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# Recession, taxes and economic growth

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## *Abstract*

The current economic situation forces the governments to find solution how to promote economic growth. Economic theory suggests that differences in taxation may play a role in explaining differences in economic performance. Paper summarizes common features tax related measures used to tackling the economic recession in the European Union and it also points out the effect of taxes on economic activity presented by empirical studies.

## *Introduction*

The current economic situation forces the governments to find solution how to promote economic growth and to consolidate public finance. There are different views of how this problem should be dealt with in general and also applied tools of individual countries have various forms – from ad hoc tax measures to substantial structural reforms. It is questionable whether the governments may affect the economic performance of countries through changes in taxation. Although economic theory suggests that differences in taxation may play a role in explaining differences in economic performance, the effect of taxes on economic activity is one of the least contested areas in theoretical macroeconomics. Nevertheless, it is generally difficult to assess the overall effect of the tax changes on gross domestic product (GDP). For example changes in any single tax may simultaneously affect several determinants of GDP and its growth. The aim of the paper is to summarize common features tax related measures used to tackling the economic recession in the European Union (EU) and it also points out the effect of taxes on economic activity presented by empirical studies.

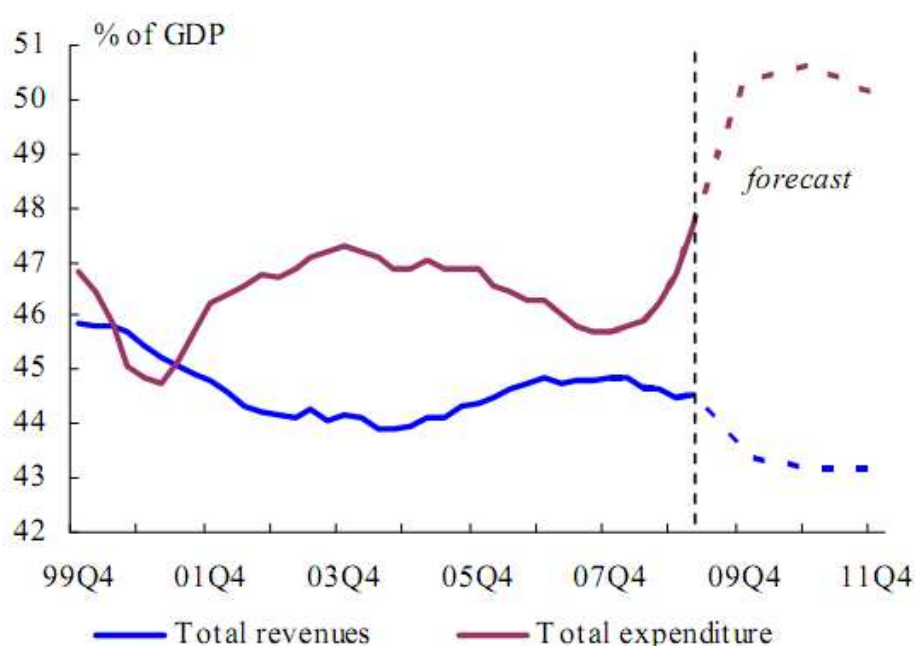
## **1 Economic recession and its impact on economic performance**

The impact of the economic crisis and recession on economic performance and public finance varies across European Union members. There are 27 sovereign member state in the EU with independent tax policy and none of them are identical. Each government has been dealing with its problems individually and the choice of instruments for crisis management is influenced by many factors as for example divergence in economic performance, consequences of the crisis on economic growth, employment, inflation, balance of payments, export, etc. It is important to be aware of the time constrained function and assess their potential impact on long-term fiscal stability when applying anti-crisis measures. The

variability of these measures reflects the economic and budgetary conditions of individual states. Such measures may have a general fiscal impact or only a cash flow impact<sup>1</sup>.

In countries with strong macroeconomic imbalances and/or where the bursting of an asset bubble adds to the effect of the global downturn (e.g. the UK), the budgetary deterioration is more pronounced than in other countries. In some of these countries the increase in government deficits combined with low growth is set to give rise to a large increase in debt positions. Figure 1 shows development of total revenues and expenditure in European Union.

**Figure 1: Total revenue and expenditure (four-quarter moving average), EU**



Source: European Economic Forecast Autumn 2009, p. 31.

