ZENITH International Journal of Business Economics & Management Research
Vol.2 Issue 7, July 2012, ISSN 2249 8826
Online available at http://zenithresearch.org.in/

ANALYTICAL EVALUATION OF FISCAL AND MONETARY POLICIES IN MACROECONOMIC MANAGEMENT IN TANZANIA

ANICETH KATO MPANJU*

***Assistant Lecturer,**
Tanzania Institute of Accountancy,
Department of Accountancy and Finance (Academic),
Dar-es-Salaam, Tanzania.
Ph.D Student,
Maastricht School of Management,
The Netherlands.

ABSRTACT

This paper tries to analyze the relative effectiveness of monetary and fiscal policies on macroeconomic management and how they have influenced economic growth and development in Tanzania for the period 1990 to 2009. The essence of the study was to evaluate the trend of narrow money (M1), broad money (M2), government revenue, government expenditure, government budget deficits, and gross domestic product (GDP) growth rates. The study adopted a case study design with a quantitative research approach and it represents an econometric analysis using statistical package for social sciences (SPSS). The empirical analysis on basis of ordinary least squares method suggests that, there is moderate (positive) relationship between the variables (narrow money, broad money, government revenue receipts, and gross domestic product growth rates). This means that these variables have no big significant impact on the pattern of gross domestic product (GDP) growth rates. Also, the analysis suggests that budget deficits have moderate (negative) relationship with gross domestic product growth rates. Thus, the study finds no signified relationship between most of the components and we may conclude that fiscal policy and monetary policy does not exert a strong impact on economic activities in Tanzania.

KEYWORDS: Fiscal policy, monetary policy, macroeconomic management, and economic growth.

1.0 INTRODUCTION

Today theories of fiscal policy and monetary policy play an important role in shaping macroeconomic management both nationally and internationally. But the relative importance of these policies has been a serious debate between the Monetarists and the Keynesians. The debate surrounding the effectiveness of monetary policy and fiscal policy is rooted in the traditional views of monetarists and Keynesians. Monetarists favor monetary policy since they believe money supply plays a major role in defining the condition of the economy. On the other side, Keynesians argue that fiscal policy is more

essential, and therefore government expenditures have the upper hand in gearing the economy.

Fiscal and monetary policies are inextricably linked in macro-economic management as development in one sector directly affects developments in the other. However, in the light of global financial crisis there is no doubt perhaps in claiming that the dominant economic policy approach in developed world and developing economies today remains essentially Keynesian, with its inherent bias in favor of fiscal policy in stimulating aggregate demand and output growth (Tatlonghari, 2009).

Furthermore, Government fiscal recklessness resulting in deficit financing can also cause inflation, which contradicts the fundamental monetary policy objective of price stability. This has the potentials of destabilizing the macro-economic environment thereby retarding economic productivity and development (Ezeoha and Uche, 2004). But Mishkin (2009) points out that the fallacy that the monetary policy is ineffective during financial crisis may promote policy inaction in the face of a severe contractionary shock. The author thus argues that monetary policy is more potent during financial crises because aggressive monetary policy easing can make adverse feedback loops less likely.
The United Republic of Tanzania, being one among the poorest countries in the world, has embarked on macroeconomic policies, including fiscal and monetary policies, to promote growth, economic stability, high employment, low inflation rates, stability in the financial markets, and favorable conditions in the external balances. A key function of all central banks including the Bank of Tanzania (BOT) is to promote and maintain monetary stability and a sound financial system.

This study is based on the argument that unless macroeconomic management is supported with sound monetary policy and fiscal policy, their effect will not be felt in the Tanzanian economy. Similarly, their contribution to the economic growth and development will be limited. The study will examine the relative effectiveness of monetary and fiscal policies in Tanzania using regression analysis.

