Reforms of Personal Income Taxation in New EU Member States from Central and Eastern Europe (2008-2016)

Nelly POPOVA[1]
Assistant Professor, PhD
University of National and World Economy, Bulgaria

Abstract: *The present paper has as its object the main reforms in personal income taxation (PIT) in the new EU member states from Central and Eastern Europe. The period under consideration is 2008-2015 and the objective is to analyze the impact of the global economic and financial crisis on PIT revenue of these countries as well as to outline the main reforms carried out in response to the crisis. In general, new Member States are characterized by a significantly lower overall tax burden in comparison to the "old" Member States of EU-15, and by some significant differences in the tax techniques applied, especially in the field of individual taxation. These differences are a result of the so-called "flat tax revolution", which took place during market transition and consisted in substitution of the multi-bracket system with a single (flat) PIT rate. The aim of the flat tax was to simplify the tax system and hence, to attract foreign investments and accelerate economic growth. After the beginning of the global crisis, new EU Member States had the advantage of relatively stable public finances and they could focus their tax policy more on economic recovery, rather than on fiscal consolidation. In the period under consideration the downward trend in top personal income tax rates in these countries continued and this was accompanied by some changes in the tax allowances and credits applied. Revenue neutrality was achieved by shifting the tax burden to consumption and negative externalities. By contrast, the average top statutory PIT rate in the countries of EU-15 in the same period increased. Thus, the global crisis has deepened the divergence in the tax structure of new EU Member States and the countries of EU-15.*

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[1] npopova@unwe.bg

1. Introduction

The countries of Central and Eastern Europe are characterized by a lower tax burden in comparison to the EU-15 countries, as a result of the reforms undertaken during market transition. One of the main pillars of these reforms has been the substitution of the multi-bracket progressive system with a single (flat) rate. The "flattening" of the personal income tax (PIT) was accompanied by a reduction of the corporate income tax rates and an increase of the tax burden on consumption. The present paper has as its object the development of personal income tax revenue in 2008-2015 and to outline the main changes in this field. The paper is structured as follows: part two presents the characteristics of the flat tax regimes applied in new Member States from Central and Eastern Europe. Part three is focused on the development of personal income tax revenue in these countries in 2008-2015. Part four outlines the main changes in the field of individual taxation undertaken in this period and part five concludes.

2. The "flat" tax expansion in Central and Eastern Europe

The flat tax was originally proposed by US economists Robert Hall and Alvin Rabushka and consisted in an integrated system of individual taxation and corporate taxation. The individual income tax in their proposal is based on the application of a single rate of 19% combined with a family allowance. However, the most important feature of the original flat tax is that it is levied only on the part of the income that is spent on consumption, while savings are exempted, thus, it is a consumption tax (Hall & Rabushka, 1995, p. 3).

The personal income tax system introduced in Central and Eastern European countries during market transition is different from the original concept of Hall and Rabushka because it is levied both on labour and capital income. The main similarity is the application of a single rate combined (in most cases) with a general allowance. However, the single tax rate and the amount of the personal exemption vary among countries.

Estonia was the first country in Europe to adopt a flat tax in 1994 (at a rate of 26%). In the next years Latvia and Lithuania followed in its steps. At the turn of the century, flat tax was adopted also by Slovakia, Bulgaria, Romania and the Czech Republic.[2]

Just like the original idea, the "flat" tax applied in most CEE countries is progressive. The availability of a general allowance (a part of the income that is exempt of taxation) means that the average tax rate is always lower than the marginal tax rate. In addition, progressivity of PIT is enhanced by different tax credits and deductions, such as tax credit for children, earned income tax credit, mortgage interest deduction, deduction for donations, etc.

Among EU Member States, the only country with a proportional personal income tax for the majority of taxpayers is Bulgaria. The adoption of the 10% flat rate (the lowest in the EU) was compensated by the abolition of the general allowance. There are deductions for disabilities, donations to certain institutions, contributions to private pension and health funds and mortgage interest for young families.

The difference between the flat tax regimes with and without a general allowance can be demonstrated with a numerical example. Table 1 compares the average tax rate (ATR) in two countries with a flat tax – the Czech Republic and Bulgaria. In the Czech Republic, an individual with an annual income of 100 000 CZK (around 37 000 EUR) will have an annual tax liability of 11 274 CZK[3] and an ATR of 11.3%.[4] Due to the availability of a general allowance the ATR is always lower than the MTR. In Bulgaria an individual with an annual income 100 000 lv. (around 51 000 Euro) will have an annual tax liability of 10 000 lv. and an ATR of 10%. This means that the ATR is equal to the MTR.

