PERSONAL INCOME TAX IN ESTONIA – WHO'S BURDEN?

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Abstract

Despite many common features, the personal income tax (PIT) systems are broadly country specific and designed in accordance with society's preferences. The paper focuses on PIT developments during the last decade in Estonia. There will be considered income dynamics and allocation of taxpayers to income groups. Also will be analyzed PIT burden distribution across the income earners groups and explained main factors, influencing effective tax rates. Also will be given overview and explained dynamics of various deductions, which adjust actual tax burden. Despite the existing flat tax system in Estonia, different deductions are implementing significant progression to the actual tax system.

Keywords: personal income tax, income, tax rate, tax burden, fiscal policy, tax declaration, deductions

JEL Classification: H2, H24, H3

1. Introduction

Personal income tax (PIT) systems are broadly country specific and designed in accordance with society's preferences and economic needs. In very general, PIT systems can be classified as graduated tax rate or flat rate based arrangements.

Common understanding among economist is that certain PIT progressivity is necessary to achieve redistributive or economic stabilization goals (Messere; Veermend; Owens; Keen and others)). However, the principal issue is how to implement effective rates progression into the PIT system. The controversial issues are related with the extent and efficiency of instruments to reach desirable effective progressivity. Actually, personal income tax systems across the countries are exploiting various instruments to achieve that goal.

The paper considers Estonian personal income taxation developments and distribution of tax burden during the last decade. Particular research question is related with analysis of PIT burden degree across the income earners and tax deductions impact on effective personal income tax rate. At the end of the paper are made certain conclusions over Estonian PIT system progressivity and various factors influencing income earners tax burden.

In the process of analysis used in Estonian Tax and Tax Board (in Estonian Maksu ja Tolliamet) materials for respective period.

2. Short overview of Estonian personal income tax system

Estonia became newly independent in 1991 and had immediately to pass a new personal income tax (PIT) law to establish public finance system appropriate for market economy and democratic society. This first law was designed with progressive tax rates of 16%, 24% and 33%. Nevertheless, due to high inflation, economic uncertainty, and low sophistication both taxpayers and tax officials aroused an acute need for more workable PIT system.

In 1994, Estonia introduced a deep reform of its tax system and opted for a flat tax system for personal income taxation. Under this new system, the statutory PIT rate was relatively low at 26%, but the tax base was broader than in the first system: all three income sources – labor income, capital income and capital gains - were taxed at the same rate (that also matched the corporate tax rate). The system was made progressive by allowing for general exemptions and deductions available for some categories of taxpayers, such as families with several children and retired people. The discussions during the preparatory period emphasized three main reasons for having a flat personal income tax rate system: simplicity; fiscal capability and low compliance costs for both taxpayers and tax institutions.

There are several modifications of flat PIT system - a single rate system without any tax allowance; a single tax rate with basic allowance or single rate system with tax credits¹. By Jeffrey Owens, it is misleading to talk in abstract term about "flat taxes" without specifying how the tax is designed (Owens, pp. 149-150). Estonia is using a flat tax system in which the single rate is combined with extensive tax deductions and allowances. That is an Estonian way to implement progressivity into effective tax rates.

The Estonian tax administration and taxpayers were indeed still relatively inexperienced in tax matters and it was necessary to establish a system that would be both efficient functionally and easy to manage. The introduction of a flat rate tax system was therefore primarily justified by its simplicity rather than by considerations of economic efficiency or equality. After Estonia, many states in Eastern and Central Europe, particularly former USSR countries, had adopted analogous taxation system.

The main principles of the country's "Income Tax Act" are effective since that period, despite various minor amendments has added to the law². Estonian PIT system characterized as a comprehensive income tax system, in which various incomes (labor, rents investments, other) are aggregated and taxed after deductions with the same flat rate. This does not mean that there were no attempts at changing the system. During the period the left-wing parties have proposed to replace the existing flat tax system by a more progressive (graduated rate) system. However, the

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¹ That is like PIT system, which became effective in Hungary from 2011

² Here are not considering here principal changes in company taxation, which abolished profit taxation at the source and taxes will be apply only on redistribution of profits.

political situation yielded support to maintain the main principles of this PIT system. The government coalitions were indeed constantly ruled by right-wing parties that declared the flat tax principle as one of the cornerstones of their tax and economic policies.