1.2 ECONOMIC OVERVIEW OF TANZANIA

When it gained her independence in 1961, the Tanzanian economy had sustained growth. However, this period was followed by internal and external shocks which caused an economic crisis from the late 1970s to most of 1980s. Inevitably, the economic crisis caused rising inflation and considerably reduced the country's capability to fund her social welfare programmes. Annual inflation rate rose from -3.1 percent in 1963 to the highest rate of 36.3 percent in 1984. The government of Tanzania was forced to enter into negotiations with the International Monetary Fund (IMF) and the World Bank to resolve the crisis. The negotiations led to the adoption of Structural Adjustment Programmes (SAPs) from 1983 to 1986and later the Economic Recovery Programme (ERP) from 1986 to 1989 and the Economic and Social Adjustment Programme (ESAP) from 1989 to 1992. These programmes resulted into a major change in Tanzania's policies for economic management.

Since the introduction of IMF and World Bank programmes there have been improvements in the performance of the economy (URT, 2005). For instance, the economy grew by 7.8 percent in 2004 up from 4.9 percent in 1999 and in 2000, respectively (Table 1.1).

TABLE 1.1: GROSS DOMESTIC PRODUCT (GDP) FOR TANZANIA: 1990-2009

Year	US dollars at current prices and current exchange rates in millions	TZS at current prices in millions	Real GDP growth rates (%)
1990	5,479.85	760,006.0	6.88
1991	6,193.56	989,593.0	5.70
1992	5,528.24	1,275,764.0	3.52
1993	5,052.05	1,607,764.0	4.22
1994	5,209.83	2,125,324.0	2.88
1995	6,076.17	2,796,642.0	3.57
1996	7,519.47	3,452,559.0	4.79
1997	8,889.64	4,281,600.0	3.58
1998	9,678.62	5,124,926.0	3.66
1999	9,920.66	5,977,699.0	4.90
2000	10,423.81	6,706,381.0	4.90
2001	10,637.30	7,624,615.4	6.08
2002	11,070.40	8,699,886.9	7.20
2003	11,935.16	9,816,319.3	6.86
2004	13,141.89	11,331,638.4	7.80
2005	14,491.68	13,063,317.2	7.31
2006	14,738.50	14,995,247.4	6.72
2007	17,298.77	20,942,403.0	7.14
2008	21,328.45	24,781,679.0	7.38

2009	23,038.27	28,212,646.0	6.22

Source: National Bureau of Statistics and UCTAD stat

1.3 FEATURES OF MMONETARY AND FISCAL VARIABLES IN TANZANIA

The Tanzanian economy has continued to register good performance, growing at an average rate of 6.3 percent for five years up to 2006. The economy had been dominated by agriculture, hunting and forestry; and industry and construction sectors for the past years. However, in the recent years the country's economic activities have become heavily affected by amid rising international oil prices and fluctuations in revenues. Moreover, revenue collection as a percentage of GDP has declined slightly in the past recent years as a result of slowdown in economic activities due to the global economic crisis.

Over the nine years (1999-2007), except for 2008 when it was 10.3 percent (Table 1.2), inflation rate had remained in single digit, even though cannot be considered as modest. The increase in inflation in that year was mainly due to intense pressures emanating from a protracted surge in oil and food prices. For instance, the annual rate of inflation dropped from 7.7 percent in June 1999 to 5.9 percent in June 2000 and down to 5.5 percent for the year ending December 2000, the lowest rate of inflation since 1973.

TABLE 1.2: ANNUAL INFLATION RATES FOR TANZANIA: 1960-2009

Year	Indices Sept. 2010=100	ANNUAL INFLATION RATES
1990	8.55	35.7
1991	11.01	28.8
1992	13.43	22.0
1993	16.66	24.1
1994	22.54	35.3
1995	28.72	27.4
1996	34.74	21.0
1997	40.34	16.1
1998	45.50	12.8
1999	49.09	7.9
2000	52.00	5.9

2001	54.68	5.1
2002	57.58	5.3
2003	60.64	5.3
2004	63.51	4.7
2005	66.71	5.0
2006	71.54	7.3
2007	76.57	7.0
2008	84.44	10.3
2009	94.69	12.1
2010	99.87	5.5

Source: National Bureau of Statistics

Monetary policy in Tanzania is implemented by the Bank of Tanzania (BOT). In terms of the new BOT Act (1995), the primary objective of BOT is price stability; the Bank therefore ensures that it establishes monetary conditions control and stabilize inflation. In order to influence money supply, the Bank uses various indirect instruments of monetary policy including open market operations (OMO), foreign exchange market operations (FEMO), discount rate, repurchase agreement transactions, statutory reserve requirements, and moral suasion.