Table 1: Marginal tax rate and average tax rate of an individual in Bulgaria and the Czech Republic

Country	General allowance	Marginal tax rate	Average tax rate
Czech Republic	24 840 CZK	15%	11.3%
Bulgaria	no	10%	10%

It is also interesting to compare the tax burden on individuals receiving the minimum wage. In 2017 the minimum wage in the Czech Republic amounts to 11 000 CZK. This

[2] Overall around 40 countries in the world apply a flat tax, including Russia, Georgia, Serbia, Macedonia, Albania, Moldova, Bolivia, Kazahstan, etc.

[3] (100 000 – 24 840) x 15% = 11 274 CZK

[4] (11 274/100 000) x 100 = 11.27%

means that an individual receiving no other income will have to pay no PIT at all and his ATR is 0%. On the other hand, the minimum wage in Bulgaria in 2017 is 5 520 lv. per year. An individual receiving only this income would have a tax liability of 552 lv. and his ATR will be 10%, exactly equal to the ATR of the individual with an income of 100 000 lv. Of course, the social security contributions are also a part of the tax burden on labour, but in this example they are not taken into account.

Table 2: Marginal tax rate and average tax rate of an individual with a minimum wage in Bulgaria and the Czech Republic

Country	General allowance	Marginal tax rate	Average tax rate
Czech Republic	24 840 CZK	15%	0%
Bulgaria	no	10%	10%

This example intended to demonstrate the significant differences between the flat tax regimes applied. It can be concluded that no country applies the original flat tax as developed by Robert Hall and Alvin Rabushka. Rather, most Central and East European countries have adopted a simpler version of the progressive personal income tax.

3. Personal income tax revenue in 2008-2015

The global financial crisis affected negatively the economies of all EU countries and the new Member States were no exception. The decline of GDP was most severe in the Baltic countries. On the other hand, Poland was the only EU Member State that did not go into recession although its economy slowed down.

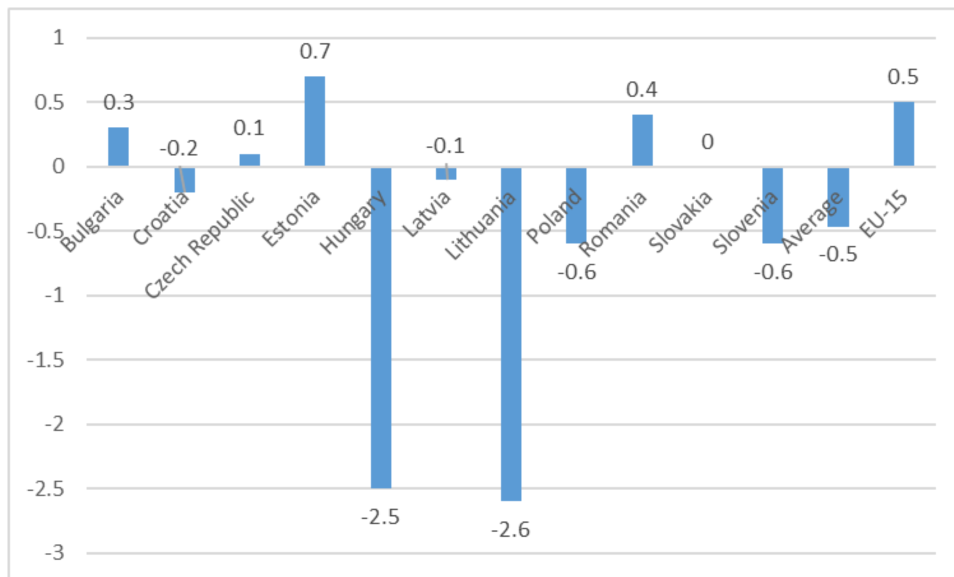
On average, the sovereign debt of the 11 countries almost doubled, from 27.3% of GDP in 2008 to 48.9% in 2016, but its amount remained significantly below the EU average level. All countries, except Estonia, were placed under an excessive deficit procedure. Latvia, Hungary and Romania had to request EU and IMF-led international financial assistance (European Central Bank, 2010, p. 1).

The economic recovery began in 2010-2011, driven by exports and their relatively stable public finances. In the period under consideration Slovakia, Estonia, Latvia and Lithuania fulfilled the convergence criteria and joined the euro area, while Slovenia did this as early as in 2007.