However, since the early 90-ies, discussions in Estonia over the PIT system efficiency and social outcomes are going on continuously. Clearly, income taxation is a sensitive issue and has many essential aspects - both in personal and public sector level. Main controversial issues are related with PIT fiscal capacity, redistributive amplitude and macroeconomic impact as an automatic stabilizer.

However, there are two principal PIT system components, which have been modified significantly. First, the PIT legislation was constantly amended and more specific regulations are added. As a result, PIT system became more detailed and complex.

Second, PIT system was amended extended by various deductions (e.g. family benefits) and exemptions and also improved some technical procedures for tax reporting.

At the beginning, the combination of a proportional and relatively low tax rate with a broad tax base provided average effective tax rate rather flat. In a meantime, various deductions and exemptions (e.g. general tax deductions; mortgage interest, educational expenses, pension schemes, other) have had increased significantly progressivity of actual tax rates. More specifically impact of tax deductions will be considered above.

Over the first decade, the new PIT almost completely fulfilled the optimists' views formulated upon its introduction. Growth was strong and the Estonian economy recovered rapidly after the decline caused by the Asian and Russian economic crises in 1998-1999. It is beyond the scope of this paper to establish a causal relationship between economic performance and the flat-tax in Estonia. Nevertheless, it is important to stress that this tax system worked quite efficiently in terms of its capacity to collect tax revenues, at least during the first decade in operation. This achievement was not so obvious at the time of introducing the reform. Yet, the flat rate tax system became an integral part of the Estonian economic system and even a trademark of the country's innovative economy. It was flagged as the example that many Eastern and Central European countries subsequently followed.

During the period 1994-1999 the total revenue from the PIT revenues increased constantly in nominal terms but, as a fraction of GDP, they gradually fell. It also fell as a fraction of total government revenues. So, despite the effectiveness, the government actually shifted the overall tax burden away from the flat PIT tax. Those trends have continued during the period 2000-2010.

2. PIT developments during the recent decade

In following sections are considered tax revenue dynamics and distribution of tax burden among taxpayers. Particular interest is to focus on the period 2003-2009, there the tax rates and deductions were introduced and the economy passed boom and a sharp decline. There are analyzed Estonian Tax and Customs Board (ETCB) data about tax declarations. At the beginning is given a short overview of PIT statistics and role in public finances. Personal income magnitude in government sector revenues is summarized in the following Table 1.

Table 1. PIT in public sector revenues

	Total taxes in GDP	PIT in GDP	PIT in total taxes	PIT in the state budget	PIT rate
2000	31.0%	6.8%	22.1%	44.3%	26%
2001	30.3%	6.5%	21.5%	44.5%	26%
2002	31.1%	6.4%	20.6%	44.3%	26%
2003	30.8%	6.5%	21.0%	44.3%	26%
2004	30.4%	6.3%	20.6%	41.7%	24%
2005	30.4%	5.6%	18.3%	34.6%	24%
2006	30.4%	5.6%	18.3%	32.9%	23%
2007	31.6%	5.9%	18.7%	32.7%	22%
2008	31.9%	6.3%	19.7%	27.4%	21%
2009	35.7%	5.7%	15.9%	19.6%	21%

Source: Statistics Estonia http://www.stat.ee/en.

There are several trends visible in tax revenues and PIT role.

First, total tax burden correlates very visibly with the GDP cycle. Fast economic growth in the middle of the decade allowed decreases the tax rates and increase various tax deductions. In opposite, economic decline forced to increased relative tax burden and forced government to increase tax rates (particularly consumption taxes). Despite the fact that total tax collection over 2008-2009 didn't change significantly; the sharp decline of GDP resulted as dramatic increase of total tax burden.

Second, PIT importance in GDP has been steadily declining. This is due to decrease of PIT rate and widening of tax deductions and exemptions. During the period, the combination of the PIT rate decline; widening tax deductibility and increase of other taxes rates (consumption and social security contributions) have declined PIT importance in public sector revenues.