The BOT controls inflation by targeting broad money (M2). To control M2, the Bank controls reserve money that is directly related to money supply through the money multiplier. The BOT develops an annual monetary program every year in June which come the basis for drawing out a reserve money program (Massawe, 2001).

TABLE 1.3: MONETARY SURVEY FOR TANZANIA: 1990-2009 (MILLIONS OF TZS)

End of June	Narrow-Money Supply M1	Broad-Money Supply M2	Extended Broad Money Supply M3	Base Money Supply M0
1990	88,709.0	136,179.0		
1991	110,551.0	174,991.0		
1992	151,817.0	245,008.0		
1993	247,091.1	367,094.0	420,635.6	152,320.8

1994	329,624.8	486,489.2	569,743.2	226,441.4
1995	428,285.1	613,695.3	752,911.5	314,885.1
1996	449,213.3	684,990.6	818,063.0	335,768.0
1997	493,868.7	760,353.3	927,068.9	364,940.0
1998	545,517.0	844,929.4	1,026,984.7	418,734.0
1999	632,571.2	972,088.6	1,217,626.9	508,674.0
2000	695,006.5	1,093,610.9	1,397,688.8	556,430.9
2001	736,402.9	1,288,182.4	1,636,730.7	584,369.1
2002	940,377.7	1,567,041.3	2,047,683.1	695,701.2
2003	1,107,197.6	1,846,073.7	2,388,316.1	783,309.0
2004	1,359,019.2	2,211,041.4	3,153,781.1	999,985.7
2005	1,791,337.1	2,960,415.6	4,250,725.0	1,284,685.4
2006	2,006,767.4	3,454,491.0	5,164,455.6	1,504,124.5
2007	2,590,523.1	4,394,622.7	6,223,588.6	1,879,047.6
2008	3,158,306.3	5,468,460.8	7,458,779.1	2,276,437.1
2009	3,590,798.6	6,603,404.8		

Source: BOT Economic and Operations Report (Various Issues)

The Ministry of Finance and Economic Affairs (MoFEA) is a Central ministry entrusted with the main functions formulation of policy issues related to macroeconomic analysis, fiscal, monetary and debt policy and strategy; preparation of expenditure targets, review of expenditure performance, and preparation of budget guidelines; and overseeing all revenue and expenditure operations of the Government.

Government expenditure increased from TZS 374,962 million (with overall deficit of TZS 72,141 million) in 1993/94 to TZS 6,734,078 million (with overall deficit of TZS 1,215,042.0 million) in 2008/09 (Table 1.5). Total government expenditure in 2008/09 was equivalent to 25.1 percent of GDP. Nevertheless, the government had overall surplus budget of TZS 8,052 million, TZS 9,601 million and TZS141,820 million in 1989/90, 1991/92 and 2000/01, respectively.

Also, revenue collection as percentage of GDP increased to 13.36 percent in 1996/97 as compared to 11.41 percent, 11.84 percent and 12.99 percent recorded in 1993/94, 1994/95, and 1995/96 respectively. Despite these efforts revenues collection as percentage of GDP fluctuated for the following five years. It declined to 12.08 percent in 1997/98 and 11.53 percent in 1998/99 before starting to rise to 11.59 percent and 12.19 percent in 1999/2000 and 2000/01, respectively. It declined again to 11.99 percent in 2001/02. As from 2002/03 it started to rise again from 12.40 percent to 15.22 percent recorded in 2008/09 (Table 1.4).