Figure 1 presents the dynamics in PIT revenue as proportion to GDP in 2008-2015. On average, revenue fell by 0.5 percentage points (p.p.), from 4.8% to 4.3%. The sharpest decline was recorded in Lithuania (2.6 p.p.) and Hungary (2.5 p.p.). As will be explained in the following section of the paper, at least in part, the downward trend in NMS was determined by the personal income tax reforms carried out in response to the crisis.

Receipts have also fallen in Croatia, Latvia, Poland and Slovenia. An increase was seen in Bulgaria, Czech Republic, Estonia and Romania, while in Slovakia revenue remained unchanged. In EU-15 on average PIT revenue as a proportion to GDP increased by 0.5 p.p. to reach.

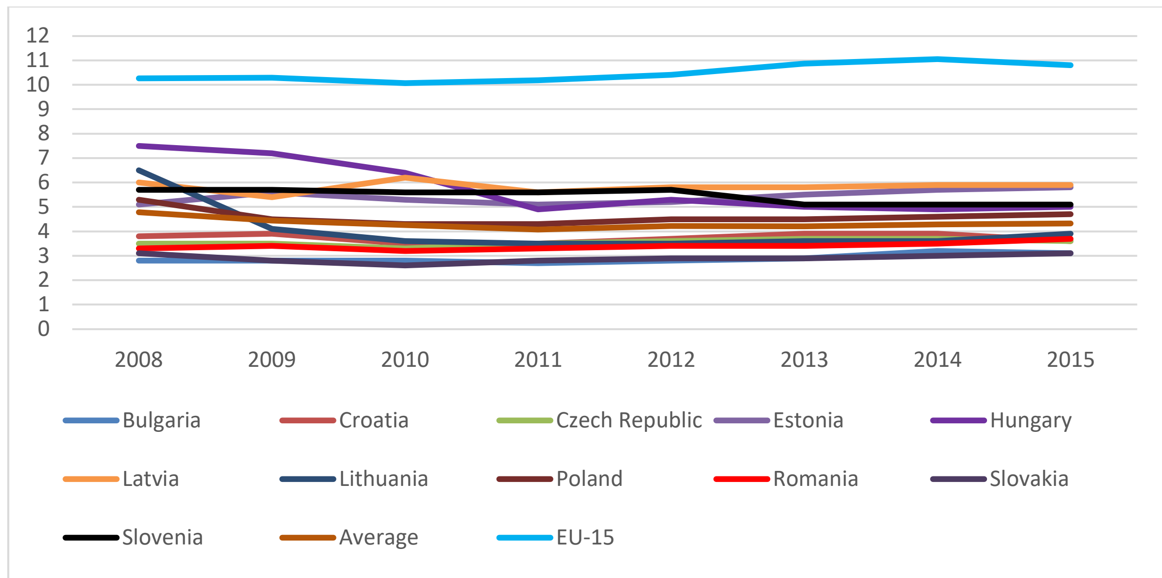
Figure 1: Change in PIT revenue in NMS-11 2015-2008 (in percentage points)



Source: own calculations

As can be seen in Figure 2, the global crisis led to a convergence in the levels of direct tax revenue among new Member States and also to an increasing divergence from EU-15. The PIT-to-GDP ratio in these countries fell to 4.3%, which was significantly lower than the EU-15 average of 10.8%.

Figure 2: Personal income tax revenue in NMS-11 in 2008-2015 as percentage of GDP



Source: Taxation Trends in the EU, 2017 Edition

4. Main changes in individual taxation in NMS in 2008-2015

During the period under consideration there were significant changes in personal income tax in EU new Member States. The countries that carried out the most sweeping reforms were Hungary and Lithuania, while the other countries introduced more limited changes. The measures affected both statutory tax rates and the tax base and they were aimed mainly at reducing the tax burden on labour and especially on low-income earners and families with children.

As can be seen in figure 3, in 2008-2015 the downward trend in PIT statutory rates in the new EU Member States from Central and Eastern Europe continued. The strongest decline was seen in Hungary where in 2011 the multi-bracket system, with a top rate of 40% was replaced with a single rate of 16%. The arguments in favour of the introduction of the flat tax was improving the competitiveness of Hungarian economy and simplification of the tax system (Ministry for National Economy, 2010, p. 1).

