

# Personal income tax non-standard reliefs in European Union member states, Croatia and countries of the region

HELENA BLAŽIĆ, PhD\*  
SAŠA DREZGIĆ, PhD\*

Review article\*\*

JEL: H24

doi: 10.3326/fintp.37.1.3

---

\* The results presented are part of the scientific project *Strategy of the Socioeconomic Relations of Croatian Society*, No. 081-0000000-1264 supported by the Ministry of Science, Education and Sports of the Republic of Croatia. The authors would like to thank two anonymous referees for their useful comments and suggestions.

\*\* Received: February 6, 2012

Accepted: August 21, 2012

---

Helena BLAŽIĆ

University of Rijeka, Faculty of Economics, Ivana Filipovića 4, 51000 Rijeka, Croatia

e-mail: [helena@efri.hr](mailto:helena@efri.hr)

---

Saša DREZGIĆ

University of Rijeka, Faculty of Economics, Ivana Filipovića 4, 51000 Rijeka, Croatia

e-mail: [sdrezgic@efri.hr](mailto:sdrezgic@efri.hr)

## Abstract

*The paper presents an overview of the current situation in personal income tax non-standard reliefs for the EU-15, most of the EU-12, Croatia and countries of the region, as well as a comparison of them for 2006-2011. A review of personal income tax relief issues in last twenty years is given, especially concerning the reaction of the entire personal income tax system to the economic and financial crises. It is followed by comparative analysis of non-standard tax reliefs in the stated period. Despite the mostly negative attitude of tax theory (and policy), economic crisis and fiscal consolidation, they still play very significant role. The EU-15 actually broadened these reliefs in the period observed, while the analyzed EU-12, Croatia and countries of the region with less developed non-standard tax reliefs have reduced them significantly. Many of these countries, accordingly, have none today. Since the introduction of the new personal income tax system in 1994 Croatia has gone a long way, from their complete exclusion to the inclusion of almost all of them and in the end the exclusion of almost all of them.*

*Keywords: non-standard tax reliefs, personal income tax, European Union, Croatia, economic crisis*

## 1 INTRODUCTION

The tax reform of the 1980s already required the reduction/peel of the different tax reliefs (besides the rate reduction). This was especially pronounced for personal income tax and related non-standard reliefs. Not only were their negative fiscal effects put forward, but also their inefficiency (“neutrality” distortions and high revenue forgone in comparison with effects/benefits of those reliefs too), horizontal and vertical equity distortions as well as their complexity and non-transparency.

The stated requirement of tax base broadening was also implemented in the tax reforms of transition countries. Together with the request for rate reduction, it constitutes the basic recommendations for tax policy. These demands were renewed, gaining in importance during the economic and financial crisis and resulting fiscal consolidation. Repeal of non-standard reliefs is believed not only to contribute to the fiscal consolidation, but also to boost economic growth: directly – because of their above stated disadvantages, as well as indirectly – through making room for a personal income tax rate reduction (for instance OECD, 2010a).

In this paper a normative qualitative analysis is performed, which combines international and dynamic comparison. An international overview of non-standard tax reliefs for 2006 (Blažić, 2006:153-154, 156) is repeated for the end of 2011, following the same methodology. The reason behind such comparison was not only to detect the five year period changes, but also to perceive the changes influenced by the economic and financial crises. Namely, by comparing pre-crisis 2006 data with the newest data (end of 2011) the answer to the following question was sou-

ght: How much have the repeated requests for tax base broadening, especially emphasized in the crisis (and “post-crisis”?) period, really influenced the tax systems? A comparison of non-standard personal income tax reliefs was performed for the EU-15, some EU-12 (all except the Baltic countries, Malta and Cyprus) and countries of the region with special emphasis on Croatia.

At the beginning of the paper, after shorter definition of non-standard reliefs, a review of the literature concerning trends and analysis of tax reliefs is given. Since the paper is mostly oriented to the period of the crisis, the stress is laid to the reactions of personal income tax to the crisis, not only concerning non-standard reliefs, but also its other elements (rates, brackets, standard reliefs). According to the standard OECD methodology not only standard and non-standard reliefs are defined, but also borderline cases. Their classification is presented also. That all together presents the research methodology – the analysis framework, where the concept of non-standard reliefs is further narrowed. Some other elements of their characteristics and structuring are pointed out in tables A1 and A2, concerning their technique and resulting effects. After that, the presentation of the current situation (2011) follows as well as a comparative analysis of non-standard reliefs (2006-2011), first for the EU-15 and after that for some of the EU-12, Croatia and other countries of the region, underlying the stated differences. The paper ends with an additional retrospective review of Croatia concerning the numerous fundamental changes in non-standard reliefs.

## 2 RECENT ANALYSIS OF PERSONAL INCOME TAX RELIEFS

In contrast to standard reliefs that are automatically at the disposal of tax payers that fulfil certain basic (status) requirements (personal existence, income existence, marital status, children, old-age, disability and possibly also employment), non-standard reliefs are not given automatically. They are based on the concrete expenses/expenditures of tax payers (medical, charitable, insurance/pension/saving, housing ownership, educational...) that the tax system recognizes for the tax purposes (in order to diminish the tax due). The stated framework coverage of non-standard reliefs is explained in the third chapter in detail.

Most reliefs of that type are also named “interventionist” type reliefs, tax preferences or tax subsidies. Even many reliefs that are theoretically justified by ability to pay or so called “subjective net principle”<sup>1</sup> have distinguished subsidy characteristics. The term “tax subsidies”, which implies an analogy between revenues forgone (reduced revenues) and subsidy (transfer) allowance at the expenditure side of the budget, is related to the currently more widely accepted term “tax ex-

<sup>1</sup> Public finance theory distinguishes between the subjective and objective net principle. The former is about personal income being reduced by that parts of income that are not freely disposable by a tax payer, because they represent unavoidable private expenditures, i.e. income deductions for existence and non-discretionary needs. It is about the ability-to-pay principle and the reliefs that enable that principle to be maintained. The latter is about deductions from gross income (revenues/receipts) that represent all those expenses that are connected with its acquiring and maintenance.

penditures”. This implies the resulting loss of tax revenues (revenue forgone) caused by tax reliefs. Non-standard tax reliefs are especially negatively related in that respect. Since it was easier for different interest groups – the beneficiaries of such reliefs to “hide” such subsidies on the revenue side of the budget (as revenues forgone) instead of showing them explicitly on the expenditure side of budget (as subsidies), it became the most common practice in a rising number of countries to quantitatively specify those tax expenditures, very often precisely as the budget supplement. Many structurally justified reliefs (structural measures of ability to pay) have subsidy elements and it is very hard (as could be seen from the analysis framework in the third chapter) to make a precise distinction between standard and non-standard reliefs. That is why the tax expenditure calculations for the developed countries (OECD, 1996; 2010a; 2010b) do not even pretend to isolate and encompass only the “pure” tax expenditures by considering only non-standard tax reliefs in the narrowest sense, i.e. those that have a strictly subsidy character of giving incentives to the most “desirable” activities. Those calculations present more or less all tax reliefs in the broadest sense,<sup>2</sup> in order to enable a comparison of the efficiency of direct expenditures and of tax expenditures,<sup>3</sup> but also to avoid tremendous difficulties (often discretionary) in drawing a strict borderline between stated categories.

Some recent reviews of personal income tax reliefs, as well as tax expenditure calculations based on those reliefs (inside the broader tax expenditure calculations) for some, mostly OECD member, countries could be found for instance in: Polackova Brix, Valenduc and Swift, 2004; OECD, 2010a:54-56 and Annex A; and OECD, 2010b.

Tax expenditure literature (especially concerning non-standard reliefs only) is rare, and especially rare are comparative country experiences (Polackova Brix, Valenduc and Swift, 2004:x). But the government accounting data suggest that, in spite of tax reform tendencies from as late as mid-1980s, “the use of tax expenditures is pervasive and growing” in many countries at the beginning of this century (OECD, 2010b:14 and Polackova Brix, Valenduc and Swift, 2004). It is interesting to point out that even the famous US tax reform of 1986 (Tax Reform Act), which was the pioneer of all the already explained reforming tendencies of the 1980s, including this one about abolishing/reducing especially non-standard tax

<sup>2</sup> Exemptions of some income types (although not all of them), tax allowances, tax credits, lower tax rates and tax delays (OECD, 1996:9).

<sup>3</sup> One of the typical examples is that of tax reliefs for children. Such reliefs are structural measurements of the ability to pay (subjective net principle) and represent a typical example of standard reliefs. On the other hand, they could be easily replaced by direct subsidy – child supplement. Although tax reliefs for children are not real tax expenditures, their exclusion from the overview of tax expenditures reduces the analysis of possible efficient combinations between direct expenditures and tax reliefs in order to achieve appropriate social goals.

reliefs, “repealed perhaps 19 of 119 pre-existing tax expenditures”.<sup>4</sup> The results of other subsequent significant tax law changes in other developed countries are similar – a huge number of tax expenditure (tax reliefs) are still present, and that is even confirmed by the trends in the last pre-crisis years, i.e. until 2006/2007 (OECD, 2010b:52, 269-237)<sup>5</sup>. The question should be raised why tax reliefs are still multiplying and growing. One of the possible answers lies in the already mentioned fact that they are easier to introduce and maintain in the law in comparison with direct subsidies – real expenditures. It is simply easier to accept the justified tax reliefs for specific-merit goods than to pursue an increase in public expenditures for the same purpose. Furthermore, in many developed countries a critical and systematic evaluation of the effects of these reliefs has been avoided. This is related to understandings of the tax system as constant and persistent in contrast to the expenditure side of budget, which is reassessed and revised on a yearly basis. This is in turn correlated with the lower transparency of tax expenditures.

In spite of the already mentioned reform tendencies from the eighties, the repeal of all targeted tax reliefs, i.e. all tax expenditures has not been generally and officially proposed for the developed countries (OECD, 2010a:3; OECD, 2010b:24). “Assuming in the first instance that there are valid reasons for government involvement (such as market failures or merit goods), there are conditions under which tax expenditures are most likely to be successful, or even the best, policy tools to achieve their objectives” (OECD, 2010b:24). They are justified if, based on cost-effectiveness analysis, their benefits continue to outweigh their costs (OECD, 2010b:3). So, the focusing on standard tax reliefs is proposed, followed by continued evaluation of the cost-effectiveness of non-standard reliefs (OECD, 2010a:3, 22). The negative effects of the standard (as well as remaining non-standard) tax reliefs on vertical equity, i.e. progressivity could be mitigated/eliminated by the substitution of tax allowances by non-wastable tax credits.<sup>6</sup>

Of course, the stated arguments are not to be seen as an argument capable of undermining the already stated critical arguments concerning the (over)numerous and (over)generous non-standard tax allowances. In this respect, “an important and timely associated issue is that some OECD member countries have enacted, or are considering, fiscal rules that make use of expenditure ceilings” (OECD,

<sup>4</sup> The source of this information (OECD) speaking here about tax expenditures refers to the tax reliefs that cause those expenditures. “The largest effect on the number of dollars of tax expenditures (here it is again not about number of reliefs, but specific tax expenditures, i.e. revenue lost in monetary terms) in that instance likely came from the reduction of marginal tax rates, which reduced the values of the many tax expenditures based on exclusions or deductions from taxable income that were not repealed.” (OECD, 2010b:52).