TABLE 1.4: TOTAL REVENUE AS PERCENTAGE OF GDP FOR TANZANIA: 1990-2009

Year	Revenue (millions Tshs)	GDP (millions Tshs)	Revenue as percentage of GDP
1990	94,655.0	760,006.0	12.45
1991	133,238.0	989,593.0	13.46
1992	173,566.0	1,275,915.0	13.60
1993	164,109.0	1,607,764.0	10.21
1994	242,444.0	2,125,324.0	11.41
1995	331,238.0	2,796,642.0	11.84
1996	448,373.0	3,452,559.0	12.99
1997	572,030.0	4,281,600.0	13.36
1998	619,083.0	5,124,926.0	12.08
1999	703,149.0	5,977,699.0	11.53
2000	777,645.0	6,706,381.0	11.59
2001	929,624.0	7,624,615.4	12.19
2002	1,042,955.0	8,699,886.9	11.99
2003	1,217,517.0	9,816,319.3	12.40
2004	1,459,303.0	11,331,638.4	12.88
2005	1,773,709.0	13,063,317.2	13.58
2006	2,124,844.0	14,995,247.4	14.17

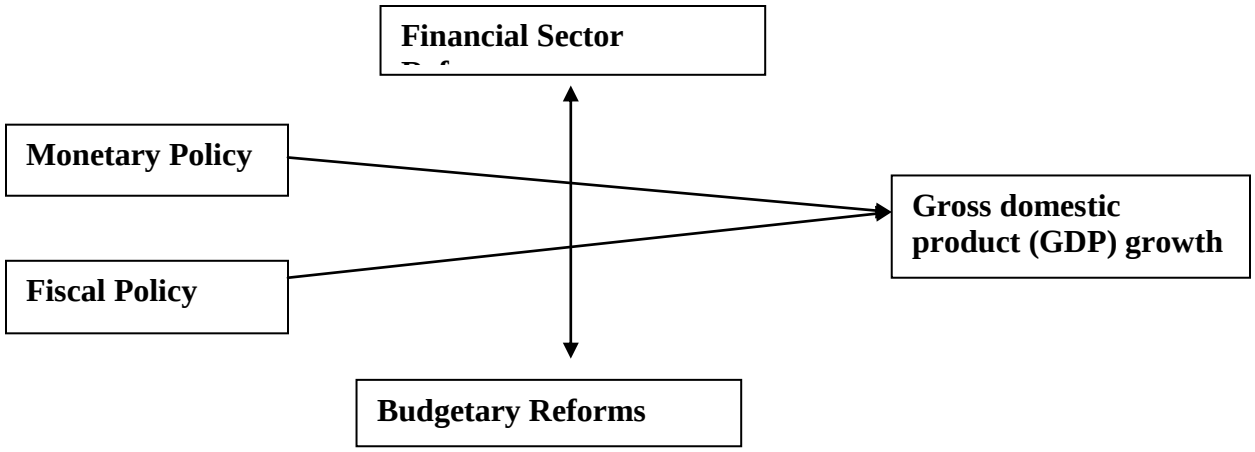
2007	2,739,022.0	20,942,403.0	13.08
2008	3,644,302.0	24,781,679.0	14.71
2009	4,293,074.3	28,212,646.0	15.22

Source: National Bureau of Statistics

1.4 THE THEORETICAL /CONCEPTUAL MODEL

The conceptual framework (figure 3.1) is based on research contributions by earlier researchers (including Ajisafe and Folorunso, 2002). This model is composed of two independent variables namely monetary policy (where narrow money and broad money are used as proxies) and fiscal policy (where government revenue, government expenditure, and government budgets are used as proxies). To be more specific, we took into account one important measurement of economic growth as the dependent variable: gross domestic product. We also used two moderating variables for this research, i.e. financial sector reforms and budgetary reforms.

FIGURE 3.1: CONCEPTUAL MODEL OF THE STUDY



ZENITH International Journal of Business Economics & Management Research
Vol.2 Issue 7, July 2012, ISSN 2249 8826
Online available at http://zenithresearch.org.in/

TABLE 1.5: CENTRAL GOVERNMENT OPERATIONS (1990-2009)

