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# The impact of fiscal policy on Polish economy

Anna Krajewska

Institute of Economics, University of Lodz, Poland

# Abstract

In this paper we have shown that: Changes in the Polish fiscal and tax policy have been moving in a direction other than the tax reforms in the EU-15. Tax cuts carried out between 2004 and 2010 were to a large extent random and were motivated by political considerations. In practice, it turned out, however, that they triggered the demand mechanisms that made the economic crisis in Poland run smoother than in other countries. However, lower budget revenues due to tax cuts led to a significant increase in public sector deficit (about 8% of GDP in 2010 and 5% in 2011). It is crucial for the Polish economy in the foreseeable future if we can prevent a sharp decline in consumption and the growth of unemployment.

Keywords: fiscal policy; Poland

## 1. General overview

Poland is one of the few countries in the European Union, which in the current crisis, at all times maintained a positive growth in GDP. Searching for the reasons for this success one often indicates the positive impact of the fiscal policy carried out in the recent years (also the policy before the crisis).

Statistical data on EU-27 and Poland (Table 1) indicate that fiscal policy in Poland is clearly different from policies pursued in other European Union countries. Here are some basic differences:

1. Under the counter-cyclical policy pursued in 2008 and 2009 there took place a major increase in the public expenditure in the European Union countries, by 5 percentage points in EU-27. Public expenditure in Poland increased to a lesser degree at that time (by 2.3 percentage points). Later, in the years 2010 and 2011 there was a slow (slight) drop of public expenditure in the EU-27. In Poland, however, the fall was significantly stronger in 2011.

2. Budget revenue in relation to GDP was relatively steady during the study period while in Poland we saw a distinct fall in budget revenue although there was no distinct collapse.

3. Due to the fall in GDP the budget revenues from taxes decreased in the EU-27 countries by about 1.0 percentage points, while in in Poland the decline in budget revenues was significantly worse (3.0 p.p.) and to a greater extent than from recession resulted from previous decisions on tax cuts (the transition from 2009 onwards to a two tax brackets PIT: 18% and 32%, instead of a three tax brackets: 19%, 30%, and 40% and a reduction in pension contributions, in 2006 and 2007; from 13% to 6%).

4. The tax burden in the Polish economy is much lower than the EU average, and moreover the difference has been deepening in recent years.

Table 1. GDP rate of growth and public finance in EU-27 and Poland							
Specification	2006	2007	2008	2009	2010	2011	2012
EU-27							
GDP growth rate (%)	3.2	3.0	0.5	-4.2	2.0	1.5	-0.4
Public expenditure (GDP %)	46.3	45.6	47.1	51.1	50.6	49.1	49.3
Budget revenues (GDP %)	45.0	44.7	44.7	44.2	44.1	44.6	45.2
Budget revenues from taxes (GDP %)	36.6	37.1	36.6	35.8	35.6		
Budget deficit (GDP %)	-1.5	-0.9	-2.4	-6.9	-6.5	-4.5	-4.0
Public debt (GDP %)	61.5	59.0	62.5	74.8	80.0	82.5	85.3
Poland							
GDP growth rate (%)	6.2	6.8	5.1	1.6	3.9	4.3	1.9
Public expenditure (GDP %)	43.8	42.2	43.2	44.5	45.4	43.6	42.2
Budget revenues (GDP %)	40.0	40.3	39.5	37.2	37.5	38.5	38.3
Budget revenues from taxes (GDP %)	35.0	34.8	34.3	31.8	31.8		
Budget deficit (GDP %)	-3.6	-1.9	-3.7	-7.4	-7.9	-5.1	-3.9
Public debt (GDP %)	47.6	45.0	47.1	50.9	54.8	56.3	53.0

 Table 1. GDP rate of growth and public finance in EU-27 and Poland

Source: http://epp.eurostat.ec.europa.eu (23.04.2013).

GDP was falling in Poland at a slower rate than in other EU countries. However, it should be noted that this was not a result of successful anti-cyclical policy but resulted from the specific features of the Polish economy. The Polish economy responded to the crisis with large delay.