<sup>5</sup> It is very hard to compare countries concerning the number of tax expenditures (tax reliefs and non-standard ones of them especially) as well as the amount of tax expenditures (their monetary sum). Based on both the criteria the USA, UK and Canada are among the highest in ranking (countries of large numbers and amounts) and for instance Germany and the Netherlands among the lowest ones. But, these results are influenced more by specific definitions, classifications and ways of counting reliefs in specific countries than by objective criteria and that is why they are very doubtful (OECD, 2010b). It should be mentioned also that the stated analysis encompasses only ten OECD countries (the data refer to different years from 2004 to even 2008).

<sup>6</sup> This is harder to achieve for different non-standard tax reliefs for saving in the broader sense, which are not only generally provided as tax allowances, but also automatically related to higher incomes.

2010b:15). Other countries are also considering (the extension of) ceilings, which could be given either for singular relief or for pooled reliefs – most of them or all of them (the case of Croatia before the repeal of non-standard reliefs). This could be seen from the later analysed tables A1 and A2 in appendix.

Tax expenditure measurement for the pre-crisis period (and the period at the very beginning of the crisis) for the OECD member countries (2006-2008) showed the greatest share of personal income tax expenditures, as usual. This is true for all OECD countries except Denmark, France, Mexico and United Kingdom, where VAT tax expenditures dominate (OECD, 2010a:50), while in Australia, Canada, Korea and Norway the corporate income tax expenditures shares are relatively high. In Italy, Spain and United States the personal income tax expenditures have the greatest percentage in personal income tax revenues (even around one third). “The main categories of tax expenditures (were) reported... for social and family policies, supporting home building and improvement, encouraging savings, promoting R&D. Several countries cited the promotion of employment and economic development as reasons for certain tax reliefs” (OECD, 2010a:56-57)<sup>7</sup>.

A very interesting insight is given by the tax expenditures/reliefs trends data during the ten years prior to the present analysis. It is about data for OECD countries in the period from approximately 1996/1997/1998 to 2006/2007/2008 (OECD, 2010a:57-59). Although some new reliefs were introduced and old reliefs repealed, a generally increasing trend in the use of these reliefs is present, especially concerning personal income tax. For the countries reporting detailed data, it could be seen that it is just about non-standard reliefs. It seems that the repeal of tax reliefs is often associated with a rate reduction (as was the case in Croatia), but the introduction of new reliefs is not explicitly associated with a rate increase. Political obstacles are often mentioned as one of the major obstacles in the way of repealing tax reliefs (it is about interest groups that would become losers if reliefs were abolished).

An overview of data from particular countries shows a rise in personal income tax expenditures in many countries, especially in stated period (OECD, 2010a:63): in Australia (especially from 2004), Belgium (from 2005) and France, Spain, Switzerland and United States. In contrast, tax reliefs were reduced in the Czech Republic (the standard ones in 2006 because of the conversion from tax allowances into tax credits, as well as non-standard ones in 2008 because of the introduction of the flat tax),<sup>8</sup> Germany (reforms from 2000 and 2008 have reduced some employment incentives), Mexico, the Netherlands (reform from 2001), Norway (reform from 2004-06) and the Slovak Republic (the famous flat tax reform of 2004 abolished almost all non-standard reliefs). In Portugal many reliefs were

<sup>7</sup> Supporting home building and improvement as well as encouraging savings represent relevant non-standard tax reliefs according to the analysis done in this paper (see the third chapter).

<sup>8</sup> It was only about the reduction of certain individual reliefs, and not about the repeal of some of them.

abolished in 2005 in order to compensate revenue loss due to the reduction in marginal rates of personal income tax, but new reliefs were reintroduced in 2006. Denmark has also abolished some reliefs.

Since welfare and family reliefs (including also general employment incentives for lower income groups, which are those that are rising most) belong to the standard reliefs (according to the presented analysis framework in the third chapter) their detailed development will not be elaborated here. The attention will be drawn to the rising reliefs for different types of saving, including home ownership in the already stated period (OECD, 2010a:66). Such reliefs are widely available in OECD countries. This is particularly the case for the preferential treatment of home ownership (especially mortgage interest deductions) and retirement plans. Some countries (for instance Belgium and Spain) even allow a deduction for mortgage capital repayments (sole loan repayments – without the interest) and this deduction exists even today (2001 – see table A1 in appendix). Many of these reliefs have been in force for more than two decades, while additional non-standard reliefs of that type have been introduced/increased in the last decade observed (the decade before the research performed in this paper). So, Belgium and Norway increased their housing reliefs (as well as energy-saving investment) and pension reliefs. It is interesting that Portugal, after having abolished them in 2005, in 2006 reintroduced reliefs in the form of tax credits for contributions to retirement saving plans, pension funds and the purchase of personal computers. In many countries the reliefs for work related expenses (commuting expenses, car expenses, expenses for meals at work, computer expenses) increased also.

It is especially interesting to observe personal income tax changes and those of them related to tax reliefs, especially non-standard ones, in the EU at the beginning of the economic and financial crisis. In the second half of 2008 and in 2009 economic policy incentives, especially those provided on the expenditure side of budget were followed (although to a lesser extent) by tax policy incentives – those given on the revenue side of the budget. Although this was more pronounced for the developed countries, and so for the EU-15 also, still some of the EU-12 have provided such measures, as it could be seen from the simplified overview in figure 1.

At the beginning of the economic crisis, i.e. in the second half of 2008 and in 2009 (European Commission, 2009:13-19; 2010:30-48) especially pronounced were different measures of easing the income tax burden on lower/the lowest incomes<sup>9</sup> by reducing statutory income tax rates, especially for lower incomes (Austria, Finland, Germany, Latvia, Lithuania, Poland, France<sup>10</sup>, the Czech Republic and Swe-

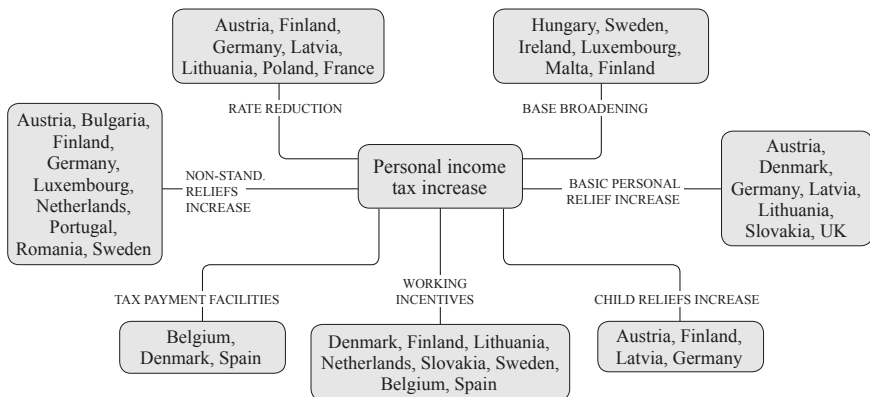
<sup>9</sup> Even in the same year or next year revenue lost was often compensated by increased tax burden for middle/higher/highest incomes – for instance by broadened/increased highest income bracket (Austria), abolishment of the middle income bracket (Denmark), higher rates for the highest incomes (United Kingdom), introduction of an additional progressive income tax (Ireland).

<sup>10</sup> Substantial reduction (two thirds) of income tax for low incomes (the technique was not specified).

den – not for personal income tax, but for employees' contributions), broadening of the basic personal relief – personal exemption – zero rated bracket (Austria, Denmark, Germany, Latvia, Lithuania, Slovakia, United Kingdom, Luxembourg<sup>11</sup>), as well as child reliefs (Austria, Finland, Latvia, Germany<sup>12</sup>), and finally introducing/raising working incentives (tax reliefs for employment income) that are typically targeted to lower incomes and often subject to the income earner having dependent children (Denmark, Finland, Lithuania, the Netherlands, Slovakia, Sweden, Belgium<sup>13</sup>, Spain – not only for personal income tax but also for employers' contributions). Some countries decided to facilitate tax payments by reducing or delaying withholding tax (Belgium, Denmark). Spain, similarly, decided to lower penalty interest for delay in tax payment and extend the deadline for contributions to tax-privileged housing schemes and enable advanced claim of own housing mortgage tax deduction through monthly withholding tax payments. Greece introduced, instead of the above measures, a special negative tax, i.e. a special benefit to unemployed persons or low-income pensioners who already had contracted a mortgage loan.

**FIGURE 1**

*Income tax reduction measures at the beginning of the economic crisis*



Source: Authors, according to European Commission (2009:13-19;2010:30-48).

Tax reduction measures related to non-standard reliefs did not have the same importance as other measures. More significant fiscal impact was achieved by standard reliefs. On the other hand, many tax incentives were provided through corporate income tax or related part of personal income tax – that one concerning business income (which is out of scope of this analysis). Still, relatively numerous increases of these reliefs were registered (European Commission, 2009:13-19; 2010:30-48). Austria increased commuter tax credit and introduced the tax

<sup>11</sup> Switchover from tax allowance to the tax credit.

<sup>12</sup> Germany introduced a negative tax on a one time basis for children (“Kinderbonus”) as well.