End of June	Revenue			Expenditure				Overall Balance
	Tax	None Tax	Total	Re-current	Development	Total	Grants	Surplus/Deficit (cheque issued)
1990	81,471	13,184	94,655	76,053	2 2,376	98,429	27,664	8,052
1991	118,257	14,981	133,238	109,445	16,488	125,933	22,875	-4,499
1992	153,356	20,210	173,566	128,869	32,605	161,474	32,798	9,601
1993	146,420	17,689	164,109	203,070	60,343	263,413	58,313	-72,141
1994	220,358	22,086	242,444	300,273	74,689	374,962	106,790	-104,515
1995	299,898	31,340	331,238	366,332	31,692	398,024	58,505	-62,442
1996	383,744	64,629	448,373	415,140	5,382	420,522	46,882	-16,804
1997	505,355	66,675	572,030	486,494	28,896	515,389	81,416	-86,290
1998	566,123	52,961	619,083	543,751	186,585	730,336	119,358	-68,137
1999	630,108	73,041	703,149	680,183	136,524	816,707	169,946	-24,424
2000	685,107	92,537	777,645	808,865	359,913	1,168,779	280,306	-113,272
2001	827,788	101,836	929,624	1,018,782	286,253	1,305,035	286,306	141,820
2002	939,267	103,688	1,042,955	1,121,526	344,611	1,466,137	379,849	-38,757
2003	1,105,746	111,771	1,217,517	1,488,641	500,897	1,989,538	622,302	-163,211
2004	1,342,798	116,505	1,459,303	1,780,115	736,828	2,516,943	696,673	-399,739
2005	1,615,247	158,462	1,773,709	2,093,055	1,071,161	3,164,216	724,397	-727,075
2006	1,946,432	178,411	2,124,844	2,661,863	1,211,392	3,873,255	1,000,160	-924,413
2007	2,599,439	209,583	2,739,022	3,137,469	1,337,211	4,474,681	952,225	-955,797

2.0 RESEARCH METHODOLOGY

2.1 RESEARCH DESIGN

The study adopted a case study design with a quantitative research approach. Case studies can be exploratory, explanatory, and descriptive. The type that was used is descriptive. The study based on 20 observations of the impact of monetary policy and economic policy on GDP growth over a period 1990 to 2009.

2.2 SOURCES OF DATA

For this study secondary data from public sources were used. For government revenue, expenditure and deficits) and monetary survey (i.e. base money, narrow money, broad money and extended broad money) data were obtained from the Bank of Tanzania (BOT). These sources are published every year and gives information related to central government operations.

For gross domestic product (GDP) and annual inflation rates data were obtained from the National Bureau of Statistics (NBS) publications for the period 1990-2009. These sources are published every year and gives information related to macroeconomic development that includes the contribution of each sector to the GDP. Figures for GDP growth rates were obtained from UNCTAD stat.

2.3 DATA AANALYSIS TECHNIQUES, ANALYTICAL FRAMEWORK AND METHODOLOGY

Gathered data were analyzed with quantitative techniques. The quantitative component entails collecting and analyzing data from relevant research reports and data bases, such as Bank of Tanzania and National Bureau of Statistics (NBS-Tanzania). Additional information was gathered from government and other sources.

The main purpose of this paper was to examine the relative effectiveness of fiscal and monetary policy in Tanzanian economy. The time period for the study is 1990 – 2009, based on the availability of data.

In this study the ordinary least squares (OLS) method was used. The OLS test was run using statistical package for social sciences (SPSS) with Y as dependent variable, shows the economic activity in which the Gross Domestic Product (GDP) is employed as a proxy; while MP and FP as independent variables, are measures of monetary and fiscal actions of the government at a particular time. Both narrow money (M1) and broad money (M2) are employed as proxies for monetary policy variable while the search for fiscal policy variable is among the government receipts (R), government expenditure (E) and government budget deficits (BD) which is measured as (R-E). The coefficient of regression, β_t, indicates how a unit change in the independent variables, MP and FP, affect the a dependent variable (economic activity). Running ordinary least squares, we assumed the hypothesis that there is no relationship between monetary policy and fiscal policy and economic activity (Y).

