater influence of monetary policy over fiscal policy across these countries. Jawaid, et al. (2010) conducted a comparative analysis of monetary and fiscal Policy in Pakistan. The results indicate that there was a significant and positive effect on economic growth of both policies, but the monetary policy had greater effective in enhancing economic growth.

Ali et al. (2008) explored whether fiscal stance or monetary stance was more effectiveness for economic growth for South Asian countries including Pakistan, India, Sri Lanka and Bangladesh. The results clearly demonstrated that monetary policy variable was significant in both short and long run, while fiscal policy variable is insignificant in both short and long run. Their results emphasized that in order to accelerate economic growth, the monetary policy was the most effective tool, while the fiscal policy was completely ineffective in case of South Asian countries.

Based on St. Louis equation, Adeniji & Evans (2013) evaluated relative potency of monetary and fiscal policies in selected African countries during the period 1972-2012. Panel data regression model showed that monetary base and government expenditure are viable instruments to stabilize output. As the result showed, the greatest influence appears in favor of monetary policy. Ajayi & Aluko (2017), also used St. Louis equation to examine empirically the relative impact of monetary and fiscal policy in Nigeria from 1986 to 2014 using a modified St. Louis equation and employing the Ordinary Least Squares estimation method. The study revealed that there is a positive and significant relation of the output growth through the growth of monetary tools and exports. On the other hand, there was a negative and insignificant effect of the output growth through the growth of government expenditure. Therefore, the monetary policy has a greater stimulated effect on economic growth.

In terms of examining the effect of each policy on the economy separately, Agbonlahor (2014) investigates empirically the impact of monetary policy on economic growth in the United Kingdom. The study uses time-series data over a study period spanning from 1940-2012. The impacts of each of the endogenous variables are investigated using the Vector Error Correction Model (VECM). Their findings revealed a connection between money supply and inflation rate, which was considered a prominent instrument to economic growth in the UK. The results verify causality between government expenditure and money supply with economic growth.

Cheng & Lai (1997) analyzed the relationship between government expenditure and economic growth in South Korea by applying a VAR techniques to South Korean data for the period 1954-94. The results showed that there was a feedback causal relationship between government expenditure and money supply with economic growth.

Al-Saidi and Al-Otaibi (2015) attempted to analyze the effectiveness of both monetary and fiscal policies in influencing economic growth in Saudi Arabia. The study used the

descriptive analytical approach by studying the evolution of the rate of growth of some important determinants of both policies, as well as the standard model was applied using the method of time series data for the period (1986-2012). The results revealed the existence of a long-term relationship between economic growth and monetary and fiscal policies, but the effectiveness of fiscal policy is higher in influencing the growth of the economy.

Looney, R. E. (1989), study the relative efficacy of monetary and fiscal policy in Saudi Arabia. The results show that the relationship between money and economic activity is more predictable than that stemming from changes in autonomous expenditures.

There is no doubt that monetary and fiscal policy tools are extremely important to achieve economic growth for each economy. The global financial crisis in 2008 strengthened the role and importance of fiscal policy in responding to economic crises when monetary policy alone was unable to prevent an economic downturn. For all of this, this study has chosen the Kingdom of Saudi Arabia to confirm the importance of fiscal and monetary policy tools in influencing the performance and management of the national economy, implementing its economic plans and directions, developing the country, preserving the path of sustainable growth, and maximizing social welfare. In Saudi Arabia, and to the best of our knowledge, very few empirical studies have been done regarding the relative efficacy of both policies on economic growth. Therefore, in terms of both methods used and period chosen this study is the first attempt to examine the relative effectiveness of government policies on economic growth in Saudi Arabia.

1.3 The Study Design

Data:

This study uses annual time-series data over a study period from 1980 to 2018, and it is based on the use of the analytical descriptive method by reviewing the most important literature related to the aspects that the study aimed at highlighting. The secondary sources are used to collect the available data published in the statistics of Ministry of Finance, Saudi Arabian Monetary Authority (SAMA) and General Authority for Statistics (GaStat) about government expenditure, money supply and non-oil gross domestic product at current prices.

The reason behind using non-oil GDP, includes the significant contribution of the oil sector in GDP of Saudi Arabia and in addition to the significant impact of fluctuations in the world oil price, which leads to misleading results when using overall GDP (Alshahrani & Alsadiq, 2014).