<sup>13</sup> Belgium reduced withholding tax for employment income and temporary prolonged delay payment.



deductibility of certain donations. Bulgaria introduced mortgage interest deduction for young families. Italy introduced tax incentives for purchases of household appliances and furniture, decided to cap the interest rate for variable-rate mortgages and reimburse the difference to the banks through tax credits, as well as to offer postponement until 2011 of the measures supporting housing renovation, i.e. the personal income tax credit on renovation expenses. Finland increased the pension income allowances in state and municipal income taxation as well as the tax credit for paid household work. Germany increased the personal income tax credit for services supplied by self-employed persons for household repairs. Luxembourg increased the deduction ceiling for the one-off premium paid as part of a temporary life insurance policy as well as the deductibility ceiling for interest paid on a housing credit. The Netherlands increased the ceiling for the deduction of annuity premiums related to private pensions. Portugal increased the deductions from taxable income related to education, health, dwelling and nursing home expenses and also introduced tax allowance for commuting expenses. Romania increased the level of deductibility of voluntary health insurance and threshold of deduction for employees' contribution to optional pension schemes.<sup>14</sup> Sweden introduced a tax credit for renovations, conversions and building maintenance for households. Greece supplemented its non-standard mortgage interest relief with special benefits for unemployed and low-income pensioners, as already explained. Denmark decided not to stimulate pension saving through the usual non-standard relief for pension contributions indeed, but then decided to stimulate its withdrawal by preferential tax treatment. It could be concluded that the rise of non-standard reliefs in the EU refers mostly to home ownership investments (to boost construction and consumption), followed by retirement saving.

Yet at the very beginning of the crisis, some countries in unfavourable fiscal positions were not able to implement personal income tax reductions (at all). On the contrary, they mostly passed different measures to increase the burden of personal income tax, as well as other taxes. Among them, from the EU-15 especially Greece, but also Ireland could be pointed out. Ireland introduced, among other measures, an additional personal income tax similar to the Croatian "crisis tax". Among the EU-12 Lithuania was forced to reduce basic personal reliefs already in the second half of 2009. Estonia has not reacted by raising the tax burden indeed, but has postponed the planned reduction in personal income tax rate as well as the increase in basic personal relief.

Already at the beginning of 2010 a gradual halt to the dominant trend in income tax reduction was observed. Although some countries still proceeded with the described reduction measures (especially Denmark, Finland, Germany, Hungary and

<sup>14</sup> Romania has also increased the cap for the deductibility for voluntary pension and health contributions from corporate and personal income of employers as well as has carried out some other tax base narrowing measures. They were mostly connected with capital gains incentives (exemptions for trading securities on Romanian stock exchange and for non-residents). Romania reduced dividend tax rates for non-residents also. In the end, the tax base was further narrowed by exemption of interest on term deposits and/or saving instruments.

Slovenia), more and more countries raised their tax burden, especially for the highest incomes (European Commission, 2010:30-48). Estonia, which deferred the planned tax disburdening (tax rate cut, personal allowance increase), cancelled the additional allowance for the first child. Greece additionally burdened high incomes as well increasing the entire personal income tax burden in a numerous ways. France introduced a 50% tax on bonuses exceeding 27,500 euro paid in 2009 by financial institutions to their traders. Portugal introduced a special 60% personal income tax rate for an unjustified increase in wealth of over 100,000 euro<sup>15</sup> and started to include golden handshakes to managers and board members in the tax base. Hungary had included up to that time non-taxable incomes and even employer's contributions in the tax base. Latvia had increased the personal income tax rate, introduced capital income, dividend and interest taxation, abolished employer bonuses exemption from personal income tax and social security contributions as well as including up to that time non-taxable employment incomes in the tax base. Slovenia imposed a new additional tax at the rate of 49% on the income of management in companies receiving state aid. Spain gradually diminished employment tax credit for high incomes. The United Kingdom introduced an additional marginal personal income tax rate of 50% for highest incomes, restricted personal allowances for high incomes, and also raised contributions of employees, employers and the self-employed (European Commission, 2009:19).

Among measures concerning non-standard reliefs as well as borderline cases between standard and non-standard reliefs at the beginning of 2010 (European Commission, 2010:30-48) the following could be highlighted: increase in the tax credit for paid household work and increase of the income employment deduction, as well increases in pension allowances in state and local income taxes in Finland, increased deductibility (full deduction) of payments for health and nursing care insurance in Germany, substantial changes of existing tax reliefs for savings (private pension, insurance and investment funds) and lowering of tax relief for pension contributions for high incomes in United Kingdom (European Commission, 2009:19).

The broader synthesis of the beginning of 2010 in comparison with 2009 (as well as end of the 2008) taking into account all presented measures (figure 1), as well as inclusion of other income types (European Commission, 2010:28) already indicates a notable trend reversal. While in 2009 measures of income tax burden reduction were considerably predominant (concerning tax rates as well as tax base)<sup>16</sup>, in 2010 an almost equal number of countries reduced as raised this tax burden. Considering the tax raising technique used, the number of countries applying different measures of base broadening (among them those related to non-standard reliefs to a lesser extent) is almost the same as those applying rate increases.

<sup>15</sup> Later (in 2011 and in 2012) it introduced additional surtaxes for high incomes also.

<sup>16</sup> Only three countries – Greece, Ireland and to a lesser extend Lithuania, have risen personal income tax.

The same trend was further developed in the remaining part of 2010, as well as in the first half of 2011 (European Commission, 2011:32), as can be seen from the table 1.

**TABLE 1**

*Personal income tax changes in the EU in 2010 and in the first half of 2011*

	<b>Statutory rates</b>	<b>Base (or special regimes)</b>
<b>Increase</b>	Greece, Spain, France, Ireland, Lithuania, Luxembourg, Portugal, UK	Austria, Czech Republic, Denmark, Estonia, Spain, France, Ireland, Latvia, Portugal, Romania, Slovakia, UK
<b>Decrease</b>	Germany, Denmark, Finland, Hungary, Netherlands	Austria, Belgium, Denmark, Finland, Italy, Lithuania, Sweden

*Source: European Commission (2011:32).*

Considerable changes in personal income tax in 2010 and in the first half of 2011 are visible. They (compared to the previous data) show a further increase in the number of countries that increase personal income tax burden in mid and at the end of 2010 as well as in the first half of 2011. According to table 1, although some countries are still proceeding with the previous decade's trend of income tax decrease (which intensified especially at the beginning of the economic crisis), most of the countries have increased the personal income tax burden, especially by different base-broadening measures.<sup>17</sup> The increase of the tax burden in Denmark in 2011 is connected with its previous decrease in 2010. The countries that in that period still decreased the income tax burden (often by providing work incentives) have made up for the resulting revenue loss by shifting the tax burden to other sources (mostly consumption).

One of the most prominent newest reform tendencies in personal income tax, in contrast to the "classical" reform tendencies set as late as the mid 1980s, is a rise in progressivity. This is a result of the renewed and rising interest in the redistributive effects of the tax system. This is one of the rare measures that can increase both the tax revenues and the vertical equity of the tax system. This tendency was anticipated by some measures mentioned already for the beginning of 2010 and even earlier. The considerable increase in progressivity could be noticed in some EU member countries (European Commission, 2011:33). "France increased the highest marginal tax rates as well as tax rates on capital income. Spain introduced two additional top personal income tax brackets of 46% and 47%, and increased tax rates on capital income from savings in 2010. In the United Kingdom, personal income tax has been made more progressive, with higher tax allowances and an additional top rate of 50% – 10 percentage points higher than the previous maximum" and a ceiling has been introduced for the use of the personal exemption.

<sup>17</sup> However, it is logically expected and usual in such a type of analysis (table 1) to classify more countries under the "base" since it is about numerous different reliefs.

“Greece and Portugal both introduced a new 45% top rate.” Latvia and Luxembourg both increased the top rates. In Ireland the top marginal rate was increased to 52% for employees and is applied earlier (a lower threshold for the highest income bracket). Romania could be added to the listed number of countries, since progressivity is enhanced here by including also capital gains and interest on bank deposits in the income tax base (taxed, as is known, by the flat rate).<sup>18</sup>

In the period analyzed (2010 and 2011) some measures of non-standard relief reduction could be observed (European Commission, 2011:33-34). In Denmark, for instance, deductions (tax allowances) for work-related expenses (employment income) and interest expenses were reduced. That compensated, according to the classical reform recommendations, for the revenue loss resulting from the income tax rate reduction. France has, also according to the usual recommendations, replaced a tax allowance for mortgage interest with more precisely targeted loan subsidies. The tax base has considerable broadened in Latvia also.

It is obvious that the stated tax changes overviews in the times of economic crisis are comprehensive, encompassing all measures that resulted in personal income tax increase and decrease. Similarly, within the base changes, all different broadening/narrowing measures are encompassed, without special emphasis on non-standard tax reliefs, which are blamed as being the most inefficient and most inequitable as well as the main cause of complexity in the tax system and revenue loss. The presented review ends with the data for the middle of 2011, although some important measures happened (or were announced) by the end of that year. So, the comparative analysis in the remaining part of this paper will be focused exclusively on non-standard reliefs by comparing the pre-crisis period (end of the 2006) with the last available data (end of the 2011).

### 3 FRAMEWORK FOR NON-STANDARD RELIEF ANALYSIS

As already pointed out in chapter 2, non-standard reliefs, in contrast to standard reliefs, are not acquired automatically (depending on status), but they depend on the documentarily proven concrete (in general non-discretionary) expenses/investments of the tax payer subject to the relief. Typical non-standard reliefs encompass for instance different voluntary (social security) contributions, i.e. insurance premiums, charitable contributions, medical expenses (voluntary medical insurance premiums/contributions are already mentioned as part of the first item) and different interest payments (for loans where tax payers have borrowed for different investment purposes – the most typical example are mortgage interest).

<sup>18</sup> Only two countries decreased progressivity in personal income tax in 2010 and in the first half of 2011 (European Commission, 2011:33). Hungary introduced a flat tax relatively late (in 2011). The flat tax rate amounts to 16%, and that almost halved the highest marginal rates. Denmark lowered highest marginal personal income tax rate (from 63.0% to 56.1%). Furthermore, two countries made significant steps in continuing dual income tax trends. Austria, which already has had considerable dual income tax elements, finally applied a dual income tax in 2011. It started to tax financial capital gains regardless of their duration at the same flat rate of 25% at which dividends, interests and other capital gains are taxed. That broadened the tax base. Portugal has similarly broadened its tax base by inducing flat taxation of all capital gains regardless of their duration.

Borderline cases<sup>19</sup> encompass child care expenses, household expenses, contributions for compulsory social security contributions, and eventually (other lump-sum) work-related expenses (expenses related with employment). Such reliefs are mostly considered standard ones, so they are treated in same way in this paper (they are not encompassed by the analysis performed in the remaining part of the paper).<sup>20</sup> Reliefs for child care and household expenses are some sort of reliefs for employed spouse, because they are related to its specific status (employment) and specific family situation (children and their number). That is why they could be regarded as standard reliefs. Since alimony is the result of the existence of child(ren), as well as specific (non)marital status, deduction in this case could be considered standard relief also. Employment relationship presents a specific status also, where some costs (for instance compulsory social security contributions) are incurred automatically. The same is true for different lump-sum reliefs for employment (work-related expenses) as well as for reliefs that present a combination of employment income reliefs (“status”) and family situation (children) as is the case with earned income tax credit. Finally, commuting costs are considered non-standard reliefs, although they are caused by employment location (possibility to move, other discretionary elements of those costs).