It seems that the reason for Poland going relatively smooth through the crisis was a result of the following factors:

1. The Polish economy takes advantage of the so-called "backwardness rent" consisting of:

a) The financial sector is relatively underdeveloped. It achieves good results based on the traditional, proven instruments. This weakens the negative effects of crisis and delays their occurrence. The impact of the financial sector on the real sector is still limited. In 2008 the bank loans were in Poland at the 44 per cent of GDP while similar index for Germany was 129 per cent of GDP and for the UK as high as 282 per cent of GDP<sup>1</sup>.

b) This was proved by the fact that in 2008 only 26 per cent of small and medium-sized enterprises benefited from loans<sup>2</sup> although enterprises of that size in most countries are generally strongly dependent on external financing;

<sup>&</sup>lt;sup>1</sup> Raport o sytuacji banków w 2009 r. Urząd Komisji Nadzoru Finansowego, Warsaw 2010, p. 62

<sup>&</sup>lt;sup>2</sup> Raport Polskiej Konfederacji Pracodawców Prywatnych "Lewiatan", Warsaw 2009

c) Connections with international markets are still relatively modest. For example, in Poland exports account for 40 per cent of GDP, while in many countries of the "Old" European Union, even in the Czech Republic they are above 70 per cent<sup>3</sup>. This implies that the effects of the collapse of economies of the developed countries are not felt in Poland to the same extent;

d) As one of the least developed EU countries, Poland benefits from abundant, external financial assistance, in excess of EUR 10 billion per year (Poland is a biggest beneficiary of EU aid funds).

2. As one of the least developed EU countries, Poland benefits from abundant, external financial assistance, in excess of EUR 10 billion per year (Poland is a biggest beneficiary of EU aid funds). The funds are assigned for:

a) The infrastructure investments promoting entrepreneurship, innovation, and environmental protection;

b) Consumer spending (EU farm subsidies, sustaining employment, severance pay for laid off employees).

3. High GDP growth rate before the crisis (5-6 per cent annually) slows down the fall of Poland's economy.

4. Decisions to reduce taxes taken just before the crisis, considerably increased demand, especially the consumer demand. These decisions involved:

- The reduction of corporate income tax in 2004 (from 27 per cent to 19 per cent),

- The reduction of pension contribution 2006-2007 (from 13 per cent down to 6 per cent),

- The introduction in 2007 of the pro-family income tax allowance which made it possible to deduct expenses for bringing up children from personal income tax,

- The introduction in 2009 of a two-tier PIT scales (18 and 32 per cent) in place of the previous (19, 30 and 40 per cent) scale.

# 2. The structure of public expenditure

Fiscal policies pursued during the crisis in the EU countries and Poland demonstrate significant differences concerning public expenditure (Table 2).

1. The increase in public expenditure in the EU-27 since 2008 has been to a large extent associated with stabilization activities taken because of the downturn (GDP fell from 3.0 per cent in 2007 to 0.5 per cent in 2008 and down to – 4.2 per cent in 2009). The economic situation in Poland was still good in 2008 (5.1 per cent GDP growth) and, let us remind you once again, also in 2009 when Poland was a "green island", the only country in EU-27 without a fall in GDP growth. Therefore, it cannot be said that that it was the downturn that had triggered increased public expenditure in Poland.