2.1 Descriptive Analysis:

Table 1: Descriptive Statistics

Statistics	NGDP	GE	M2
Mean	671392.3	409586.7	526811.8
Median	397606.0	244912.0	242006.0
Maximum	1928923.	1140603.	1657000.
Minimum	203205.0	137422.0	83403.00
Std. Dev.	541022.9	308444.7	529905.1
Dev.	1.11E+13	3.62E+12	1.07E+13
Observations	39	39	39

Table 1 displays the descriptive statistics for the data sample. The total number of sample observations is (39), the non-oil GDP reached its highest value in 2018 and the lowest value in 1980. With regard to the government expenditure, it reached peak in 2014 and reached its lowest value in 1986, while the highest level of money supply recorded in 2018 and the lowest level in 1980**.**

2.2 Methodology:

On the practical side, the empirical equation to capture the impact of polices' variables on economic growth is being modelled in level form as below:

LY_t NGDP= α +β0 LGE_t + β1 $LM2_t$ + U_t…….(1) **Source: Okorie et al (2017)**

Where as:

LY_t NGDP= Logarithm of non-oil Gross domestic product, proxy of economic growth (dependent).

LGE_t = Logarithm of total government expenditure, proxy of fiscal policy (independent).

$LM2_t$ = Logarithm of broad money supply'M2', proxy of monetary policy (independent).

U_t= the error term.

In order to achieve the reverting mean of relationships and to make econometric testing procedures valid, the time series data are transformed into logarithmic forms. Researcher's calculations are conducted using the E-views 10 software.

Unit Root Test:

At the estimation stage, since data employed are time series and to avoid spurious result first, each series has been tested for unit root for stationarity using the Augmented Dickey-Fuller (ADF) test through regression of the series at first difference against the series with once lag, lagged difference terms, and a constant and a time trend are optionally employing (Dickey & Fuller, 1979), which can be expressed as:

$$\Delta y_t = \alpha y_{it-1} + \sum_{j=1}^{Pi} B_{ij} \Delta y_{it-j} + x'_{it}\delta + \varepsilon_t \ \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

The null hypothesis is formulated as:

$H_0: \alpha = 0$, if the coefficient of (y_{it-1}) is significantly different from zero then the null hypothesis that (y) contains a unit root is rejected which implies the series is stationarity and the order of the series is I(0). If it's not, then the series contains a unit root which implies non-stationarity. Therefore, the unit root tests have been applied after taking the difference of the series.

Testing for co-integration: the ARDL Bounds testing approach:

To test the co-integration which helps to identify long-run economic relationships between variables I have used Autoregressive Distributed Lag model (ARDL) popularised by (Pesaran & Shin, 1998) and (Pesaran, et al., 2001). Some of the ARDL method advantages that even when the explanatory variables are endogenous the estimation is possible and it can be applied regardless of the co-integration degree of all variables is the same I(0), I(1) or not. The Auto Regressive Distributed Lag (ARDL) follow-on the error correction model is given below for the above equation (1):

$$\Delta Y_{it} = \alpha + \beta 1 \sum_{i=1}^{p} \Delta \mathrm{Y}_{i.t-i} + \beta 2 \sum_{i=1}^{p} \Delta \mathrm{GE}_{i.t-i} + \beta 3 \sum_{i=1}^{p} \Delta \mathrm{M2}_{i.t-i} + \delta_1 \mathrm{Y}_{i.t-1} + \delta_3 \mathrm{GE}_{i.t-1} + \delta_3 \mathrm{M2}_{i.t-1} + \mu_{it} \ldots (3)$$

The error correction model is represented by the terms with summation sign. While the long run relationship is represented by the second part of the equation.

The null hypothesis is formulated as:

$H_0: \sum \delta_{it} = 0$, this implies that there is no long run relationship

The alternative hypothesis is:

$H_1: \sum \delta_{it} \neq 0$, this implies that there is long run relationship.

By comparing "F-statistic" with two critical values, lower and upper values, calculated by (Pesaran, et al., 2001). If "F statistic" is bigger than the upper value, there is a long-run relationship between the variables; if it is smaller than the lower value, there is no long-run relationship and no interpretation can be made between the lower value and the upper value.

To estimate this model, the number of optimal lags have been obtained by the Akaike Information criterion (AIC).

The diagnostic tests have been tested in the field of establishing classical assumptions is one of the important aspects of estimating Auto Regressive Distributed Lags. Where there is a serial correlation between the residuals or not, normality distribution, homoscedasticity of residuals.

The following equation will be estimated in the model then in order to estimate the long run coefficients if there is existence of long-run relationship:

$$Y_{it} = \alpha + \beta 1 \sum_{i=1}^{p} \mathrm{Y}_{i.t-i} + \beta 2 \sum_{i=1}^{p} \mathrm{GE}_{i.t-i} + \beta 3 \sum_{i=1}^{p} \mathrm{M2}_{i.t-i} + \mu_{it} \ldots\ldots (4)$$

Finally, if there is evidences of long run relation then in order to estimate the short run coefficients the following equation will be estimated:

$$\Delta Y_{it} = \alpha + \beta 1 \sum_{i=1}^{p} \Delta \mathrm{Y}_{i.t-i} + \beta 2 \sum_{i=1}^{p} \Delta \mathrm{GE}_{i.t-i} + \beta 3 \sum_{i=1}^{p} \Delta \mathrm{M2}_{i.t-i} + \gamma\, EC_{it-i} \ldots (5)$$

γ is the percentage of short-term imbalance is adjusted in each period in order to reach a long-run equilibrium or the speed of adjustment in a short run to long run equilibrium.