Furthermore, deductions of costs that are related to the acquiring of income are not to be treated as reliefs, since this is about the already explained objective net principle<sup>21</sup>. The only exception from this principle in the analysis refers to the commuting expenses of employees. The reasons are already mentioned, i.e. there exist different ways in avoiding those costs and they vary depending on personal circumstances (residence location). Regarding other work-related expenses of employees, their reliefs are treated depending whether they are given on lump-sum bases (standard reliefs) or tare based on specified (partly discretionary) costs, i.e. extraordinary high costs (non-standard reliefs). The former relief is not given very often and that is why it is classified under “other costs”.

The second exception is interest payments encompassed in this analysis. They are cost related to the capital income, which is generated from the loan taken. The most interesting relief in that sense is mortgage interest relief, which is widely used. Tax theory requires the resulting income – imputed rent from owner occupied housing to be taxed also. The non-taxation of that sort of income in most countries contradicts the objective net principle. Since this income is not taxed in general, there is no ground for deduction of costs in this case. As the result, such reliefs are classified as non-standard. For other interest payments, where such

<sup>19</sup> Borderline cases and related problems are analyzed in more detail in: Blažić (2006:132-135, 137-141, 146-215), as well as Blažić and Drezgić (2012:67-68).

<sup>20</sup> So, OECD, for instance, in its regular yearly publication “Taxing Wages” by calculating the tax burden of the average worker (which is calculated taking into account standard reliefs only) includes the relief for compulsory social security contributions also (considering it the standard relief).

<sup>21</sup> Also, this analysis does not encompass specific reliefs given to personal income tax payers that are entrepreneurs (business income tax payers).

capital income is taxed (securities, for example), such classification is less justified, but it could still be argued that such costs are not necessary and unavoidable.

The analytical framework for the definition and classification of different reliefs is based in general, as well as in this analysis, on the classical income concept.<sup>22</sup> In the end, it is necessary to refer also to this theoretical problem: is the adequate baseline for defining tax reliefs that of income of the consumption type (for instance OECD, 2010:17, 45; Caroll, Joulfaian and Mackie, 2011)<sup>23</sup> Some countries provide reliefs for some saving/investment types also. These reliefs (together with already mentioned reliefs for compulsory and voluntary retirement saving and life insurance) could not be considered tax reliefs at all, if the consumption concept in its genuine (standard) form (savings adjusted income tax) is taken as the adequate tax base concept. Starting from the income concept, on the contrary, the tax exemptions of some capital incomes, which are very frequent, especially in the EU-12 and countries of the region, should be regarded as tax reliefs. But they are reliefs in the broader sense, as already mentioned. This analysis encompasses non-standard reliefs only, i.e. reliefs in the narrower sense (defined as specific nondiscretionary expenses). So the non-taxation of capital income represents privileged tax treatment and departure from the classical income concept and results in the tax base narrowing. But this privileged treatment does not represent non-standard reliefs in the narrower sense and is consequently not included in the further analysis.

According to the stated theoretical framework the comparative analysis encompasses the following non-standard reliefs:

- relief for voluntary pension insurance contributions, regardless whether they are paid to private or public insurance funds,
- relief for life insurance premiums,
- relief for medical expenses, including also voluntary medical insurance contributions,
- relief for commuting and moving expenses,
- relief for charitable contributions,
- relief for interest payments,

<sup>22</sup> Classical income concept is so called comprehensive or synthetic income, which is also called “Schanz-Haig-Simons (S-H-S) income”, denoting the founders of that concept. Income is accrual of economic power in some period. It is formed by all possible sorts of income (labour income, capital income, transfers). Considering its use, it consists of consumption and increase in net worth (saving). The opposite concept – so called “consumption concept” has two forms. The first one is the genuine (standard) one, where the base is S-H-S income minus saving (savings adjusted income tax), i.e. the tax base is consumption. The derivative of that model – so called “alternative model” is interest-adjusted income tax, meaning that all capital income (interest in the broader sense) is deductible from the S-H-S base. If transfers are ignored, this form of tax is simply reduced to labour income tax.

<sup>23</sup> The stated problem as well as other problems of defining a real “benchmark” for non-standard tax reliefs and related defining and measuring of tax expenditures, as already pointed out in previous chapter, make a tax expenditure comparison among countries almost impossible, i.e. very conditional (OECD, 1996; 2010a:40-53 and Annex A; 2010b; Altshuler and Dietz, 2011).

- other reliefs for different expenses (for instance education, investments/saving).

The current (end-2011) non-standard reliefs are compared to end-2006 reliefs in order to perceive changes made over the last five years. The analysis is based on the standard international tax legislation on-line data of the International Bureau of Fiscal Documentation (IBFD). The latest (end-2011) data of their “Tax Research Platform” (IBFD, 2012) are compared to the already performed non-standard reliefs overview for the countries in question for 2006 (Blažić, 2006:153-154, 156). The 2006 analysis was done based on the methodologically identical IBFD Edition at that time *European Tax Handbook* published on CD ROM (IBFD, 2006).

Although the above stated publications both follow the strict relief classification based on their technique (tax allowances/exemptions/deductions in contrast to tax credits), the detailed description of the reliefs depends on the particular country reporter. Consequently, it often happens that some reliefs are not described in detail or even, in a case of a numerous reliefs, the country reporter restricts his report to the “most important ones” (as for instance in the case of France)<sup>24</sup>. The stated problem influences both the scope and the changes detected in the already existing reliefs<sup>25</sup>.

Since the analysis is about the influence of the economic crisis on tax reliefs, it is realistic to assume that the newest data (end 2011) are still “premature” concerning the (possibly too slow) reaction of the tax legislation to the crisis “post-crisis?” period as well as the extension of crisis in many countries. The greater influence of the base broadening demands could be seen maybe as late as 2012 or even 2013. Furthermore, the presented income tax trends data from the previous chapter should also be taken into account. Namely, some “set off” of reliefs is possible, i.e. the increase of non-standard reliefs from the beginning of the crisis could be compensated by their later (insufficient) reduction. However, that is the positive element of this analysis, which should give some kind of (up to date) result/resume of the conducted non-standard tax relief measures influenced by the economic crisis.

<sup>24</sup> In the cases where the reporter for particular country mentions that, this is also noticed in the comparative tables A1 and A2 in appendix. But there is a reasonable suspicion that not all of the reporters emphasize this, so some of the reliefs are omitted in that way. This could make a comparison between the years stated for the country in question harder, especially if the reporter is changed in the meantime. The changes of reporters for different countries also imply the problem of data being only differently presented (for instance shortened). That could lead to the wrong impression that the reliefs have been simplified/changed.

<sup>25</sup> One of the potential problems is that tables A1 and A2 in appendix do not entail specific quantitative amounts of reliefs. This is not possible, since most countries’ data do not entail such data. Even where such data are present, it would be hard to find out whether the rise in these amounts is a result of an effective rise in relief or of an inflation adjustment.

The comparative analysis in this paper (tables A1 and A2 in appendix) presents all the relevant relief elements in as great detail as possible. That is why additional remarks besides tax allowance (TA) and tax credit (TC) remarks are given. So,  $F$  denotes full deduction (allowance), i.e. that all the relevant costs/expenditures subject to relief are deducted in full from the tax base. Full tax credit is, of course, not possible (the tax system would make up for all those expenses to the tax payer). That is why a tax credit is provided as partial (P), i.e. as part of the relevant expenses. Such partial provision exists very often for the tax allowances also (partial tax allowance – PTA). PTA in contrast to PTC (partial tax credit) already implies certain limitation of tax allowance, especially when the tax allowance was previously full (FTA). Such limitation is often made by defining fixed tax allowances ( $F_xTA$ ) and fixed tax credits ( $F_xTC$ ), which are more appropriate concerning fiscal effects.  $F_xTA$  and  $F_xTC$  are usually used for standard tax reliefs, especially personal/family exemptions, but they occur also for non-standard reliefs, especially when such reliefs are intended to be provided on a lump-sum basis and not bound to specific quantitative amounts of cost. It can be seen that this is already about borderline cases.

It has already been pointed out that the TCs are mostly partial (PTC), being provided as partial – share (percentage) of the costs. However, when percentage (%) is explicitly given in tables, it denotes a situation in which the TC is not a share (percentage) of the specific expense, but of the tax payer's personal income (I%). If TC is higher than this income, the difference is mostly lost, i.e. not refunded to the tax payer as the negative tax. The term “non-wastable” denotes the opposite and rarer situation in which the TC is not wasted if it is higher than the tax due. The difference is paid out to the taxpayer as a transfer (negative tax).

Due to fiscal and other reasons, tax reliefs often have an upper limit (ceiling – C). It is mostly stated in an absolute amount, meaning that no relief is allowed after that amount. It is possible for a ceiling not to be given in absolute amount, but as income percentage (I%).

It is also possible for reliefs not only to be expressed as part (percentage) of income (I%), but to be income related (IR). This means that with the rise of income the relief decreases (inverse proportionality). Such relation is caused by social effects and is very frequent recently (standard allowances – personal exemption (basic tax allowance) at the flat tax for instance). Very similar is the situation of gradual phasing out (p.o.) of relief with the income rise.

#### **4 COMPARATIVE ANALYSIS OF NON-STANDARD RELIEFS IN THE EU-15 (2006-2011)**

Table A1 in appendix presents the comparison of current non-standard tax reliefs' situation (end-2011) with the situation from the end of 2006 for the EU-15. All the changes are pointed out – the abolished reliefs are underlined and written in italic



letters, new reliefs are bolded and relief modifications are shaded (inside them their new elements are bolded again).<sup>26</sup>

The insight into the current situation (2011) shows that developed tax systems still use a broad array of non-standard reliefs. Almost all the countries provide relief for voluntary pension contributions/premiums, while fewer of them provide relief for life insurance premiums. There is no country that does not provide even one of these reliefs. When both are provided, the technique is the same (with the exception of Italy). Tax allowance is the predominant form of these reliefs, which is logical (concerning the analogy of voluntary pension contributions with the compulsory ones and the similarity of life insurance with the former). Only Belgium and partially Italy and Portugal (which turned to tax credits completely) provide these two reliefs as tax credits. These reliefs are in general limited by a ceiling in order to prevent fiscal outflow and mitigate their negative vertical equity effects.

