

ESTIMATION OF THE EFFECT OF TAXES AND GROSS FIXED CAPITAL FORMATION ON ECONOMIC GROWTH OF EURO AREA

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Current paper contributes to identifying the effects of both direct and indirect taxes along with important factor of economic growth – gross fixed capital formation – on economic growth of Euro Area for available period from 2002q1 to 2017q4 in terms of one regression model.

In scientific papers that were published in the twentieth century, scientists did not sufficiently consider the effect of changes in tax rates on economic growth. It was assumed that tax policy and different types of taxes have a very significant determinant of growth and investment, but its effect on economic growth was in fact insignificant. A number of studies have examined the relationship between tax rates and economic growth using growth regression models between countries for different periods, but no definite conclusions have been made. Many economists believed that higher taxes have a negative effect on economic growth, but on the other hand, they lead to higher levels of government spending. According to studies, the dominant viewpoint favors indirect taxation and implies a shift in the fiscal burden to indirect taxes, especially on consumption.

Low tax rates lead to a decrease in government spending and an increase in the amount of resources allocated in the private sector, which has a positive effect on investment performance. On average, a market-disciplined private sector contributes to a more adequate use of resources than non-market political distribution in the public sector. But some taxes have a negative effect on economic welfare. Among them, a special place is occupied by income taxes. And sales taxes do less damage to the economy. According to the study, corporate and personal income taxes are the most harmful for growth, while taxes on consumption, the environment and property are less harmful. In addition, taxes lead to an increase in budget revenues, but increase the overall surplus. The loss in total surplus exceeds tax revenues, which leads to irreparable losses for society.

Taxes provoke people to change their behavior. Since the elasticity of supply and demand is a measure of changes in consumer and producer behavior due to price changes, it also determines the degree of market distortion. The greater the elasticity of demand or supply, or both, the greater the total loss of tax. If price elasticity of demand and supply is the same, dead weight loss is low if taxes are low and it grows if they grow. Dead weight loss increases faster than most taxes: the size of dead weight loss grows with the second power of the tax rate.

In current research there have been tested the following hypotheses:

Hypothesis 1: Tax revenues from direct taxes had negative influence on GDP in Euro Area (19) during 2002q1-2017q4.

Hypothesis 2: Tax revenues from indirect taxes had negative influence on GDP in Euro Area (19) during 2002q1-2017q4.

Hypothesis 3: Gross fixed capital formation had positive influence on GDP in Euro Area (19) during 2002q1-2017q4.

Empirical results have revealed the problem of collinearity between the values of direct and indirect taxes which increases overall significance of the model. The problem of collinearity lies in the common trend which both of taxes share and in the similarity of their summary statistics meanings. Taking into that model demonstrated overall adequacy, we rely on the results of the model. Furthermore, from economic point of view the model confirmed hypothesis 1 and hypothesis 3. Obtained results also confirm the empirical results of previous studies and provide an evidence of the fact that, despite conventional theory according to which taxation contributes to distortions in the market and leads to deadweight loss exceeding budget revenues, differences in taxation structure may lead to different consequences in terms of economic growth. Our research has demonstrated that current trend of shifting tax burden from direct taxes to indirect taxes, indeed, has positive influence in Euro Area.

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