



**THE ROLE OF PUBLIC REVENUES FROM TAXES AND OTHER REVENUES IN
THE REAL ECONOMIC ACTIVITY OF A COUNTRY, THE STATE**

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Abstract

The purpose of this paper is to analyze the impact of Taxes, Taxes on the economic development of a country, state. data in analytical form should be presented. Analyzing the variables in the econometric model we must notice whether Taxes affect economic growth or state development or do the opposite. Our goal is to see if the results obtained are consistent with our hypotheses. The results obtained, obtained in some countries show that Taxes have a direct and indirect impact on economic growth, and as revenues positively affect economic growth while uncontrolled percentage rate, tax rate has a negative impact on economic growth and consumption. And finally we give conclusions between the Keynesian school and that of the neo-classics, like any other model this model has its limitations that in addition to these variables used can be taken other variables for analysis, and our recommendation is that in future to analyze the impact of taxpayers are: Value Added Tax (VAT), personal tax and tax on profit, as an impact on economic growth and improving the public standard.

Key word: *Public revenue, VAT, personal tax*

Introduction

Taxes are the main channel for generating public revenues in the Republic of Northern Macedonia and have a significant impact on the economic development of the country as well as on the development and establishment of small and medium-sized businesses based on subsidies and other assistance planned by fiscal policy. These funds (money) the state collects as revenues from taxes, fees and contributions that it plans in the annual budget, with which funds the state meets public needs and performs its functions. As an instrument of fiscal policy, it is directly related to public spending, since the revenues generated from taxes, the state itself puts them in function to create public goods, from this we understand that taxes have no direct compensation, but their role in the economy is quite important. Taxes, no

matter how necessary they are as they create an allocation of financial resources for the public sector they directly affect private decision making and create a tax burden for the real sector. It is often thought that taxes are reflected in economic performance and can slow economic growth. Which means that economic growth can be affected by the effect that taxes have on economic decision-making. An increase in tax rates reduces the return on investment, which automatically reduces the tendency for investment, as tax revenues are influenced by other factors related to economic developments.

Therefore, the research question arises whether tatami on value added, personal tatami and profit tatami have a negative effect.

To answer the research question, hypotheses are set:

H1: Value added taxes have a negative effect on economic growth, affecting the reduction of real GDP.

H2: Personal taxes have a negative effect on economic growth, affecting the reduction of real GDP.

H3: Profit taxes have a negative effect on economic growth, affecting the reduction of real GDP.

To confirm or refute the hypotheses we will use the OLS method, after accurate empirical analysis in this paper.

Empirical review of the literature in the context of the impact of taxes on real economic activity

Theoretical aspects on taxes

In this section we will analyze the theoretical aspects on the role of taxes in economic growth by analyzing the conceptual incompatibilities between the two schools, the Keynesian and the neo-classical.

The impact of the fiscal burden on the process of economic growth is the subject of numerous studies conducted by various authors. The theoretical basis of the studies lies in the two currents of economic thought, known as Keynesian currents and neo-classical theories.

Decades ago these two schools held quite strong debates about the impact of fiscal and monetary policy on aggregate demand. According to Gordon, Robert J. (1990) Keynesians

argued that monetary policy is powerless to influence aggregate demand, while neo-classics argued the opposite as fiscal policy is powerless and non-influential on aggregate demand. Both of these theories are essentially dead today. Almost all Keynesians or neo-classics today are of the opinion that both fiscal and monetary policies have a significant impact on aggregate demand.

Keynesian theory of aggregate demand, reducing government spending or raising taxes, reduces aggregate demand and indirectly revenue, transmitting a negative impact on output. the multiplier of negative effects is partially offset by crowding-in² effects for lower interest rates and monetary depreciation. According to Blinder, Alan S. (1986) the Keynesian model is consistent with endogenous models that for sustainable long-term growth intended to accumulate revenues from tax sources will have a negative effect on economic growth.

Neo-classical models emphasize that the sustainable economic growth of a country is not affected by tax policy, and that in the long run they do not have a reciprocal impact on economic growth rates and the tax rate but that it can only affect the level of production. Hoover, Kevin D. (1988) imply that the neo-classical model is driven by exogenous factors and is contradictory to the endogenous growth model neo-classical ones. Which also clarifies the conceptual discrepancies between the two views.

Empirical evidence regarding the impact of taxes on real economic activity

In this section we will analyze the empirical evidence on scientific papers analyzed by various researchers on the impact of the tax burden on economic growth, on the factors that affect it, and how taxes are treated in different models.