<sup>&</sup>lt;sup>3</sup> Statistical Yearbook, GUS, Warsaw 2009, pp. 875-887

- 2. Under the anti-cyclical policy actions are taken aimed at increasing consumption demand of the population with lowest income, namely people who receive social benefits. The number of unemployed and amounts for unemployment benefits are increasing. This has been reflected in the EU countries by increased share of social benefits in public expenditure, from 18.9 per cent in 2007 to 21.7 per cent in 2009 and in next years. In Poland, in contrast the expenditure for social benefits increased only slightly (from 16.2 per cent to 17.0 in the study period). This slight increase in social expenditure results from its structure. In Poland, retirement and disability pensions account for over 70% of total social expenditure<sup>4</sup> and must grow according to its own rhythm set by the increase in the number of beneficiaries and the "natural" increase in the amount of benefits regardless of the increase in the GDP.
- 3. The increase in the expenditure for gross capital formation in the EU-27 countries was significantly slower than in Poland, although the increase in investment expenditure is an important component in the long-term anti-cyclical policy. The increase in investment expenditure in Poland is associated with growing inflow of the EU grants which always require co-financing from domestic sources which is a very mobilizing factor for fund raising for this purpose. The EU and domestic funds together contributed to the increase in expenditure defined as gross capital formation from 3.5 per cent of GDP in 2006 (the year of Poland's accession to the EU), to 5.8 per cent of GDP in 2011. It should, however, be emphasized that the increase in investment expenditure financed from public funds is not in Poland directly associated with anti-cyclical policy (although it clearly stimulates the Polish economy).

Specification	2006	2007	2008	2009	2010	2011	2012
EU-27							
Total general government expenditure of which:	46.3	45.6	47.1	51.1	50.6	49.1	49.3
Compensation of employees	10.6	10.4	10.6	11.3	11.1	10.8	10.7
Social benefits*	19.5	18.9	19.5	21.7	21.6	21.5	21.6
Gross capital formation	2.4	2.6	2.7	2.9	2.7	2.5	2.3
Interest	2.7	2.7	2.8	2.6	2.7	2.9	2.9
Poland							
Total general government expenditure of which:	43.3	42.2	43.2	44.5	45.4	43.4	42.2
Compensation of employees	9.8	9.6	10.0	10.2	10.1	9.7	9.4
Social benefits*	17.3	16.2	16.1	16.9	17.0	16.2	16.4
Gross capital formation	3.5	4.3	4.6	5.3	5.7	5.8	4.6
Interest	2.7	2.3	2.2	2.6	2.7	2.8	2.8

 Table 2. Public expenditure in EU-27 and Poland (in % of GDP)

\*Social benefits other than transfers in kind

Source: Eurostat, General Government expenditure by function (21.10.2013)

<sup>&</sup>lt;sup>4</sup> A. Wernik, Długookresowe tendencje w polskich finansach publicznych, [in:] A. Alińska, B. Pietrzak, Finanse publiczne a kryzys ekonomiczny, CeDeWu.Pl, Warsaw 2011, p.156

While comparing the direction of changes in public sector expenditures in the EU and Poland certain similarities should be noted, especially:

- 1. Public expenditures for compensation of employees are relatively stable in the EU and Poland in relation to GDP regardless of economic situation. However, the share of these expenditures began to decrease in the EU-27 countries but it was associated with a decrease in the absolute value of GDP.
- 2. The increase in the budget deficit due to economic downturn results in increased share of public expenditures on interest. The share of this expenditure in relation to GDP is similar in the EU and Poland despite essential differences in the volume of the budget deficits.

# 3. The tax policy in the EU countries. Historical approach

It is generally accepted, that the fiscal function of taxes is the most important one. Taxes are levied so that the state can achieve social and economic goals. Non-fiscal tax functions, especially redistributive, allocative and stabilizing began to play a big role along with the rising popularity of Keynes' theory. Tax system that emerged after World War II seriously considered tax extra-fiscal functions. This was reflected in progressive tax, income tax allowances, and tax exemptions and deductions, as well as in diversified consumption tax rates. Such tax structure made it possible to employ taxes as automatic stabilizers. It also allowed the implementation of the stimulatory and the allocative function of taxes.

The neo-liberal doctrine approach to taxation is different. It clearly emphasizes that taxes should be neutral, the extra-fiscal functions of taxes should be limited, taxes should be reduced and tax exemptions abolished. The representatives of the supply-side economics were the most explicit in their expectations towards taxes.

The tax reforms, performed in the spirit of liberal school recommendations, have been introduced gradually and with high resistance (on the principle that "taxes do not like revolution"). However, reducing tax progression and tax deductions as well as lowering the upper tax thresholds led to two negative effects:

1) The reduced government revenues from taxes and limited ability to reduce the budget costs led to an increase in public deficit and public debt,

2) The new tax structure led to a greater social differentiation.