3.0 FINDINGS AND DATA ANALYSIS

3.1 DATA ANALYSIS

Based on the states sample, the relationship between variables can be estimated by two simple linear regression models of the form: $Y_t = \alpha_t + \beta_t MP_t + \varepsilon_t$ **and** $Y_t = \alpha_t + \beta_t FP_t + \varepsilon_t$ **where, as said above,** Y_t **shows the economic activity in which the Gross Domestic Product (GDP) growth rates is employed as a proxy,** MP_t **and** FP_t **are measures of monetary and fiscal actions of the government at a particular time** t**, respectively while** ε_t **represents an error term;** α_t **and** β_t **represent the slope and coefficient of regression. Both narrow money (M1) and broad money (M2) are employed as proxies for monetary policy variable while the search for fiscal policy variable is among the government receipts (R), government expenditure (E) and government budget deficits (BD) which is measured as (R-E). The coefficient of regression,** β_t**, indicates how a unit change in the independent variables, MP and FP, affect the a dependent variable (economic activity). The error,** ε_t**, is incorporated in the equation to cater for other factors that may influence monetary policy, fiscal policy and economic activity.**

CASE 1: THE VARIABLES CONSIDERED ARE

- **Narrow money (M1) and Broad money (M2)- independent numerical variables (X),**
- **Gross Domestic Product (GDP) growth rates - dependent numerical variable (Y)**

Pearson correlation coefficients ρ = 0.591 and ρ = 0.580 (Correlations table) which show that correlations between narrow money (M1) and gross domestic product (GDP) growth rates and between broad money (M2) and gross domestic product (GDP) growth rates in Tanzania, is positive and direct but not strong.

CORRELATIONS

		GDP growth rates	Narrow Money	Broad Money
Pearson Correlation	GDP growth rates	1.000	.591	.580
	Narrow Money	.591	1.000	.999
	Broad Money	.580	.999	1.000
Sig. (1-tailed)	GDP growth rates	.	.003	.004

	Narrow Money	.003	.	.000
	Broad Money	.004	.000	.
N	GDP growth rates	20	20	20
	Narrow Money	20	20	20
	Broad Money	20	20	20

For testing the significance of the correlation coefficients, we use the t-test (Correlations table). The properly significance values are (sig = 0.003) < (α = 0.01) and (sig = 0.004) < (α = 0.01) highlight that we obtained significant correlation coefficients to a threshold of 0.003 and 0.004, respectively, so are less than 1% chance of error if we say that between the three variables it is a significant correlation (i.e. there is a significant difference between the means of the three variables). This means that increases or decreases in narrow money and broad money do significantly relate to increases or decrease in the gross domestic product (GDP) growth rates.

The estimated regression equation is $Y_t = 4.235 + 0.000006634\ M1 - 0.000003199\ M2$

Coefficients b = 0.000006634 and b = -0.000003199 correspond to direct (positive) link and an inverse (negative) link between the variables considered. A growth of M1 with a unit determines an increase in the GDP on average with 0.000006634 percent whereas a growth of M2 with a unit determines a decrease of GDP growth rate on average with 0.000003199 percent, in Tanzania. For testing the parameters of the regression model, we use the t-test (Coefficients table). Values (Sig. = 0.258) > (α = 0.05) and (Sig. = 0.326) > (α = 0.05) show that β (slope) does not correspond to a significant link between the two variables. In other words, the results are not significant. F test (ANOVA table) has a low value (F = 5.340) and the Sig. value properly F statistics is low: (sig = 0.016) < (α = 0.05) which means that the independent variables – M1 and M2 explain the variation of dependent variable – GDP.

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.588	2	9.294	5.340	.016[a]
	Residual	29.588	17	1.740		
	Total	48.176	19			

a. Predictors: (Constant), Broad Money, Narrow Money

b. Dependent Variable: GDP growth rates

The coefficient of determination $R^2 = 0.386$ (R square Model Summary table) shows that 38.6 % of the variance in the dependent variable (gross domestic product) growth rates can be explained by changes in the independent variables (narrow money and broad money) value made in Tanzania during 1990-2009.