Most of the countries have reliefs for medical expenses. These are characterized not by the upper threshold – ceiling, but by the lower threshold. This threshold is either explicitly stated or taken into account by being given only for high medical costs. Some countries (Greece, Italy and Portugal) provide that relief as a tax credit, which is not in accordance with ability to pay principle, but reflects its social character. Although theory points out the possibility of substituting the relief for voluntary health insurance for the relief for medical expenses, some countries provide both reliefs.

A lot of countries provide relief for commuting expenses. The approval of such relief or its amount often depends on the distance. Instead of that relief France provides moving expenses relief, while Sweden and Germany provide both reliefs. In general these reliefs are in the form of tax allowances, which is logical since they are one of the costs of acquiring income (objective net principle).

The majority of countries allow relief for charitable contributions, which could be claimed to be the most justified (see the sixth chapter). Most of the countries have accepted the fact that this relief is more efficient in the form of a tax allowance. In contrast, Portugal, of course, as well as Spain and France provide that relief in the form of a tax credit.

All of the countries have relief for interest payments, which could be explained by the objective net principle, as already stated. Most of countries give it as a tax allowance, and five as a tax credit, which is not in accordance with the objective net principle. This implies the social goals of the most used of those reliefs – this one for mortgage interest.

<sup>26</sup> More specified analysis – tables containing changes only – is presented in Blažić and Drezgić (2012:68-72).

Among other reliefs, the relief for educational expenses, work-related expenses (employment expenses) as well as reliefs for different saving/investment forms (in general as tax allowances) could be pointed out.<sup>27</sup>

The analysis of **changes** of non-standard tax reliefs in the 2006-2011 period is expected to reflect the base broadening demands (repeal/reduction of reliefs), which have lately also been especially emphasized. But the comparison of the 2006 and the 2011 figures reveals no significant base broadening trend based on the significant number of repealed reliefs. Moreover, the number of newly introduced reliefs outweighs the number of those repealed. This, however, does not imply changes in the quantitative amounts of reliefs of the same size in both stated directions, which are not encompassed by the analysis (as already stated in the second chapter). It is possible that the stated limitations in the third chapter still imply a strong influence of the trends from the beginning of the crisis (base narrowing through non-standard reliefs) and relatively weak trends from the end of the crisis (base broadening) also. The modifications in reliefs (shaded areas) imply their reductions (base broadening), which is visible from, for instance, the introduction of an upper limit (ceiling) or fixed tax allowance instead of (part of) the real expenses, but there are some modifications in the opposite direction. Modifications are neither numerous nor all directed towards base broadening, which is again, in accordance with the review of the trends in the second chapter.

Nevertheless, even this limited analysis has proven the already known fact, pointed out in the second chapter also, that once introduced, tax reliefs are hard to repeal.<sup>28</sup> This is true regardless of the already presented criticisms,<sup>29</sup> even under the rising pressure of fiscal consolidation due to the economic and financial crisis.

## **5 COMPARATIVE ANALYSIS OF NON-STANDARD RELIEFS IN SOME EU-12 AND COUNTRIES OF THE REGION (2006-2011)**

It is much easier to analyse the non-standard tax reliefs in the EU-12 (not including the Baltic states, Malta and Cyprus) and countries of the region (table A2 in appendix). The reason is very simple – these reliefs are traditionally not developed in these countries, especially in those from our region. This is the result of personal income tax not having been developed in these countries. Ex-socialist countries did not have synthetic/comprehensive personal income tax, but mostly schedular taxation – taxation of some income types that implicitly excluded/signi-

<sup>27</sup> Such tax allowances are somehow identical to the non-taxation of some capital income. This is excluded from the analysis, as already explained in the previous chapter.

<sup>28</sup> Political obstacles are often stated as the main obstacle for tax reliefs' abolishment. It is about interest groups – reliefs beneficiaries that give strong resistance to their abolishment.

<sup>29</sup> The already stated OECD member countries analysis came to the similar conclusion, pointing out that reliefs for saving/investment in real estate (mortgage interest) as well as pension saving have not only persisted for more than twenty years, but have even grown during the last decade (OECD, 2010a:66).

ificantly restricted non-standard reliefs.<sup>30</sup> Some of these countries have retained such taxation until recently (for instance Bosnia and Herzegovina until 2008), while some countries apply classical comprehensive income tax for high incomes only (for instance Serbia).

Non-standard reliefs are considerably less present in this group of countries than in the former group. Based on current data (2011), it is obvious that Montenegro, Kosovo, Macedonia, Serbia, Slovakia and recently Hungary, as well as Croatia (with the exception of charitable contributions) have completely accepted the negative attitude toward non-standard reliefs (their inefficiency and inequity). A question could be raised about why non-standard reliefs do not exist in these countries. Is it the result of the traditionally undeveloped tax (and economic) systems of these countries (which could be supported by the 2006 data in table A2)? Or does it mean that these countries (in contrast to the more developed EU-15 countries) have accepted contemporary tax policy recommendations (against those reliefs) more consistently? It is obvious that both of the causes have played a significant role, since they are complementary. Concerning the latter, the introduction of a flat tax in these countries should be mentioned (in contrast to the EU-15). It is well known that the classical flat tax model excludes non-standard reliefs (although its practical implementation has different deviations). So, the countries that in principle do not have non-standard reliefs (with the exception of Slovenia and Croatia) are flat tax countries also (Serbia, however, introduced a flat tax in 2003, but abandoned it in 2007). Albania is the only flat tax country that still recently introduced some of those reliefs. As already pointed out, Croatia (with the exception of charitable contributions) and Slovenia have abolished those reliefs without having introduced a flat tax.

The rest of the analysis concentrates on the remaining countries that provide non-standard reliefs and their comparison with the EU-15. It seems that, in comparison with the EU-15, employment income is mostly discriminated against, since these countries provide neither commuting expenses relief nor other relief for concrete, absolutely work-related expenses. Still, some progress concerning lump sum relief for work-related expenses (employment income) should be emphasized (this relief is not encompassed with the research since it is considered the standard relief).<sup>31</sup>

<sup>30</sup> Taxation of “Summed income of individuals” in the former Yugoslavia could be regarded as an exception only conditionally, because such comprehensive/synthetic taxation, which included non-standard reliefs also, was applied only to high incomes (higher than three times the average wage). A similar system is now in effect in Serbia.

<sup>31</sup> Tax approved lump sum work-related expenses (tax reliefs for employment) did not exist in these countries in 2006 (Blažić, 2006:144-146). In the meantime Hungary, Poland and Romania have introduced them and still (2011) have them, while Slovakia provides basic personal relief (exemption/tax allowance) only for employment income and business income as well as tax credit for children only for employment income above a certain threshold (IBFD, 2012). The Czech Republic plans to introduce tax credits for employment income in 2015 (IBFD, 2012).

As with the EU-15, these countries in principle provide relief for pension insurance contributions/premiums, but provide the relief for life insurance premiums much more rarely. Almost all countries provide relief for charitable contributions and slightly fewer of them provide relief for medical expenses.<sup>32</sup> Around half of these countries (that provide non-standard reliefs) also provide relief for interest payments, especially for mortgage interest. It is logical that this relief is not provided for other investment forms, since their capital incomes are mostly not taxed at all. Among other reliefs, the relief for students could be pointed out.

All the countries use tax allowances that are limited in principle, mostly because of fiscal but also because of vertical equity considerations.

The 2006-2011 data comparison reveals that, in contrast to the EU-15, the number of reliefs abolished considerably exceeds the number newly introduced. Only Albania (which previously had had a completely undeveloped system of personal income tax reliefs) and Bulgaria went in the opposite direction. The former introduced new reliefs and the latter maintained all previous reliefs and introduced one new relief. The remaining countries, with Croatia in the forefront, have mostly abolished tax reliefs (in Hungary partially substituted for by cash transfers). Accordingly, there are more countries without non-standard reliefs now (in 2011) than in 2006, when only Serbia and Montenegro, Albania and Macedonia belonged to that group. This could be explained by the already mentioned flat tax introduction, but not entirely. Furthermore, it is obvious that not only have these countries decided to follow modern tax policy recommendations, but that interest group resistance in these countries is weaker, giving them more manoeuvring space. A question could be raised as to whether the repeal of these reliefs is based on detailed cost-effectiveness analyses (including equity issues also) or whether it is merely the result of efforts at fiscal consolidation, which are accompanied by revenue-neutralizing rate lowering. But it is obvious that such a dilemma is obsolete if not irrelevant (OECD, 2010a).

## 6 NON-STANDARD RELIEFS IN CROATIA

The Croatian situation concerning non-standard tax reliefs is characterized by repeated radical changes. Instead of a detailed analysis of the particular reliefs, especially concerning their cost-effectiveness analysis as well as analysis of their other aspects, the “global” approach has been implemented in principle. From the implementation of a modern income tax system in Croatia in 1994, non-standard reliefs in the country have passed through an interesting development path, which is characterized by a vicious circle of extreme solutions. It started with their non-existence inside the personal income tax through the introduction of almost all of them and finished with the abolishment of almost all of existing reliefs (except

<sup>32</sup> It is interesting that Hungary, which completely abolished non-standard reliefs, still substituted cash transfers for tax credits (for voluntary contributions/premiums of pension, life and health insurance). This indicates that their repeal is only formal.

that for charitable contributions). This is presented in detail in the remaining part of this chapter.

As is known, the 1994 personal (and corporate) income tax reform was consumption based. It was characterized by “interest-adjusted personal (and corporate) income tax” (Rose and Wenger, 1992).<sup>33</sup> In accordance with consumption based taxation (as well as tax reform demands from the eighties for developed countries that had spread into the transition countries also), a strong attitude against non-standard reliefs was present. This was completely implemented in the Croatian personal income tax system.

But after a couple of years the first relief in the form of tax allowance (in the form of already existing standard tax reliefs in Croatia) for charitable contributions in art and culture, and later in sport, was introduced. The fragmentary introduction of this, probably mostly justified<sup>34</sup> relief, was not brought by tax legislation, but by specific activities’ legislation. The partial introduction of this relief was obviously not motivated by criteria of efficiency<sup>35</sup>, but by the influence and strength of other elements that initiated the stated legislative changes. Such fragmentation led to the tax discrimination of other forms and (possible) recipients of charitable contributions (especially humanitarian, scientific and educational institutions).