There are different views how the problem with GDP decrease and public debt increase should be dealt with in general and also applied tools of individual countries have various forms – from ad hoc tax measures to substantial structural reforms. The removal of tax barriers which hamper the effective functioning of financial markets, particularly at the international level, could help countries exit from the crisis. This include tax provisions which distort investor choices as to whether to invest directly or by means of collective investment vehicles, and tax provisions which act as a barrier to the use of different financial products which reduce the cost of capital. Governments should also consider the broader tax implications of the government bailout packages for financial institutions and how they may influence the future attitudes of these institutions to risk taking<sup>2</sup>.

<sup>1</sup> Dvořák (2008), p. 326-331.

<sup>2</sup> Valentine, T., Gordon, C. (2009), p. 8-11.

## 2 Common features tax related measures in European Union member states<sup>3</sup>

Tax measures implemented in a period 2008 – 2010 is possible to divided into several groups. One of the most common types of tax measures was the direct support of household spending power by reductions in the personal income taxes (PIT). This happened more often through increases in allowances than cuts in rates, because of equity considerations but also because an increase in allowances, having a proportionally higher impact on lower-income households, is expected to more directly boost private consumption. In a few cases, PIT rates were even increased, but this was typically limited to higher incomes. Some countries suffering from particularly pronounced drops in GDP decided to defer previously decided PIT rate cuts.

**Table 1: Tax measures taken in EU Member States in a period 2008-2010**

	<b>Lowering Taxes</b>	<b>Increasing Taxes</b>
<b>Labour Taxes</b>		
Personal Income Tax	DK, FI, FR, DE, HU, LV, LT, LU, MT, NL, PL, PT, SI, SK, SE	EL, IE, UK
SSC Employers	CZ, FI, HU, NL, SE	IE, RO, UK
SSC Employees	CZ, NL, SE, SK	LT, RO, UK
Withholding taxes	BE	
Deductions	BG, DE, IT, PT, SK, ES, SE	
Capital Gains	RO IE	IE
Deferral of reform		CZ, EE
<b>Corporate Income Tax</b>		
CIT rate	CZ, EL, LU, PT, SE	IT, LT
Allowances	BG, ES, IT, NL, DE, FR, LT, PL, PT, SI, SK	
<b>Value-Added Tax</b>		
Standard Rate	UK	FI, HU, IE, LV, LT
Reduced Rates	BE, CY, CZ, FI, FR, MT, RO	HU, EE, IE, LV, LT
<b>Property and inheritance taxes</b>	EL, ES, IT, LU, PT	
<b>Environmental taxes</b>	DE, NL, RO	FI, IT, LV, LT, SI, UK

Source: based on data from Taxes in Europe [database online] and Taxation trends in the European Union (2009)

Another group consists of measures relating to corporate taxation. Measures reducing the general corporate income tax rate were rare, presumably owing to the fact that such a measure, while boosting confidence in the long run, has no short-term impact on loss-making companies. Many member states also attempted to support business investment through

<sup>3</sup> Based on data from Taxation trends in the European Union (2009), Tax responses to the global economic crisis (2009) and European Economic Forecast Autumn 2009.

measures such as more generous depreciation allowances or investment tax credits. The cuts were targeted towards small and medium enterprises in a few cases. Some European states have opted for granting these incentives for a limited period of time only, in order to give an immediate boost to capital spending.

As to indirect taxation, EU member states have generally not opted for temporary VAT rate cuts as a way to boost consumer spending in the short run. One exception is possible to find as Finland decreased VAT on food. In contrast, a number of Member States hiked VAT rates, curtailed the scope of exemptions and reduced rates, or increased excise duties to help cover the budgetary shortfall generated by the slump. Member States did not cut excise duties on energy products, although for example Italy cut excise duties on gas for industrial use and granted some tax and social contributions relief to road haulage operators.

One more effect of the crisis can be seen: demands for fairness have come more clearly to the forefront. This idea, together with the budgetary needs, has stimulated international cooperation on ensuring more effective taxation of portfolio investments held abroad. There is now visibly greater international consensus on information exchange, the final objective of the Savings Directive and of the Mutual Assistance Directive, which represent the EU approach in this area.

### **3 The effect of tax burden on economic growth in empirical studies**

It is questionable whether the governments may affect the economic performance of countries through changes in taxation. Theoretical effect of taxation on economic performance is not an obvious matter and it is one of the least contested areas in theoretical macroeconomics. A higher level of tax burden can be seen as a serious obstacle to sustained improvement of economic level of the country. Taxes cause distortions in economic activity, may reduce the level of savings and investment, discourage work and entrepreneurship, and last but not least create the conditions to increase the informal economy. Scully (1991) says: *“Taxes levied by government may have both positive and negative effects on economic growth. The value of economic resources and the ability to transform resources into output are greater to the degree that property is protected, roads and harbours are provided, and domestic tranquillity is insured. Taxation beyond this level may have a negative effect. In modern times, many private goods are provided at public expense and direct income redistribution takes place on a large scale. At some level of taxation, resources employed in the public sector are less than in the private sector and resources escape into informal or underground economy – which diminish economic growth.”*

Both neoclassical and Keynesian theoretical models, for example, predict that higher taxes reduce economic activity, even though there is less agreement on the exact mechanisms that generate this result. On the other hand, taxes may be benefits for the economy because

the taxes are the basic source for financing public goods and services and in this way can increase the living standards and wealth of the whole society. If collected taxes are used efficiently, provided public services can increase productivity of human and fixed capital in private sector and promote long-term economic growth.