The current crisis has deepened these effects and confirmed the saying well-known among economists: "When in fear, Keynes is dear". This was reflected in President Obama's anti-crisis package and then followed by many governments in Western Europe with anti-crisis packages covering new tax systems. These packages included such activities  $as^5$ :

- 1) The increased tax exemption amount in many countries,
- 2) The reduced bottom PIT rate,
- 3) The introduction or increase of the pro-family tax reforms (the Netherlands)

<sup>&</sup>lt;sup>5</sup> Taxation Trends in the European Union 2012, Eurostat, European Commission, Luxemburg 2012, pp. 19-35

- 4) The indexation of tax threshold,
- 5) The introduction of the new additional top PIT rates,
- 6) The improved collection of taxes better tax systems.

These measures were justified as follows: the tax relief for the poor will increase their consumption demand and stimulate economy. However, raising taxes for the rich will not reduce their consumption, and therefore will not harm the economy; to the contrary it will only result in reduced savings.

The decisions on VAT and excise rates are not so precisely oriented. The standard VAT rates were temporarily reduced in some countries. Preferential VAT rates were also reduced. However, many countries temporarily increased the excise tax on certain products and increased the standard VAT rate<sup>6</sup>.

## 4. The structure of tax revenue by economic function

Taking into account the type of tax base 3 types of taxes can be identified: tax on consumption, labour, and capital.

Tax on consumption involves indirect taxes, VAT, excise, and other taxes on goods and services purchased by households.

Tax on labour, apart from income tax on the employed involves social security contributions paid by employers and employees and other tax burdens on labour.

Tax on capital combines various taxes, such as CIT, PIT on business, income of the selfemployed, income from capital, and income from the wealth and savings of households.

The response of fiscal policy pursued in the European Union to the current crisis will be analysed in three ways:

- 1. Distribution of total tax burden by economic function, i.e., the share of taxes on consumption, labour, and capital in total tax revenues. The analysis will cover backward looking tax burden indicators.
- 2. Analysis of trends in the implicit tax rate (ITR) on consumption, labour and capital. Such an approach is described as forward-looking effective tax rate.
- 3. Tendencies observed in the EU countries will be compared with the changes taking place in Poland. An attempt will be made to explain the specifics of fiscal policy pursued in Poland.

For the purpose of the paper, the statistics processed by the methodology adopted by the European Commission published in Taxation trends in the European Union, 2011–2013 were used.

<sup>&</sup>lt;sup>6</sup> Ibidem, pp. 19-39

The decrease in tax revenues in relation to GDP leads to changes in the structure of tax burden on different types of activity (Table 3). The share of taxes on consumption in EU-27 is relatively stable, while a increase was noted in the years 2010-2011 in Poland. The revenues from tax burden on labour (PIT and social security contributions) are increasing in EU-27. In Poland, however, this trend is less pronounced compared with the EU-27 averages. The recession in the EU leads to a decrease in the share of taxes on capital in the budget revenues. In Poland the share of this factor in shaping the budget revenues remains at the same level, but is higher than in the EU.

Taxes on	2006	2007	2008	2009	2010	2011
EU-27						
Consumption	33,5	33.6	33.3	33.5	34.5	34.5
Labour	45.3	44.8	46.4	48.4	48.2	48.0
Capital	20.4	21.5	20.4	18.8	18.5	18.7
of which CIT	9.2	9.9	9.5	7.9	7.7	7.6
Poland						
Consumption	37.6	37.5	38.0	36.9	39.2	39.1
Labour	39.7	37.3	37.1	38.6	37.9	38.5
Capital	23.8	25.6	25.2	24.8	23.3	22.8
of which CIT	7.1	7.9	7.9	7.2	6.3	6.4

Table 3. Taxes on Consumption, Labour and Capital as % of Total Taxation

Source: Calculation based on: Taxation Trends in European Union 2013, European Commission, Brussels 2013.