<sup>33</sup> In contrast to this “alternative model”, the “standard” model of consumption concept includes the “savings adjusted personal income tax” at individual level, followed by the “cash-flow tax” at the corporate level.

<sup>34</sup> Although this is the relief in the narrowest sense, i.e. “interventionist” type relief, which is not relief justified by objective or subjective net principle (ability to pay principle), there are still additional equity reasons in favour of the right to this relief. Such expenses are justified personal expenses (Dodge, 1989:122-123), i.e. expenses that present inability to contribute to the redistributive function of the state. To the group of such expenses not only those expenses that represent existence and nondiscretionary expenses could be classified, but also those expenses that are part of the non-government social redistribution scheme that has the priority in comparison to the government ones. This other reason is related right to the charitable contributions and follows from the first one, which makes the argument in favour of this relief especially strong (Dodge, 1989a, 125-126). The ability to pay principle arises, namely, from the understanding of government as the instrument of wealth redistribution and the provision of public good. That is why this relief could be advocated for its redistributive effects and provision public goods, regardless of the amounts being part of the ability to pay, its voluntary element and existence needs. The next argument in favour of this relief is so called “needs principle” (“Bedarfsprinzip”) (for instance Tipke, 1993:361-417, 713-742) and the equity argument understood as “reward”, but also “incentive” for socially desirable forms of consumption (for instance Kiesling, 1992:119; Mijatović, 2007:297). This is already related to the effectiveness of this relief, i.e. it is effective if the desirable activity incentive effect is realized at the minimum possible cost (revenue lost, i.e. tax expenditures). Empirical researches imply the efficiency of that relief related to its elasticity, although they are not completely unambiguous (Blažić, 2006:150-151), which implies the necessity of specific cost-effectiveness analyses for each country and situation (Blažić, 2000). Among other arguments those related to democratization and pluralist society strengthening through decentralization and some sort of competition in financing different activities could be pointed out. It is mostly not about pure public goods, but merit goods and therefore it is desirable for the budget to be released from such expenditures (that are otherwise financed through charitable contributions). Since such goods could not be adequately placed through the market, private financing through charitable contributions is the optimal “in-between mechanism”. Of course, a question could be raised about the adequacy of the location of such goods through private sector decisions. That is why public sector control is necessary and it is performed properly by shaping and targeting this relief (see footnote 36).

<sup>35</sup> The incentive effect for some other charitable contributions – for instance humanitarian ones (or maybe scientific and educational ones) would obviously be greater.

Of course, the chosen solution was in contrast to the usual situation in contemporary tax systems, where relief for such charitable contributions is general.<sup>36</sup>

Tax reform from 2001 was formally a departure from the consumption concept in the direction of the income concept.<sup>37</sup> Although this should not have automatically implied a positive attitude towards reliefs, more and more reliefs were gradually included. This was influenced not only by the tax systems of the EU-15 (and other developed countries), but also by the tax systems of some of the EU-12. Furthermore, the already stated arguments in favour of particular non-standard reliefs could not be avoided. Some of them enable the fulfilment of the subjective net principle (ability to pay principle), but even the objective net principle. This justifies them from the aspect of equity (this is especially true for the relief for medical expenses and in a broader sense the relief for the voluntary health insurance) as well as efficiency (this is especially true for the already analysed relief for charitable contributions).<sup>38</sup> Finally, the reasons for the reliefs' introduction were the influences of different interest groups, which used EU tax practice as strong argument.

So, it is no wonder that these reliefs were introduced without significant cost-effectiveness analyses or analysis of horizontal and vertical equity or fiscal and tax compliance effects.<sup>39</sup> The following reliefs were thus introduced: tax allowances for other charitable contributions, life insurance premiums, additional and voluntary health and pension insurance premiums, other medical expenses, buying or building a first home, home maintenance, mortgage interest and 50% of rental fees. The stated reliefs are presented in table A2 in appendix according to the non-standard reliefs synthesis for EU countries.<sup>40</sup>

A look at table A2 reveals that Croatia has applied all basic types of non-standard reliefs, i.e. that in comparison with the EU-15 only some non-standard reliefs were “missing” – for instance relief for commuting expenses as well as some “other” expenses like these for moving expenses, education, home work, etc.

Concerning the stated “generous” application of reliefs, which started to show strong negative fiscal effects, sweeping restrictions on and even the repeal of some reliefs were proposed for the tax reform in 2005. But, in the end the reform was reduced only to setting an upper limit (ceiling) for almost all non-standard reliefs taken together, caused mostly by fiscal reasons (so called “mini reform”).

<sup>36</sup> It is usual that such relief is limited to approved relevant institutions as recipients, as well as approved activities. However, it is not usual to narrow such relief to such a small number of activities/recipients.

<sup>37</sup> However, the system, however much of a hybrid it was, still remained mostly inside the consumption concept (and its alternative model).

<sup>38</sup> For more detailed equity and efficiency arguments see for instance: Blažić (2006:132-135, 147-152); Mijatović (2007:294-299), and the further listed references there.

<sup>39</sup> One of the rare attempts was in Blažić (1999).

<sup>40</sup> For the detailed review of the stated reliefs, as well as the other tax expenditures and their changes see: Šimović (2012:59-60).

Up to this moment (the situation presented in table A2 for 2006 was not changed significantly until 2010) Croatia has taken a path relatively in contrast to that advocated by contemporary financial science and tax reform from the end of eighties, whose requirements were renewed right by the economic crisis and fiscal consolidation problems. It has gradually and constantly introduced new reliefs, which is partially understandable, taking into the consideration the different starting position of Croatia in comparison to most of the developed countries.

But, in the middle of 2010 Croatia abolished all non-standard reliefs, with the exception of that for charitable contributions (Government of the Republic of Croatia, 2010:13<sup>41</sup>). The reasons for the repeal of these reliefs are complementary to those of the tax reform from the mid-1980s: horizontal and vertical inequity, inefficiency, administrative complexity and the most important reason, the fiscal, i.e. the tax revenue loss (tax expenditures) connected with these reliefs. Following the classical reform recommendations shortly presented at the beginning of this paper the reductions in tax expenditures, i.e. the rise in tax revenues of the income tax based on the repeal of these reliefs is used for the reduction of statutory tax rates, first of all of the lowest rate (from 15% to 12%) and the abolition of the highest rate of 45%.<sup>42</sup>

There are few analyses of the effects of the reliefs from that period. The calculations of tax expenditures (revenue forgone) resulting from these reliefs, which pointed out their negative fiscal effects are more systematic (Bratić and Urban, 2006; Bratić, 2006; and afterwards Šimović, 2012b). One of the rare analyses was one about vertical equity, i.e. progressivity (Urban 2006a; 2006b). This analysis, which used the methodology for measuring the influence of different elements of personal income tax on progressivity applied to OECD countries by Wagstaff and van Doorslaer (2001), showed the negative influence of these reliefs (together with all other tax allowances) on progressivity (Urban, 2006a:2; 2006b:217-221). It was actually the decrease in progressivity, i.e. the fact that these allowances benefited higher income groups, that mostly influenced the decision of the Government of the Republic of Croatia (2010:13) to abolish them. Perhaps before the decision to repeal, some rethinking was needed and a thorough cost-effectiveness analysis (among other considerations) of existing reliefs should have been undertaken. This could have resulted in the abolition of some reliefs and a transformation of the (some of) existing reliefs into tax credits, which are more equitable than tax allowances. Maybe even further transformation into income related reliefs or even “phasing out” reliefs or some combinations of all the stated transformation possibilities should have been considered. This could, of course, have

<sup>41</sup> In the stated document the abolishment of all non-standard tax reliefs was mentioned, except of those for research and development. Since these reliefs are allowed as the part of personal income tax concerning business income taxation, they are not part of this research. Although the mentioned abolishment encompasses all the reliefs, the current legislation has still kept the relief for charitable contributions.

<sup>42</sup> It is also necessary to mention that the stated revenue loss was partly compensated by the reorganization of tax brackets.

increased the complexity of reliefs, so maybe this was the crucial element influencing their repeal.

Although the horizontal inequity of the reliefs was put forward as one of the *a priori* arguments for their abolishment<sup>43</sup>, it is directly analyzed and presented later also, especially concerning different income types (Šimović, 2012a; 2012b).

So, by repealing all non-standard reliefs (with the exception of those for charitable contributions) Croatia closes the circle, coming back to its starting position (1994), with the exception of the relief for charitable contributions. As already pointed out, the first reliefs that were introduced in the starting model from 1994 were actually the reliefs for charitable contributions.

Whether a second round of gradual reliefs' introduction follows up or it would be prevented solely by fiscal consolidation priority remains an open question. It is an open question whether a second round of the gradual introduction of reliefs is to follow or whether this will be ruled out by considerations of fiscal consolidation.

## 7 CONCLUSION

Despite long-lasting and recently renewed demands to limit and abolish most non-standard reliefs, they still play a significant role in contemporary income tax systems. Furthermore, while previous efforts from the end of the 1980s and early 1990s were directed not to their abolition but to their limitation, by introducing upper limits and repealing only some particular reliefs, newer (2011 in comparison to 2006) EU-15 trends imply even some indications of their increase. Although they could be related to the initial reactions to the economic and financial crisis (however, most of such reactions were related to a decrease in personal income tax rates, standard reliefs of personal income tax as well as corporate income tax incentives) it seems that not even fiscal consolidations had significantly brought about any decrease in non-standard personal income tax reliefs in the EU-15 by the end of 2011. It has been proved again that, once introduced, reliefs are extremely hard to abolish and that there are constant efforts for their reintroduction as well as introduction of new reliefs.

The situation in the analyzed EU-12 (all except the Baltic countries, Malta and Cyprus) and the countries of the region is significantly different. Not only were

<sup>43</sup> It could be rather confusing that the reliefs are at once claimed to increase the horizontal equity of the personal income tax and blamed for decreasing it. The reason lies in the different starting points, i.e. the concepts (and related measurements) of this equity as well as the stated reliefs. The first concept starts from the subjective (and objective) net principle, pointing out that two people do not have the same ability to pay if they both have the same income level and one of them has high, nondiscretionary and unavoidable medical expenses for instance. In that case, the ability to pay of that person is significantly lower. The opposite concept starts from the income subject to tax (statutory income) as relevant tax base and measure of ability to pay (equity and equality) and all the departures from it through different reliefs are claimed to distort that concept. It is obvious that these two understandings and measurements have an *a priori* embedded attitude in favour of or against tax reliefs.



non-standard personal income tax relief systems less developed than in the EU-15, but a significant repeal of reliefs took place in the observed period. Almost half of the countries analyzed (including Croatia) have no non-standard reliefs at all (end of 2011), which was strongly influenced by the flat tax introduction. But this reason is not the only one, since Croatia and Slovenia, which rejected this form of tax, still abolished all non-standard reliefs, and the reverse happened in Albania. It is obvious that economic (and tax) policy creators in those countries are strongly convinced of the necessity for the repeal of such reliefs, but are also able to implement their tax changes easier.