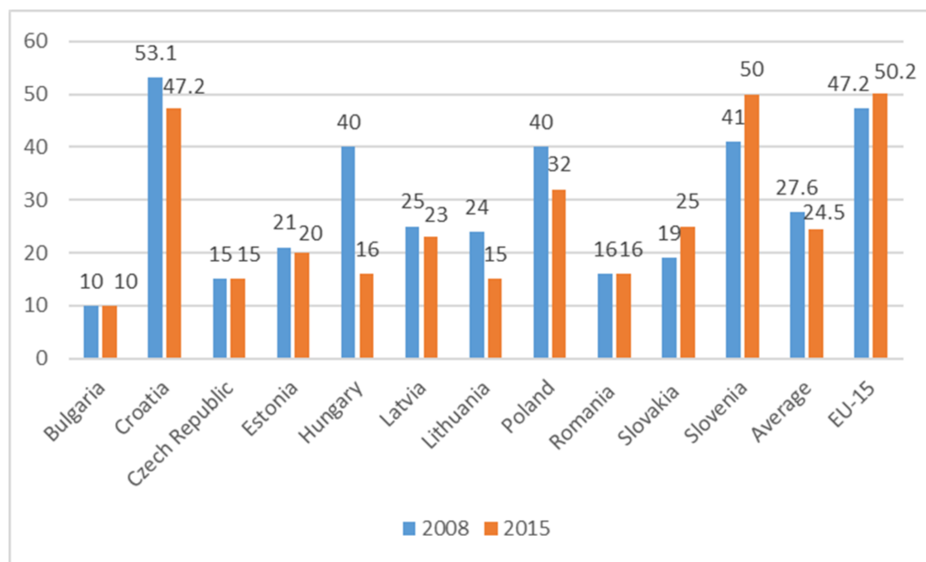
Top statutory rates were also lowered in Lithuania (9 p.p.), Poland (8 p.p.), Croatia (5.9 p.p.), Latvia (2 p.p,), Estonia (1 p.p.).

On the other hand, in 2013 Slovakia reintroduced the multi-bracket progressive system, by introducing a second positive tax bracket of 25% in addition to the 19% rate. Slovenia also introduced an additional tax bracket at a rate of 50%, applicable to high

incomes. The single tax rate was kept unchanged in the Czech Republic, Bulgaria and Romania. The Czech Republic, however, increased the tax burden on high-income taxpayers by means of a temporary 7% solidarity surcharge, applied only to the part of the aggregate individual income that exceeds four times the annual average salary.

On average, top PIT rate declined by more than 3 p.p., from 27.7% in 2008 to 24.5% in 2015. By contrast, in EU-15 the average rate went up by nearly 3 p.p. and reached 50.1% in 2016. The top statutory rate was raised in 11 of the EU-15 Member States and most strongly in Portugal, Greece and Ireland.

Figure 3: Top statutory PIT rates in NMS in 2008-2015



Source: Taxation Trends in EU Member States, 2017 Edition, p.

Some changes were introduced also with regard to the tax allowances and credits applied. In 2009 Lithuania raised the amount of the basic personal exemption. In 2013 Poland increased the tax credit for taxpayers with more than two minor children and Latvia also increased the exemption for dependents (European Commission, 2013, p. 126). In Estonia the annual basic allowance has been increased gradually over the last decade. The Czech Republic announced an upcoming increase in the tax credits for children.

As already mentioned, after 2008 PIT in Bulgaria became proportional due to the abolition of the basic allowance. However, over the last years some progressivity was reintroduced. In 2013 an allowance for the lowest wage earners was adopted. They had the possibility to apply for a refund of the personal income tax levied on their wages in the previous tax year. The refund was available only to individuals who earn no income

other than their labour income which should not be higher than the statutory minimum salary (European Commission, 2014, p. 56). This allowance, however, was in force only for the fiscal year 2014.

As of 2016, a lump-sum tax credit of 200 lv. (around 100 Euro) for up to three dependent children is in force. In 2015 the Croatian government raised the basic personal allowance, including for pensioners (European Commission, 2015, p. 23).

In Hungary, the large reduction of the PIT rate was accompanied by measures aimed at broadening the tax base. The earned income tax credit was substituted with a new family tax allowance. Before the reform those earning around the minimum wage level have not had to pay personal income tax, and even those on an average salary have benefitted in the form of tax credits resulting in a very low tax liability (Ministry for National Economy, 2010, p. 3). However, the only tax relief applied since 2013 has been the dependent children tax allowance, as well as a temporary allowance for first marriage. Thus, taxation has become proportional for the taxpayers who do not cover these criteria.

Another line of reforms in the field of personal taxation in the period under consideration was focused on increasing the tax burden on capital income, such as interest, capital gains, etc. Several new Member States introduced or increased the tax rates on the so-called passive income in order to compensate for the reduction of the tax burden on labour.

In Bulgaria, as of 1 January 2013, interest income from term deposits of individuals in banks, which was previously exempt from taxation, became subject to the 10% flat rate (European Commission, 2014, p. 55). In 2014 the rate was to 8% as part of an intended phase-out until 2017.; however, later it was decided that the 8% rate would be kept.