The following conclusions arise from the analysis of the structure of budget revenues in 2006–2011:

- 1. The crisis has contributed to a fall in budgetary revenues from taxes. At the same time stabilization measures lead to increased public expenditure. In this situation the role of fiscal function of taxes is increasing;
- 2. The majority of budget revenues come from taxes on labour. And this is the only tax, whose share in the general tax revenues was growing in the EU-27 in the last years;
- 3. The share of income from taxation of consumption is fairly stable it accounts for about 33% of budgetary revenues from taxes despite an increase in VAT and excise duties, but increasing in Poland;
- 4. The revenues from taxation of capital have decreased significantly, especially CIT, in relation to total budgetary revenues from taxes.

## 5. Implicit tax rate on consumption, labour and capital

The implicit tax rates on consumption, labour and capital are presented in Table 4. ITR is an indicator expressing the relation of the tax burden imposed on various types of activities in relation to the total revenue from this activity. The ITR on consumption measures the percentage of all consumption taxes to the overall consumption expenditure incurred in the country, the ITR on labour measures the share of taxes levied on labour (income taxes and social security

contributions) in the total gross wage fund in the economy. The ITR takes into account the legislation and resulting therefrom tax burden, which may affect the behaviour of different actors and their decisions. There are no distinct differences between the average rates for the EU 27 and Poland. It is also significant that the tax burden on consumption and capital went down during the study period. The ITR on labour rose however, although the trend in Poland was reversed (due to decreased CIT and pension contribution).

ITR on:	2006	2007	2008	2009	2010	2011
EU -27						
Consumption	21.8	22.0	21.4	20.9	21.2	21.5
Labour	34.0	34.1	33.8	32.2	33.3	33.7
Capital	25.6	27.0	26.0	24.5	23.0	23.1
(of which CIT)	21.3	22.5	21.5	18.3	16.0	15.7
Poland						
Consumption	20.6	21.4	21.1	19.0	20.2	20.8
Labour	36.4	34.0	31.7	30.9	30.3	32.2
Capital	21.0	23.0	23.1	19.7	18.6	18.3
(of which CIT)	19.1	20.3	20.3	15.0	12.5	12.7

Table 4. Implicit Tax Rate on Consumption, Labour and Capital

Source: Taxation Trends in the European Union 2013..., op. cit.

Comparison of ITR on consumption, labour and capital for the study period in EU-27 allows the following conclusions:

- 1. The ITR on labour is the highest. In 2006, the EU-27 personal income tax (PIT) and social security contributions (SSC) together accounted for 34.0% of gross wages, in 2008-2009 for 33.7% in 2011. The ITR on labour decreased in because of the efforts made in many countries towards reduction in taxes and contributions for the lowest earners, and also because of the decline in wages due to the crisis;
- There is only a slight decrease in the tax burden on consumption (ITR on consumption)

   from 21.8% in 2006 to 21.5% in 2011. This is despite the increase in the standard rate of VAT and excise tax increase. This means that consumption structure is undergoing transformation. The share of products and services with the preferential VAT rate is increasing. Such a shift in consumption structure mostly concerns the lowest income households;
- 3. The effective tax rate on capital (ITR on capital) was reduced over the study period from 25.6% to 23.1%, i.e. by 2.5 percentage points. It should be emphasized though, that it was the corporate income tax (corporate ITR) that decreased the most from 21.3% to 15.7%, i.e. by 5.6 percentage points.

The decreased share of revenues in relation to GDP caused by the crisis resulted in the decreased implicit tax rate on consumption, labour and capital. The tax burdens on capital decrease rapidly and tax burdens on the labour factor decrease very slowly (and in fact are barely perceptible). Therefore the ITR, as another measure of fiscalisation, confirms that the costs of the crisis to the greatest extent are borne by the employees. This shift in the tax burden indicates that tax policy is to a greater extent geared to implement the fiscal rather than the redistributive or stimulatory function or to encourage demand, therefore it does not help escaping economic crisis.