Croatia has gone along an interesting development path concerning non-standard personal income tax reliefs – from their non existence until full application and back. With the latest changes it joined the dominant situation as well as trends in the countries of the region (including the EU-12). These countries have never had developed non-standard relief systems or have not had them at all. Some of them that had developed such reliefs abolished them mostly simultaneously by the introduction of a flat tax or by following the contemporary tax policy recommendations even more strongly than the EU-15.

APPENDIX

TABLE A1  
Non-standard reliefs in the EU-15 (2006-2011)

Year	Voluntary pension insurance contrib.	Life insurance contrib.	Medical expenses	Commuting expenses	Charitable contributions	Interest payments	Others
2006	-	FTA (C) p.o.	TA for extremely high costs, (1%)	F <sub>x</sub> C+TA for longer distances (TA depends on distance)	-	FTAO (C) p.o.	FTA (C) for newly issued shares, p.o., TA for extremely high educational costs (1%), F <sub>x</sub> TA for the educational expenses of child outside its residence
2011	-	FTA (C) p.o.	TA for extremely high costs, (1%)	F <sub>x</sub> C+TA for longer distances (TA depends on distance)	FTA (C, 1%)	FTAO (C) p.o.	FTA (C) for newly issued shares, p.o., TA for extremely high educational costs (1%), F <sub>x</sub> TA for the educational expenses of child outside its residence
2006	PTC (C)	PTC (C)	-	-	PO (80%)	FTA – mortgage interest for owner occupied dwelling (C)	PTC for employee share schemes (C), PTC (C) for the repayment of mortgage loans, PTC for the building/maintenance/buying residence with energy saving, PTC (C) for automobiles with lesser pollution emission and bonds (venture capital)
2011	PTC (C)	PTC (C)	-	-	F <sub>x</sub> TA	FTA – mortgage interest for owner occupied dwelling (C)	PTC for employee share schemes (C), PTC (C) for the repayment of mortgage loans, PTC for the building/maintenance/buying residence with energy saving, PTC (C) for automobiles with lesser pollution emission and bonds (venture capital)
2006	FTA (C)	FTA	-	FTA	FTA (C and lower threshold)	FTA	PTA (above lower threshold) for the work-related expenses
2011	FTA (C)	FTA	-	FTA	FTA (C and lower threshold)	PTA (C)	PTA (above lower threshold) for the work-related expenses

Year	Voluntary pension insurance contrib.	Life insurance contrib.	Medical expenses	Commuting expenses	Charitable contributions	Interest payments	Others
<b>Finland</b>							
2006	FTA (C)	–	See last column	FTA (C and lower threshold)	–	FTA	FTA (C) for the “decrease in ability to pay tax” (sickness, unemployment, alimony payment); PTC (C) for the maintenance of immovables, FTA for work-related expenses (or lump-sum TA), <i>FTA for trade union fees</i>
2011	FTA (C)	–	See last column	FTA (C and lower threshold)	TA (lower threshold and C) for high education	FTA	FTA (C) for the “decrease in ability to pay tax” (sickness, unemployment, alimony payment); PTC (C) for the maintenance of immovables, FTA for work-related expenses (or lump-sum TA), <b>FTA for renting flat because of the distant working place</b> <i>FTA (C) for losses at specific shares</i> , FTA for qualifying direct investments in certain French Overseas Departments, FTA (C) for union membership fees, PTC (C) for investment in specific shares, PTC(C) for energy saving housing equipment, F_C for education expenses of children (the height depends on the type of educational institution)
2006	FTA (C)	–		FTA for moving expenses	PTC (C, 1%)	<i>FTA (C) for investment in non quoted companies</i>	FTA for qualifying direct investments in certain French Overseas Departments, FTA (C) for union membership fees, PTC (C) for investment in SMEs and innovative funds’ shares, PTC (C) for energy saving housing equipment, F_C for education expenses of children (the height depends on the type of educational institution)
<b>France</b>							
2011	FTA (C, 1%)	–		FTA for moving expenses	PTC (C, 1%)	<b>PTC (C) for owner occupied housing, &gt; for energy saving</b>	FTA for qualifying direct investments in certain French Overseas Departments, FTA (C) for union membership fees, PTC (C) for investment in SMEs and innovative funds’ shares, PTC (C) for energy saving housing equipment, F_C for education expenses of children (the height depends on the type of educational institution)

Year	Voluntary pension insurance contrib.	Life insurance contrib.	Medical expenses	Commuting expenses	Charitable contributions	Interest payments	Others
2006	PTA (C)	PTA (C)	FTA (lower threshold)	F <sub>x</sub> TA according to km (C) or FTA; FTA for moving expenses also	FTA (C) or (C, 1%) depends on type of donation, PTC for donations to political parties	FTA ili F <sub>x</sub> TA	F <sub>x</sub> TA for occupational training of children, FTA (C) for a taxpayer's first professional education or his first studies, FTA for the church tax
	PTA (C)	PTA (C)	FTA (lower threshold)	F <sub>x</sub> TA according to km (C) or FTA; FTA for moving expenses also	FTA (C) or (C, 1%) depends on type of donation, PTC for donations to political parties	FTA ili F <sub>x</sub> TA	F <sub>x</sub> TA for occupational training of children, FTA (C) for a taxpayer's first professional education or his first studies, FTA for the church tax
2006	–	FTA (C)	PTC (C)	–	FTA (C, 1% for some donations)	PTC for mortgage interest (C based on m <sup>2</sup> )	PTC (C) for the annual home rent, PTC (C) for the educational expenses of taxpayers and their children, PTC (C) for investments in Greeks investments funds, PTC (C) for ecologically acceptable energy sources of households
2011	–	FTA (C)	PTC (C)	–	FTA (C, 1% for some donations)	PTC for mortgage interest (C based on m <sup>2</sup> )	PTC (C) for the annual home rent, PTC (C) for the educational expenses of taxpayers and their children, PTC (C) for investments in Greeks investments funds, PTC (C) for ecologically acceptable energy sources of households

Germany

Greece

Year	Voluntary pension insurance contrib.	Life insurance contrib.	Medical expenses	Commuting expenses	Charitable contributions	Interest payments	Others
2006	–	PTC (C)	PTC (lower threshold), PTC (C) for voluntary health insurance contributions	–	–	PTC (C) for mortgage interest on owner-occupied dwelling	PTC (C) for educational expenses
<b>Italy</b>							
2011	FTA (C)	PTC (C)	PTC (lower threshold), <b>FTA for costs of help to disabled</b> , PTC (C) for voluntary health insurance	–	<b>FTA (C), PTA / FTA (C)</b>	PTC (C) for mortgage interest on owner-occupied dwelling	PTC (C) for educational expenses, <b>PTC (C) for real estate agents</b> , <b>PTC (C) for lower incomes</b> , <b>PTC (C) for owner occupied dwelling improvement</b>
2006	FTA (C) – depends on age)	FTA (C)	FTA (lower threshold, 1%), FTA (C) for voluntary health contributions	F <sub>x</sub> TA (according to km-C)	FTA (C/C, 1%)	FTA (C) except mortgage interest	FTA (C) for educational costs of children, FTA (C) for housing saving, FTA (C) for accident insurance premiums
<b>Luxembourg</b>							
2011	FTA (C) – depends on age)	FTA (C)	FTA (lower threshold, 1%), FTA (C) for voluntary health contributions, <b>FTA (lower threshold, 1%) for disabled</b>	F <sub>x</sub> TA (according to km-C)	FTA (C/C, 1%)	FTA (C) except mortgage interest	FTA (C) for educational costs of children, FTA (C) for housing saving, FTA (C) for accident insurance premiums

Year	Voluntary pension insurance contrib.	Life insurance contrib.	Medical expenses	Commuting expenses	Charitable contributions	Interest payments	Others
Netherlands	2006	FTA	FTA (lower threshold or C, I%) – voluntary health contributions included	F <sub>x</sub> TA (according to km-C)	FTA (C and lower threshold or C, I%)	FTA mortgage interest for owner occupied housing	FTA for educational expenses
	2011	FTA	FTA (lower threshold)	F <sub>x</sub> TA (according to km-C)	FTA (C and lower threshold or C, I%)	FTA mortgage interest for owner occupied housing	FTA for educational expenses
Portugal	2006	PTC (C – depends on age)	PTC (C) for health insurance also	–	PTC (C, I%)	PTC (C) mortgage interest	PTC (C) for educational expenses, PTC (C) for rent costs / depreciation, PTC (C) for investments in energy saving equipment and computers; 150% TA for trade union membership fees (C, I%)
	2011	PTC (C – depends on age + I%)	PTC (C, I%) for health insurance also	–	PTC (C, I%)	PTC (C, I%) mortgage interest	PTC (C) for educational expenses, PTC (C) for rent costs, PTC (C) for investments in energy saving equipment, <b>PTC (C, I%) for investments in state bonds</b>
Spain	2006	FTA (C)	–	FTA	PTC	See last column	PTC (C) for mortgage debt repayment and buying/maintaining owner occupied dwelling, FTA for trade union and professional organization membership fees
	2011	FTA (C)	–	> lump sum relief if the working place is in other town	PTC	See last column	PTC (C) for costs of buying/maintenance of owner occupied dwelling, FTA for trade union and professional organization membership fees, <b>FTA for different insurance forms</b>

Year	Voluntary pension insurance contrib.	Life insurance contrib.	Medical expenses	Commuting expenses	Charitable contributions	Interest payments	Others
Sweden	2006	FTA (C)	–	FTA (lower threshold), FTA for moving expenses	–	FTA	–
	2011	FTA	–	FTA and FTA for moving expenses	–	FTA	<b>FTA (lower threshold) for administrative costs connected with acquiring capital income, PTA (C) for the services of residence building and maintenance</b>
UK	2006	FTA (C)	–	–	FTA	FTA for investment in shares	FTA for work related expenses, FTA for educational expenses, FTA (C) for saving accounts, TA for qualifying companies or investment funds shares
	2011	FTA (C)	–	–	FTA	FTA for loans and shares	FTA for work related expenses, FTA for educational expenses, FTA (C) for saving accounts, TA for qualifying companies or investment funds shares