In Czech Republic, since 2014, acquisition by means of inheritances and gifts are incorporated into income tax. In Slovenia the flat rate applied on passive income was increased from 20% to 25% for profits realized after 1 January 2013. As from 2015 Croatia began to tax interest from saving accounts and capital gains from financial instruments at a flat rate of 12%, while previously they were exempted. In 2016 Lithuania reduced the amount of the exempt income from deposits.

Table 3: Organization of the personal income tax in EU New Member States as of 2017

Country	Tax rates	Basic allowance	Other tax allowances and credits
Bulgaria	10%	No	A lump-sum children's allowance for up to 3 children
Croatia	12%, 25%, 40%	Yes	An increasing children's allowance
Czech Republic	15% + 7% surcharge	Yes	An increasing children's allowance
Estonia	20%	Yes	Children's allowance after the first child; allowance for old-age dependents
Hungary	15%	No	An increasing children's allowance
Latvia	23%	Yes	A lump-sum children's allowance
Lithuania	15%	Yes	A lump-sum children's allowance
Poland	18%, 32%	Yes	An increasing children's allowance
Romania	16%	Yes	Lump-sum deductions for dependents
Slovakia	19%, 25%	Yes	No
Slovenia	16%, 27%, 34%, 39%, 50%	Yes	A decreasing children's allowance, Allowance for old-age dependents

Source: Taxes in Europe Database

5. Conclusions

The original flat tax as developed by Robert Hall and Alvin Rabushka is not applied in any country. Rather, most Central and East European countries have adopted a simpler version of the progressive personal income tax by reducing the number of ta brackets to one. Progressivity is retained through the availability of a general allowance combined with dependent children tax credits. The only two countries in the EU-28 with a proportional PIT are Bulgaria since the very introduction of the flat tax in 2008 and Hungary since 2013. In these two countries, there are tax allowances only for families with children.

The global financial crisis has further deepened the divergence in tax revenue structure between NMS and EU-15. In 2008-2015 personal income tax revenue in new EU Member States from Central and Eastern Europe have decreased as a proportion to GDP, whereas in EU-15 the ratio increased.

The downward trend in top PIT in the new Member States continued. The decline was the strongest in Lithuania and Hungary. On the other hand, Slovakia introduced an additional tax rate, thus returning to the multi-bracket system and the Czech Republic adopted a temporary solidarity surcharge on highest-income earners.

Some changes were introduced also in tax allowances and credits by targeting them on low-income earners and families with children. Taxation on passive (capital) income was increased in several countries.

The level of public indebtedness in NMS was relatively low, hence they had some fiscal space to respond to the economic downturn, by reducing the tax burden on labour and keeping low capital taxation.

Revenue neutrality was achieved by shifting the tax burden to consumption and negative externalities. As part of EU tax harmonization, new EU Member States significantly raised the rates of excise duties. This was accompanied by an increase in the standard VAT rate and some new taxes on pollution and Hungary a tax on unhealthy food.

References:

European Central Bank. (2010, July). *ECB Monthly Bulletin.* Retrieved from The Impact of the Financial Crisis on the Central and Eastern European Countries: https://www.ecb.europa.eu/pub/pdf/other/art3_mb201007en_pp85-96en.pdf?e1e7f3f7b17a4762d1cc35dea8a31666

European Commission. (2013). *European Commission.* Retrieved from Taxation Trends in the European Union. 2013 Edition: Data for the EU Member States, Iceland and Norway: https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/gen_info/economic_analysis/tax_structures/2013/report.pdf

European Commission. (2014). *Taxation Trends in the European Union: Data for the EU Member States, Iceland and Norway.* Retrieved from European Commission: https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/gen_info/economic_analysis/tax_structures/2014/report.pdf

European Commission. (2015). *European Commission.* Retrieved from Taxation trends in the European Union: Data for the EU Member States, Iceland and Norway: https://ec.europa.eu/taxation_customs/sites/taxation/files/eco_analysis_report_2015.pdf

Hall, R., & Rabushka, A. (1995, January). *Tha Flat Tax in 1995.* Retrieved from Hoover Institution: https://web.stanford.edu/~rehall/Flat%20Tax%201995.pdf

Ministry for National Economy. (2010, November). Retrieved from Hungary's Flat Rate Personal Income Tax: http://www.mfa.gov.hu/NR/rdonlyres/68F5E85D-7062-4001-8FD8-7946055579B3/0/Hungaryflatratepersonalincometax.pdf