According to Widmalm F. (2001) who analyzed the relationship between taxes and economic growth rate, in the 23 OECD countries for the period 1965-1990, without relying on any argument that there is a reciprocal relationship between the tax rate and economic growth, concludes and supports the idea that taxes have a negative effect on economic growth. -in real, that flat tax.

Anastassiou Th. and Drirsaki Ch. (2005), they in this study analyze the relationship between tax revenues and economic growth rate for Greece, starting from the view that lowering the tax rate will stimulate economic growth and that there is a causal link between tax revenues and economic growth. Through econometric analysis analyzing the period from 1965-2002, they have concluded that there is no causal link between tax revenues and economic growth, and that economic growth is not affected in this regard in the long run. Thus supporting the

neo-classical theory and that in the long run they do not have a reciprocal impact on economic growth rates and the tax rate but that it can only affect the level of production

Arnold J. (2008) in an analysis of 21 OECD countries, examines the correlation between tax structure and economic growth. The analysis is based on the time period 1971-2004, using an explicit model specified by Error-Correction. The author concludes that tax revenues generally have a negative correlation with economic growth. In particular, consumption tax and income tax have a greater impact on lowering the economic rate. Among the income taxes is the corporate income tax which has the most negative effect on GDP, while the property tax and personal tax have less effect on lowering the economic rate.

Kesuer M. (2002), analyzes the tax policy in correlation with the economic growth for Croatia for the period 1996-1999, and concludes that taxes distort the economic behavior and lead to the reduction of efficiency, to the reduction of income that leads to the reduction of GDP- of real. Clearly, supporting the main theories that underline the negative correlation between taxes and economic growth. From the empirical results she cites that stimulating production and employment by keeping taxes unchanged is unlikely to affect real GDP =. She suggests that a relatively modest reduction of VAT will significantly reduce the tax burden that would lead to increased efficiency and consumption, directly affecting the reduction of prices that will stimulate production and will directly affected the positive growth of real GDP. As for the income tax and the profit tax, she says that they express a relatively small source of general income and as such have very little impact on economic growth.

Gello L. and Sagales O. (2011) analyzed the effects of fiscal policy on economic activity and the effect of unequal distribution within fiscal policy, for the period 1972-2006 in 43 developed and developing countries. They conclude that fiscal policy has an impact on aggregate demand, and that negatively means that it affects the reduction of the economic rate, therefore fiscal policy can be used to affect economic growth, given the homogeneity of policy instruments. fiscal. The empirical results of this paper are consistent with other results found in empirical studies, therefore taking into account the macroeconomic effects of fiscal policy suggest that direct tax cuts increase GDP, while increasing coherent public spending reduces it.

According to Shijaku G, and Gjokuta A. in the scientific paper analyzing the effects of fiscal policy on Albania's economic growth for the period 1998-2006, based on the model of Keneller (1999) that the increase of the tax burden weakens the incentives to invest, thus

reducing economic growth, conclude that the overall economic growth rate is negatively affected by public revenues in Albania. Reflects the behavior of fiscal policy where

Specification of the econometric model

$$\Delta Y = \alpha_0 + \beta_1 + \beta_2 + \beta_3 + \mu$$

ΔY -represents the change of logGDP as a dependent variable, α_0 -represents the constant derived from STATA, β_1 -represents the value added tax log, β_2 -represents the personal tax log, β_3 -represents the tax log in profit and μ - represents common error. The econometric model is similar to the model used by Widmalm F. (2001). Based on which the STATA variables with the LOG-LOG model will be calculated.

The model below presents the LOG-LOG model in a specified manner,

$$\ln_gdp = \text{const}\alpha + \ln_tvsh \beta_1 + \ln_tp \beta_2 + \ln_tf \beta_3 + \mu$$

H1: Value added taxes have a negative effect on economic growth, affecting the reduction of real GDP,

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. regress lngdp lntvsh
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Source	SS	df	MS			
Model	.373391279	1	.373391279	Number of obs =	10	
Residual	.061605945	8	.007700743	F(1, 8) =	48.49	
Total	.434997224	9	.048333025	Prob > F =	0.0001	
				R-squared =	0.8584	
				Adj R-squared =	0.8407	
				Root MSE =	.08775	

lngdp	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lntvsh	.9285583	.1333501	6.96	0.000	.6210524	1.236064
_cons	3.168317	1.38244	2.29	0.051	-.0195952	6.35623

From the result obtained we conclude that with each VAT increase of 1%, I will reflect on GDP growth by 0.92856%. The coefficient of determination r2 is very high and shows that the independent variable VAT explains for 85.84% the independent variable GDP. According to the result from P> t in the alpha interval of 0.05, we see that VAT (0.9285583) statistically has no significance because it is much larger. Prop> F 0.0001 means that 99.99% reject the H1 hypothesis that VAT has a negative effect on economic growth and accept the alternative HA hypothesis. (In terms of ceteris paribus)

H2: Personal taxes have a negative effect on economic growth, affecting the reduction of real GDP.