Hypotheses:

The hypotheses of the study are as follows:

H_1: There is a short run impact of government expenditure on economic growth in Saudi Arabia.

H_2: There is a short run impact of money supply on economic growth in Saudi Arabia.

H_3: There is a long run impact of government expenditure on economic growth in Saudi Arabia.

H_4: There is a long run impact of money supply on economic growth in Saudi Arabia.

For further literature supporting the above hypotheses refer to R.W. Hafer (1982).

3.1 Results:

3.1.1Testing of the unit root hypothesis:

According to the ADF test, if the t-statistic is more than the critical t-value, the null hypothesis of non-stationary is rejected. The results of ADF test (Table2) show clearly evident that the null hypothesis of a non-stationary at the level is not rejected in all cases for the variables as test statistics are less than the critical values, whereas, these series are stationary in first differences with at least 5% significance level. Therefore, the non-oil GDP, government expenditure and money supply series are integrated of order one, i.e., I(1).

Table 2: ADF unit root test

Variable	Level			1st Difference			
	Intercept	Intercept and Trend	None	Intercept	Intercept and Trend		None
Y	1.11 (0.99)	-2.61 (0.27)	1.98 (0.98)	-3.03* (0.04)	-3.70* (0.03)		-2.32** (0.02)
LGE	0.18 (0.96)	-2.21 (0.46)	1.36 (0.95)	-4.29** (0.00)	-4.63**	(0.00)	-4.03** (0.00)
LM2	0.77 (0.99)	-2.25 (0.44)	2.69 (0.99)	-3.75** (0.00)	-4.01**	(0.01)	-2.57* (0.01)

* indicates stationarity at 5% significance level, and ** indicates stationarity at 1% significance level using MacKinnon (1996) critical and P-values.

Autoregressive Distributed Lag Model (ARDL) enables to be applied due to all variables have the same order of integration.

3.1.2 Autoregressive Distributed Lag Model (ARDL) Lag Selection:

Based on lowest value of Akaike Information criterion (AIC) the optimal lag length has been selected, and the result is shown in (Table3).

Table 3: VAR lag order selection criteria

HQ	SC	AIC	FPE	LR	LogL	Lag
-0.654080	-0.566785	-0.700101	9.97e-05	NA	15.25177	0
-8.015284	-7.666104*	-8.199366	5.53e-08	248.4201	155.4889	1
-8.197096*	-7.586030	-8.519239*	4.07e-08*	23.35646*	170.0867	2
-7.980387	-7.107436	-8.440592	4.55e-08	10.89096	177.7104	3
-7.683111	-6.548276	-8.281378	5.68e-08	7.811581	183.9241	4

Note: *indicates lag order selected by the criterion.

The results offer for each criterion with 4 maximum lags that all of them are criteriast and in favour of 2 lag.

3.1.3 Bound Testing for Co-integration:

(Table 4) displays the results of Bound testing approach. Calculated F-statistic is 9.40 at lag 2, which is higher than upper bound critical value at 1 % significant level implying that there

is certainly a long-run relationship among the variables in the model. Since there is a co-integration relation between the variables, the ARDL model is applied in order to determine the long and short-term relationship.

Table 4: Bounds test

Dependent Variable :Y				
I(1)	I(0)	Signif.	Value	Test Statistic
	Asymptotic: n=1000			
			9.402	F-statistic K
Upper		Lower		
6.36	5.15	1%		

3.1.4 ARDL Model Results:

The ARDL method is applied as shown in (Table5) to estimate long run and short run coefficients. The ARDL (2,0,2) model have been used to investigate the long-term relationship.

Table 5: Results of ARDL model

Dependent Variable: Y				
Prob.*	t-Statistic	Std. Error	Coefficient	Variable
0.00	6.86	0.15	1.03	Y(-1)
0.00	-3.04	0.14	-0.43	Y(-2)
0.00	2.95	0.02	0.08	GE
0.02	2.32	0.09	0.22	M2
0.18	-1.35	0.15	-0.21	M2(-1)
0.04	2.05	0.11	0.23	M2(-2)
0.00	3.65	0.29	1.08	C

Note: ARDL(2, 0, 2) selected based on Akaike Information Criterion.