MODEL SUMMARY[B]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.621[a]	.386	.314	1.31927

a. Predictors: (Constant), Broad Money, Narrow Money

b. Dependent Variable: GDP growth rates

COEFFICIENTS[A]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
1 (Constant)	4.235	.556		7.624	.000	3.063	5.407			
Narrow Money	6.634E-6	.000	4.309	1.170	.258	.000	.000	.591	.273	.222
Broad Money	-3.199E-6	.000	-3.723	-1.011	.326	.000	.000	.580	-.238	-.192

a. Dependent Variable: GDP growth rates

CASE 2: THE VARIABLES CONSIDERED ARE

- **Government revenue receipt (R), government expenditure (E), and government budget deficits (BD) – independent variable**

- **Gross domestic product (GDP) growth rates– dependent variable**

Pearson correlation coefficients ρ = 0.578 and ρ = 0.612 (Correlations table), which shows that correlation between government revenue receipts and gross domestic product and between government expenditure and gross domestic product (GDP) growth rates, respectively, in Tanzania is positive and direct but not so strong. Also, Pearson correlation coefficient ρ = -0.474 (Correlations table) shows an inverse correlation between government budget deficits and GDP growth rates.

CORRELATIONS

		GDP growth rates	Revenue	Expenditure	Deficit
Pearson Correlation	GDP growth rates	1.000	.578	.612	-.474
	Revenue	.578	1.000	.992	-.837
	Expenditure	.612	.992	1.000	-.887
	Deficit	-.474	-.837	-.887	1.000
Sig. (1-tailed)	GDP growth rates	.	.004	.002	.017
	Revenue	.004	.	.000	.000
	Expenditure	.002	.000	.	.000
	Deficit	.017	.000	.000	.
N	GDP growth rates	20	20	20	20
	Revenue	20	20	20	20
	Expenditure	20	20	20	20
	Deficit	20	20	20	20

For testing the significance of the correlation coefficients, we use the t-test (Correlations table). The properly significance values are (sig = 0.004) < (α = 0.01) and (sig = 0.002) < (α = 0.01); highlight that we obtained significant correlation coefficients to a threshold of 0.004 and 0.002, respectively, so are less than 1% chance of error if we say that between the two variables it is a significant correlation (i.e. there is a significant difference between the means of the two variables). This means that increases or decreases in government revenue and government expenditure do significantly relate between the variables considered (that is, government revenue receipts and gross domestic product growth rates). Also, the properly significance value is (sig = 0.017) < (α = 0.05) highlights that we obtained a significant correlation coefficient to a threshold of 0.017, so are less than 5% chance of error if we say that between the two variables (government deficits and GDP growth rates) it is a significant correlation. The estimated regression equation is:

$$Y_t = 4.888 - 0.000007308\ R + 0.000006027\ E + 0.000005894\ BD$$

Coefficients b = 0.000006027, and b = 0.000005894 correspond to a direct (positive) link between the variables considered (that is, government expenditure, government budget deficits, and gross domestic product growth rates). A growth of government revenue receipts with a unit determines a decrease of the gross domestic product (GDP) growth rates on average with 0.000007308 percent in Tanzania. But on the other hand, a grow of government expenditure and government deficits with a unit determines an increase in the gross domestic product (GDP) growth rates created on average with 0.000006027 percent and 0.000005894 percent in Tanzania.

For testing the parameters of the regression model, we use the t-test (Coefficient table). Values (Sig. = 0.006) < (α = 0.05), (Sig. = 0.003) < (α = 0.05) and (Sig. = 0.009) < (α = 0.05) show that β (slope) corresponds to a significant link between the three variables. F test (ANOVA table) has a low value (F = 8.948) and the Sig. value properly F statistics is low: (sig = 0.001) < (α = 0.05) which means that independent variables – government revenue, government expenditure, and government budget deficits explain the variation of dependent variable – gross domestic product (GDP) growth rates to low extent.

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	30.184	3	10.061	8.948	.001[a]
	Residual	17.992	16	1.124		
	Total	48.176	19			

a. Predictors: (Constant), Deficit, Revenue, Expenditure

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	30.184	3	10.061	8.948	.001[a]
	Residual	17.992	16	1.124		
	Total	48.176	19			

a. Predictors: (Constant), Deficit, Revenue, Expenditure

b. Dependent Variable: GDP growth rates

The coefficient of determination $R^2 = 0.627$ (R square Model Summary table) shows that 62.7% of the variance in the dependent variable (gross domestic product growth rates) can be explained or predicted by changes in the independent variable (government revenue, government expenditure, and government budget deficits) values made in Tanzania during 1990-2009.