*TA – tax allowance (deductions and exemptions from the tax base); F<sub>x</sub>TA – fixed TA; PTA – partial TA; FTA – full TA.*

*TC – tax credit (deduction from the tax due); F<sub>x</sub>TC – fixed TC; PTC – partial TC (part of the costs); TC, I% – TC is part (percentage) of the personal income; “non wastable” – the part of the TC that exceeds tax due is not “lost” (the difference is paid to the taxpayer as transfer).*

*C – ceiling (upper limit/threshold) for the reliefs (above that ceiling the relief – cost is not recognized for the tax purposes), CI% – C (or a lower threshold) is expressed as income percentage.*

*I% – denotes in general that a relief or its ceiling (C) is income related – part (%) of income (in general: lower income implies higher relief).*

*p.o. – phasing out (the relief diminishes gradually with the income rise).*

*New reliefs in 2011 in comparison with the 2006 are bolded (as well as the changes in the existing reliefs – new elements inside the modifications – see under: modifications). Abolished reliefs are written in italic letters.*

*Modifications of the already existing reliefs (2006 in comparison to 2011) are shaded.*

**TABLE A2**  
*Non-standard reliefs in some EU-12 and countries of the region (2006-2011)*

	Year	Voluntary pension insurance contributions	Life insurance contributions	Medical expenses	Charitable contributions	Interest payments	Others
Albania	2006	-	-	-	-	-	-
	2011	<b>FTA (C)</b>	-	<b>FTA</b>	-	<b>FTA for education</b>	-
Bulgaria	2006	FTA (C, I%)	FTA (C, I%)	FTA (C, I%) for voluntary medical insurance	FTA (C, I%)	-	FTA (C) for voluntary unemployment insurance
	2011	FTA (C, I%)	FTA (C, I%)	FTA (C, I%) for voluntary medical insurance	FTA (C, I%)	<b>FTA (C) for mortgage interest of young families</b>	FTA (C) for voluntary unemployment insurance
B&H (Fed.) (RS)	2011	FTA (C)	FTA (C)	FTA	-	FTA mortgage int. for owner occupied dwelling	-
	2006	<i>FTA (C)</i>	<i>FTA (C)</i>	<i>FTA (C) for voluntary medical insurance</i>	FTA (C)	<i>FTA (C) for mortgage interest</i>	<i>FTA (C) for building/maintenance of residence, FTA (C) for rent payments</i>
Croatia	2011	-	-	-	FTA (C)	-	-
	2011	-	-	-	-	-	-
Czech Republic	2006	FTA (lower threshold + C)	FTA (C)	-	FTA (lower threshold + C)	FTA mortgage int. for owner occupied dwelling	F <sub>x</sub> TA for students
	2011	FTA (lower threshold + C)	FTA (C)	-	FTA (lower threshold + C)	FTA mortgage int. for owner occupied dwelling	F <sub>x</sub> TA for students



Year	Voluntary pension insurance contributions	Life insurance contributions	Medical expenses	Charitable contributions	Interest payments	Others
Hungary	2006	PTC – transfer from '06	PTC (C) for voluntary health insurance – transfer from '06	PTC (C) p.o.	See on the right	DK (G) p.o. for education (of taxpayer and his children) and computer buying, PTC (C) for mortgages repayment
	2011	Transfer instead of PTC	Transfer instead of PTC	-	-	-
Macedonia	2006	-	-	-	-	-
	2011	-	-	-	-	-
Poland	2006	-	-	FTA (C, 1%), PTC (C, 1%)	FTA (C) for mortgage interest	FTA (C) for the costs of internet admission
	2011	-	-	FTA (C, 1%)	-	FTA (C) for the costs of internet admission
Romania	2006	FTA (C)	FTA (C) for voluntary medical insurance	-	-	FTA (C) for owner-occupied dwelling's insurance premiums
	2011	FTA (C)	-	-	-	FTA for trade union membership fees
Serbia and Montenegro	2006	-	-	-	-	-
Serbia	2011	-	-	-	-	-
Slovakia	2006	FTA (C)	-	-	-	FTA (C) for long-term saving
	2011	-	-	-	-	-
Slovenia	2006	-	FTA (C, 1%)	FTA (C, 1%)	-	FTA (C, 1%) for investment in long-term securities and shares, for buying/maintenance of the residence, for maintenance of cultural inheritance, for buying work of arts, books and scholarships
	2011	DO (G, VD and G)	-	-	-	FTA for students

Note: Same as in the table A1.

## REFERENCES

1. Altshuler, R. and Dietz, R., 2011. Reconsidering Tax Expenditure Estimation. *National Tax Journal*, 64(2, Part 2), pp. 459-490.
2. Blažić, H. and Drezgić, S. 2012. Komparativna analiza nestandardnih olakšica poreza na dohodak u Europskoj uniji i regiji. In: V. Bratić and M. Fabris, eds. *Skrivena javna potrošnja: sadašnjost i budućnost poreznih izdataka*. Zagreb: Institut za javne financije, pp. 65-79. Available at: <[http://www.ijf.hr/upload/files/file/skrivena\\_javna\\_potrosnja/zbornik.pdf](http://www.ijf.hr/upload/files/file/skrivena_javna_potrosnja/zbornik.pdf)>.
3. Blažić, H., 1999. *Međuodnos izravnog oporezivanja potrošnje i olakšica u hrvatskome poreznom sustavu*. Rijeka: Faculty of Economics.
4. Blažić, H., 2000. Efikasnost porezne olakšice za dobrotvorne priloge. *Ekonomski pregled*, 51(9-10), pp. 954-969.
5. Blažić, H., 2006. *Usporedni porezni sustavi – Oporezivanje dohotka i dobiti*. [e-book]. Rijeka: Ekonomski fakultet u Rijeci. Available at: <[http://www.efri.uniri.hr/kolegiji/dokumenti/H.Blazic\\_Usp\\_por\\_sustavi-knjiga.pdf](http://www.efri.uniri.hr/kolegiji/dokumenti/H.Blazic_Usp_por_sustavi-knjiga.pdf)>.
6. Bratić, V. and Urban, I., 2006. Tax Expenditures in Croatia. *Financial Theory and Practice*, 30(2), pp. 124-194 [online]. Available at: <<http://www.ijf.hr/eng/FTP/2006/2/bratic-urban.pdf>>.
7. Bratić, V., 2006. Tax Expenditures in Croatia: Personal Income, Corporate Income, Real Estate Transfers and Value Added Tax. *Financial Theory and Practice*, 30(2), pp. 103-112 [online]. Available at: <<http://www.ijf.hr/FTP/2006/2/sazetak.pdf>>.
8. Caroll, R., Joulfaian, D. and Mackie, J., 2011. Income versus Consumption Tax Baselines for Tax Expenditures. *National Tax Journal* 64(2, Part 2), pp. 491-510.
9. Dodge, J.M., 1989. *The Logic of Tax, Federal Income Tax Theory and Policy*. St. Paul: West Publishing Co.
10. *European Commission, 2009. Taxation trends in the European Union*.
11. *European Commission, 2010. Taxation trends in the European Union*.
12. *European Union, 2011. Tax reforms in EU Member States 2011: Tax policy challenges for economic growth and fiscal sustainability* [online]. Available at: <[http://ec.europa.eu/economy\\_finance/publications/european\\_economy/2011/ee5\\_en.htm](http://ec.europa.eu/economy_finance/publications/european_economy/2011/ee5_en.htm)>. doi: 10.2765/15419
13. Government of the Republic of Croatia, 2010. *Program gospodarskog oporavka* [online]. Available at: <<http://www.cpi.hr/download/links/hr/13292.pdf>>.
14. IBFD (International Bureau of Fiscal Documentation), 2006. *European Tax Handbook* CD-ROM 2006. Amsterdam: IBFD.
15. IBFD, 2011-2012. *Tax Research Platform* [online]. Amsterdam: IBFD. Available at: <<http://online.ibfd.org/kbase>>.

16. Kiesling, H., 1992. *Taxation and Public Goods: A Welfare Economic Critique of Tax Policy Analysis*. Michigan: The University of Michigan Press.
17. Mijatović, N., 2007. Razmatranje teorijskih pristupa osnovnim institutima uređenja oporezivanja dohotka. *Revija za socijalnu politiku*, 14(3-4), pp. 289-311. Available at: <<http://www.rsp.hr/ojs2/index.php/rsp/article/viewFile/702/667>>.
18. OECD, 1996. *Tax Expenditures – Recent Experiences*. Paris: OECD.
19. OECD, 2010a. *Choosing a Broad Base – Low Rate Approach to Taxation*. Paris: OECD.
20. OECD, 2010b. *Tax Expenditures in OECD Countries*. Paris: OECD.
21. Polackova Bixi, H., Valencuc C. M. A. and Swift Z. L., 2004. *Tax Expenditures – Shedding Light on Government Spending through the Tax System: Lessons from Developed and transition Economies* [online]. Washington DC: The World Bank. Available at: <<http://books.google.hr/books?id=nNhr4OrZW8wC&printsec=frontcover&hl=hr#v=onepage&q&f=false>>.
22. Rose, M. and Wenger, E., 1992. Prilog novom hrvatskom poreznom sustavu - Prijedlog za oporezivanje dohotka i dobiti. *Financijska praksa*, 6(7-8), pp. 381-407.
23. Šimović, H., 2012. Razvoj poreza na dohodak u Hrvatskoj: reforme i promašaji. *Revija za socijalnu politiku*, 19(1), pp. 1-24. doi: 10.3935/rsp.v19i1.1045
24. Šimović, H., 2012a. Utjecaj izdataka u oporezivanju dohotka na horizontalnu pravednost. In: V. Bratić and M. Fabris, eds. *Skrivena javna potrošnja: sadašnjost i budućnost poreznih izdataka*. Zagreb: Institut za javne financije, pp. 65-79.
25. Tipke, K., 1993. *Die Steuerrechtsordnung*. Köln: O. Schmidt.
26. Urban, I., 2006a. What makes the personal income tax in Croatia progressive? *Newsletter*, No. 23 [online] Available at: <<http://www.ijf.hr/eng/newsletter/23.pdf>>.
27. Urban, I., 2006b. Progressivity of personal income tax in Croatia: decomposition of tax base and rate effects. *Financial Theory and Practice*, 30(3), pp. 205-230.
28. Wagstaff, A. and van Doorslaer, E., 2001. What Makes the Personal Income Tax Progressive? A Comparative Analysis of Fifteen OECD Countries. *International Tax and Public Finance*, 8(3), pp. 299-315. doi: 10.1023/A:1011268209860