In Poland, the changes in the tax system do not coincide with the trends observed in other EU countries. Poland's specificity lies in the fact that:

- 1. The decrease in budgetary revenues from taxes in relation to GDP was greater than in other EU countries and was not a consequence of the decline of the GDP growth rate, but was a result of earlier political decisions on tax cuts (including the shift from three personal income tax brackets of 19%, 30% and 40% to two-tier scale: 18% and 32%);
- 2. The structure of budgetary revenues from taxes differs significantly from that observed in the EU-27. The difference is that in Poland the share of revenue from taxation on labour in budgetary revenues from taxes is lower by almost 10 percentage points while the share of consumption taxes and capital taxes is higher;
- 3. Although the share of taxes on labour in the overall revenues from taxes is clearly lower, the ITR on labour in Poland is almost similar to EU average. This can be explained by the low level of gross wages in Poland. This hypothesis is confirmed by the low share of employment costs in relation to GDP. In Poland these costs amount to 36.0% of GDP, in 2010 while the arithmetic average for the EU-27 is 46.4% of GDP;<sup>7</sup>
- 4. Despite the relatively high share of taxes on capital in budgetary revenues the tax burden on corporations is relatively low and also the effective tax rate (corporate ITR) is lower than in most EU countries.
- 5. The relatively high share of capital taxes in the Polish budget can be explained by taxes collected from the self-employed and small business. According to the terminology used in the European Commission these taxes are regarded as taxation of capital. In Poland, most self-employed do not have large capital; a significant portion of their taxes can thus be regarded as taxes on labour. At the same time, the taxes they pay in Poland represent 12.1% of budgetary revenue, compared to 4.0% in EU-27, so these taxes are more than 3 times higher in Poland than in the EU<sup>8</sup>.

In Poland, the process of shifting the tax burden from capital (and especially from taxation of corporations) to labour takes place at a faster rate than in other EU countries. Statistical data show that in time of crisis, the burden of maintaining the country is based on taxation of labour rather than on taxation of capital.

How should this be assessed? There is no clear answer. Supporters of the liberal approach consider this direction of tax burden evolution to be correct. The reduced tax burden for entrepreneurs fosters investment and employment and thus helps economy recover from the crisis. And the Keynesians believe that the tax burden on labour reduces consumer demand and hampers the process of recovering from the crisis and also leads to increased social discrepancies. There is also another option - the consequences of the crisis should be incurred to approximately the same degree by capital and labour. It is also worth noting that recently there prevails the view that the burden of crisis should be shifted from the poor to the rich and from employees to entrepreneurs.

<sup>&</sup>lt;sup>7</sup> Calculations based on the Statistical Yearbook of Polish Republic, GUS, Warsaw, 2012, p. 876

<sup>&</sup>lt;sup>8</sup> Taxation trends..., op. cit., 2012, pp. 258-261

## 6. Conclusions

Joseph E. Stigliz indicates that a well-designed stimulus program should reflect seven principles<sup>9</sup>:

- 1. It should be quickly adopted.
- 2. .It should be effective i.e., should give rise to a large increase in employment and output.
- 3. It should address the country's long-term problems.
- 4. It should focus on investment.
- 5. It should be fair should take into account the principles of social justice, including tax policy.
- 6. It should deal with the short-run exigencies created by the crisis.
- 7. The stimulus should be targeted at areas of job loss.

In economic policy, conducted in Poland these principles are not complied with, unfortunately. This applies to both revenue and public expenditure.

In this paper we have shown that: Changes in the Polish fiscal and tax policy have been moving in a direction other than the tax reforms in the EU-15. Tax cuts carried out between 2004 and 2010 were to a large extent random and were motivated by political considerations. In practice, it turned out, however, that they triggered the demand mechanisms that made the economic crisis in Poland run smoother than in other countries. However, lower budget revenues due to tax cuts led to a significant increase in public sector deficit (about 8% of GDP in 2010 and 5% in 2011). It is crucial for the Polish economy in the foreseeable future if we can prevent a sharp decline in consumption and the growth of unemployment.

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<sup>&</sup>lt;sup>9</sup> J. E. Stiglitz, Freefall, Jazda bez trzymanki, PTE, Warsaw 2010, pp. 69-71