Diagnostic Tests of Estimating ARDL:

Table 6: Diagnostic Tests

	F-statistic	
Serial Correlation LM test	0.13(0.87)	There is no Serial Correlation in the residual
Heteroscedasticity	0.98(0.45)	There is no Heteroscedasticity in the residual

Normality	J-B value 2.52(0.28)	The residual is Normally distributed

As shown by the (Table6), the lack of a serial correlation between the residuals, normality distribution and homoscedasticity of residuals are confirmed (using Heteroskedasticity Test: Breusch-Pagan-Godfrey). Accordingly, it could be argued that the statistical results of the estimated model are reliable.

Long Run Results Using the ARDL Approach:

Table 7: Estimated long run coefficients using the ARDL approach

Dependent Variable Y_{it}		
Prob.	Coefficient	Variable
0.00	0.20	GE
0.00	0.62	M2

The results of estimating the long-term relationship are presented in (Table7). According to the table, all the estimated coefficients are significant at 1% significance level. The coefficient of GE= 0.20 indicates that in long run, the fiscal policy has a positive effect on economic growth and the effect of its change in economic growth by 20%. While the coefficient of M2= 0.62 indicates that in long run, the monetary policy has a positive effect on economic growth and the effect of its change in economic growth by 62%. Therefore, the monetary policy has more impact on economic growth than fiscal policy in the long-run.

3.1.5 Error Correction Representation of ARDL Model:

In order to test the existence of short-run relationship among the variables, the Error Correction Model has applied and (Table7) presents the related results.

Table 8: Error correction representation of ARDL model

Dependent Variable ΔY_{it}		
Prob.	Coefficient	Variable
0.00	1.08	C*
0.00	-0.40	EC-1**
0.00	0.43	Δ y-1
0.02	0.22	ΔM2
0.03	-0.23	ΔM2-1

R-squared= 0.79	F-statistic= 31.70

* Constant ** Error Correction

The results show that adjustment coefficient is negative and significant (-0.40). These findings suggest that about 40% of the disequilibrium will be corrected immediately, i.e. in the next period and the speed of adjustment takes about 2.5 years for equilibrium to be restored. The result also suggests in the short run change in fiscal policy has no impact on economic growth, while monetary policy has significant impact on Economic growth.

In summarising the findings on tables (7, 8) above are as follows:

1- There is a positive relationship between both policies and economic growth in the long-run, while the monetary policy is more effective.

2- In the short-run, there is no effect of fiscal policy while the monetary policy has a positive effect and once has negative effect with economic growth lagged for one period has a positive effect on its current value.

3-The results of the study are consistent with the economic theory. Consequently, the Kingdom's pursuit of its objectives depends more on monetary policy in order to enhance its efficiency, especially with developments in world oil prices.

4-The results of the previous study showed that there is a clear relationship and influence in the long term and at a high level between the independent variables of both monetary and fiscal policy tools and the variable dependent economic growth.

5: Conclusion

The impact of economic policies on economic growth is an important issue in macroeconomic analysis. The debate is still going on between the Keynesian and monetarists. On the one hand, Keynesian argue that fiscal policy is more effective in achieving economic growth. On the other hand, monetarists emphasize the effectiveness of monetary policy in achieving economic growth.

This study aims to determine the relative effectiveness of economic policies on the growth of the Saudi economy during the period 1980-2018. The importance of this study comes as the Saudi Arabia seeks to achieve a low level of budget deficit through the adoption of several reforms that will reduce dependence on the oil sector and increase the economic growth while Kingdom seeking to achieve the vision of the Saudi Arabia 2030.

Using annual data where non-oil GDP represents economic growth, government spending represents fiscal policy and money supply represents monetary policy at current prices. Autoregressive Distributed Lag model (ARDL) Bounds and error correction model have been applied. The results show that in the short-run, there is no effect of fiscal policy while

the monetary policy has a positive effect and once has negative effect with economic growth lagged for one period has a positive effect on its current value.

In the short-run, the positive effect of monetary policy appears and once the effect of monetary policy has negative effect with one period lag and economy growth has positive effect with one period lag. It also shows a positive impact of economic growth in a single slowdown. The error correction coefficient of the model is negative and significant, which means that about 40% of the disequilibrium will be corrected immediately, i.e. in the next period and the speed of adjustment takes about 2.5 years for equilibrium to be restored. Accordingly, the results of the study are consistent with the monetarists theory. Consequently, the Kingdom's pursuit of its objectives should give more attention to monetary policy in the coming period in order to enhance its efficiency. The implication of the study is that the Kingdom's pursuit of its objectives depends more on monetary policy in order to enhance its efficiency, especially with developments in world oil prices. Moreover, the primary contribution of the study is that it assists decision makers about the proper fiscal and monetary measures that enhance economic growth in Saudi Arabia. Finally, it is important to emphasize that results of the study may suffer from the deletion of other relevant variables and therefore future study will include more relevant variables to improve results. For example, GDP (including oil) could be added in the model using quarterly data.

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