MODEL SUMMARY[B]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792[a]	.627	.557	1.06041

a. Predictors: (Constant), Deficit, Revenue, Expenditure

b. Dependent Variable: GDP growth rates

COEFFICIENTS[A]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part

1	(Constant)	4.888	.350		13.984	.000	4.147	5.629		
	Revenue	-7.308E-6	.000	-5.484	-3.141	.006	.000	.000	.578	-.618	-.480
	Expenditure	6.027E-6	.000	7.316	3.535	.003	.000	.000	.612	.662	.540
	Deficit	5.894E-6	.000	1.426	2.955	.009	.000	.000	-.474	.594	.451

a. Dependent Variable: GDP growth rates

4.0 CONCLUSIONS AND RCOMMENDATIONS OF THE STUDY

4.1 CONCLUSIONS

This research based on the secondary data. The ordinary least squares method indicates the linkage between monetary policy and fiscal policy with gross domestic product.

In terms of macroeconomic Management, there is a general agreement of the potential benefits of monetary policy and fiscal policy in Tanzania. We illustrated this point by making an econometric analysis, using a linear regression model. The empirical analysis on basis of ordinary least squares method suggests that, there is moderate (positive) relationship between the variables (narrow money, broad money, government revenue receipts, and gross domestic product growth rates). This means that narrow money, broad money, government revenue receipts, and government expenditure have no big significant impact on the pattern of gross domestic product (GDP) growth rates; thus they do not improve the country's macroeconomic management and enhance its economic growth. Also, the analysis suggests that budget deficits have moderate (negative) relationship with gross domestic product growth rates. The econometric results indicate that public spending and changes in the money supply exert small impact on economic growth; they indicate a less effectiveness monetary policy and fiscal policy over the long run. Thus, from the above analysis we may conclude that fiscal policy and monetary policy exert a moderate impact on economic activities in Tanzania.

4.2 RECOMMENDATIONS OF THE STUDY

The government needs to target monetary policy and fiscal policy as an objective of macroeconomic policy. These two areas deserve special attention if macroeconomic policy is to be more supportive of pro-poor growth in Tanzania. Macroeconomic policies are likely to stimulate pro-poor growth by addressing two main issues. First, macroeconomic policies may be designed to contribute to enhancing the basic human capabilities of the poor. Second, macroeconomic policies may be designed to contribute to fostering the concentration of growth in economic sectors that can directly benefit the poor. Thus, price stability, money supply and aggregate demand should continue to be one of the macroeconomic objectives alongside with external trade, foreign direct investments, balance of payments and sound poverty reduction policy implementation.

REFERENCES

1. Ajisafe, R. A. and Folorunso, B. A. (2002). The relative effectiveness of fiscal and monetary policy in macroeconomic management in Nigeria. The African Economic and Business Review, Vol. 3. No. 1, spring.

2. Bank of Tanzania Act 1995.

3. Ezeoha, A. and Uche, C.U. (2004). Rethinking monetary fiscal policies in Nigeria. Journal of International Financial Market, Volume 4 issue 2.

4. http//www.mof.go.tz

5. Masawe, Joseph L. (2001). The monetary policy framework in Tanzania, Paper presented at the Conference on Monetary Policy Frameworks in Africa, held at the South African Reserve Bank, 17-19 September.

6. Mishkin, F. S. (2009). Is monetary policy effective during financial crises? NBER Working Paper Series, Working Paper No. 14678.

7. Tatlonghari, V. M. (2009). The relative strengths of fiscal and monetary policy actions in the Philippine economy, Ad Veritatem, Vol. 8, No. 2, March.

8. URT, vide United Republic of Tanzania (2005). The economic survey 2004. Dar-es-Salaam: Government Printer.

9. URT, vide United Republic of Tanzania (2007). Macroeconomic convergence in Southern Africa Development Community (SADC): An assessment of Tanzania's recent macroeconomic growth performance, prospects and programme of action towards meeting regional targets: A country report submitted to the SADC Secretariat, June.