Using statistical data for comparing level of taxation and economic performance also does not provide unequivocal conclusions. We can find countries with high economic performance, which have a low tax burden (e.g. United States), but also countries that have high economic performance with high tax burden (e.g. Scandinavian countries). But there are many studies which present negative relationship between taxes and economic growth and recommend lowering tax rates.

Scully (2000) claims that countries in which government takes more than 43 % of national income in the form of taxes could collect more revenue by lowering their tax rates. Further, tax rates anywhere close to 43 % have devastating effects on economic growth. Hill (2008) built on the Scully's work and estimated that the growth-maximizing size of the state for the United States in 1960-1990 was between 9% and 29% of GDP.

Also Romero-Ávila and Strauch (2008) state that government consumption and direct taxation negatively affect growth rates of GDP per capita in the EU – 15 in the last 40 years. Johansson et al. (2008) investigate the design of tax structures to promote economic growth. *“Corporate taxes are found to be most harmful for growth, followed by personal income taxes, and then consumption taxes. Recurrent taxes on immovable property appear to have the least impact.”*

Lee and Gordon (2005) explore how tax policies in fact affect a country's growth rate, using cross-country data during 1970-1997. The coefficient estimates suggest that a cut in the corporate tax rate by 10 % will raise the annual growth rate by 1 to 2 percentage points.

Karras and Furceri (2009) examine the effects of changes in taxes on economic growth. Using annual data from 1965 to 2003 for a panel of 19 European economies, the results show that the effect of an increase in taxes on real GDP per capita is negative and persistent: an increase in the total tax rate by 1% of GDP has a long-run effect on real GDP per capita of -0.5% to -1%. The findings also imply that increases in social security contributions or taxes on goods and services have larger negative effects on per capita output than increases in income tax.

Szarowská (2010) analyzes the effect of tax changes on GDP growth using annual data from the 1995 to 2008 for a panel of 24 European Union members. Results of empirical tests verify statistically significant negative effect of tax burden on GDP growth. Total tax quota increase by 1% decreases the GDP growth rate by 0.29 percentage point in the same year. Estimations confirm statistically significant negative effect of direct taxes on GDP growth as well. A cut in the direct tax quota by 1 % raises the GDP growth rate by 0.43 %. Model also presents negative correlation between corporate income taxes and GDP growth. Regression

coefficient (- 1.28) expresses high negative impact of an increase the corporate income taxes on GDP growth. On the other hand the effect of social contribution quota on GDP growth is not statistically significant in any estimation.

### ***Conclusion***

The current economic situation forces the governments to find solution how to promote economic growth. As it was written there are large differences in both tax levels and tax structures across EU members. Economic theory suggests that these differences may play a role in explaining differences in economic performance. The response to the recession may have various forms. Some European Union member states have decided to introduce substantial structural reforms, reduce tax burden from income taxation and increase tax burden of consumption, or have introduced a unified VAT rate. Other states have made only minor changes and amending the tax codes by introducing measures protecting the tax base. There are 27 sovereign member state in the EU with independent tax policy and none of them are identical. Each government has been dealing with its problems individually and the choice of instruments for crisis management is influenced by many factors. International tax cooperation in tackling economic crisis is limited to the determination of what member states should refrain from doing, such as protectionism, discrimination of non resident taxpayers, and reverse discrimination of resident taxpayers.

It is necessary to point out results of many empirical studies which present negative impact of taxation on GDP growth. That's why the changes of tax rates should not be regarded as a single tool affecting the economic growth as the GDP growth is influenced by many factors. Moreover, it is generally difficult to assess the overall effect of the tax changes on GDP. For example changes in any single tax may simultaneously affect several determinants of GDP and its growth. The effects of changes in taxation often depend also on the design of other policies and institutions. Thus, the negative effect of labour taxes on employment often depends on wage setting institutions which determine e.g. minimum wages, which negatively affect on labour cost and then GDP growth.

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