. regress lngdp lntp

Source	SS	df	MS			
Model	.387032254	1	.387032254	Number of obs =	10	
Residual	.04796497	8	.005995621	F(1, 8) =	64.55	
Total	.434997224	9	.048333025	Prob > F =	0.0000	
				R-squared =	0.8897	
				Adj R-squared =	0.8760	
				Root MSE =	.07743	

lngdp	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lntp	2.578483	.3209281	8.03	0.000	1.838421	3.318545
_cons	-10.55824	2.906457	-3.63	0.007	-17.26054	-3.855933

From the result obtained we conclude that with each increase of 1%, I will reflect on GDP growth of 2.5785%. The coefficient of determination r2 is very high and shows that the independent variable to explains for 88.97% the dependent variable GDP. According to the result from P> t in the alpha interval of 0.05, we see that VAT (2.58483) statistically has no significance because it is much larger. Which means we reject the H2 hypothesis that PT has a negative effect on economic growth and accept the alternative HA hypothesis. (in terms of ceteris paribus)

H3: Profit taxes have a negative effect on economic growth, affecting the reduction of real GDP.

. regress lngdp lntf

Source	SS	df	MS			
Model	.125468792	1	.125468792	Number of obs =	10	
Residual	.309528432	8	.038691054	F(1, 8) =	3.24	
Total	.434997224	9	.048333025	Prob > F =	0.1094	
				R-squared =	0.2884	
				Adj R-squared =	0.1995	
				Root MSE =	.1967	

lngdp	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lntf	.3207317	.1781063	1.80	0.109	-.0899822	.7314456
_cons	10.12788	1.481135	6.84	0.000	6.712378	13.54338

From the result obtained we conclude that with each increase in tf of 1%, I will reflect on GDP growth by 0.32073%. The coefficient of determination r2 is shows that the independent variable VAT explains for 28.84% the dependent variable GDP which. According to the

result from $P > t$ in the alpha interval of 0.05, we see that VAT (0.3207317) statistically has no significance because it is much larger. $\text{Prob} > F$ 0.1094 means that with 89.06% we reject the H_1 hypothesis that TP has a negative effect on economic growth and accept the alternative H_A hypothesis. (in terms of ceteris paribus)

Conclusions

Referring to the results obtained with STATA 12, through the log-log model, the data obtained represent something different from other scientific papers and theories such as Keynesian or neo-classical, that taxes have a negative impact on real economic activity, therefore none from our findings do not refer to the analyzed works, our results showed that there is a positive relationship between GDP and taxes (in terms of ceteris paribus) by analyzing the relationship between GDP and taxes thus excluding other variables influencing fiscal policy on GDP -in.

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Appendix

obs	VAT	PT	TR	GDP
2003	21175.92	7502.5	3270.09	275597.8
2004	25756.85	7706.71	2362.16	266267.8
2005	27081.1	8098.7	2835.79	267998.4
2006	27240.31	8413.82	4709.83	338521.6
2007	32962.05	8890.91	5896.45	377125.1
2008	36174	8696	8579	406559.8
2009	35178	8707	4434	408866.8
2010	37694	8872	3691	394524.1
2011	42223	9513	3888	480536.8
2012	38468	9553	3655	456927.2

	gdp	tvsh	tp	tf	lngdp	lntvsh	lntp	lntf
1.	275598	21175.9	7502.5	3270.09	12.5267	9.96062	8.922992	8.092573
2.	266268	25756.8	7706.71	2362.16	12.49226	10.15646	8.949846	7.767332
3.	267998	27081.1	8098.7	2835.79	12.49874	10.20659	8.999459	7.950076
4.	338522	27240.3	8413.82	4709.83	12.73234	10.21245	9.037631	8.457407
5.	377125	32962.1	8890.91	5896.45	12.84033	10.40311	9.092785	8.682106
6.	406560	36174	8696	8579	12.91549	10.4961	9.070619	9.057073
7.	408867	35178	8707	4434	12.92114	10.46818	9.071882	8.397058
8.	394524	37694	8872	3691	12.88544	10.53726	9.090655	8.213653
9.	480537	42223	9513	3888	13.08266	10.65072	9.160415	8.26565
10.	456927	38468	9553	3655	13.03228	10.55758	9.164611	8.203852