Third, the PIT in total taxes has been considerably declining as well is proportion in central government budgets. PIT became mostly the revenue source for local

governments. In 2003 central government received about 44% of collected PIT; in 2009 that share declined less than 20%

The period 2004 - 2007 was characterized by an exceptionally high economic growth (especially in the construction and retail sectors) and a fast increase in both personal revenue and government expenditures. Significant inflow of foreign investments, easy access to credits and strong labour market induced a real estate and retailing sector boom. An additional major source of economic growth was the loan-based domestic consumption. However, the flip side is that the economy overheated. Indeed, due to the absence of tax brackets, the Estonian PIT system did not feature any significant automatic stabilizing effect.

Thanks to fast economic expansion, the government budget started to display a surplus. The right-wing parties, which were dominating the government coalition, thus decided to actually implement the decrease tax rates.

In 2005, the Income Act deepened this reduction to 23% in 2006, and 22% in 2007 and 21% from 2008. Just as interestingly, the government made these decisions amid the doubts, raised by many international organizations, such as the IMF, which was pointing at the risks of a *pro-cyclical* fiscal policy in Estonia.

The outcome was dismal: the reduction of the PIT tax rate fed directly into inflationary processes and created difficulties for Estonia to adopt the euro. As a consequence, economic resources moved towards domestic consumption instead of investment and innovation. The decline in the PIT rate also meant that the budget revenue shifted further towards indirect consumption taxes.

After obvious overheating of Estonian economy during 2004-2007, a natural correction of economic growth figures was expected. Unfortunately, such a domestic slow-down of economic activities coincided with global financial and economic crises in 2008. Global economic decline has had an immediate and severe impact on the Estonian economy, which saw its growth rate plummeting. At the end of 2008, the Estonian economy entered in recession with a 3.6% GDP decline year on year. In 2009 economic decline was 14.4%.

As one can expect from the above discussion, the economic decline caused sharp public sector deficit that now calls for significant cuts in the state budget.

3. PIT declarations and income

In following will be analyzed more specifically declared income distribution among the taxpayers. Particularly, there are interesting three aspects – distribution of declarations by the income groups; income size and proportion received by each group and distribution of tax burden among taxpayers. Later on will be additionally explained level and structure of tax deductions.

In the Table 2, the distribution the tax declaration by various income groups is given (thereafter used also term *income groups*).

Table 2. Number and distribution of declarations, thousands

EUR	2003	%	2004		2008		2009	%
Less 266	209.9	48.6%	196.9	41.9%	116.8	20.0%	120.6	21.4%
266-532	122.0	28.3%	143.1	30.5%	129.6	22.2%	134.0	23.8%
532-1,065	67.7	15.7%	88.3	18.8%	194.4	33.3%	184.4	32.8%
1,065-1,600	19.3	4.5%	25.2	5.4%	83.5	14.3%	72.9	13.0%
1,600-2,130	7.7	1.8%	10.1	2.1%	30.7	5.3%	26.1	4.6%
2,130-2,670	1.9	0.4%	2.5	0.5%	12.6	2.2%	10.7	1.9%
Over 2,670	2.9	0.7%	3.6	0.8%	16.0	2.7%	13.4	2.4%
Total	431.6	100%	469.7	100%	583.5	100%	562.2	100%

Source: Estonian Tax and Custom Board (ETCB) and author's calculation. Note: 1. As there is no available detailed data for income group of 523- 2,670 EUR for 2003-2004 (available only total figure), the declarations distribution is approximated on the basis of close related years.

By the Estonian PIT legislation the income declarations may be fulfilled separately or jointly by the married couple. Revenues received by the non-adults are declared by the parents or custodian. Shortly, the number of declarations is less than the number of physical persons covered by them. In average, the number of covered persons is about 15% higher than actually presented number of declarations.

Declarations are divided into the various income brackets (groups) on a monthly³ income basis in euros⁴. Such a standardized distribution of income earners across the income groups is used throughout the text⁵.

As the Table 2 presents, the number of declarations during the period 2003-2008 has increased significantly. However, due to the severe crises and consequent decline of incomes, the number of declarations has turned town in 2009.

Reasons behind increase of tax declarations are manifold. Mainly, the increase of number declarations is related with fast expansion of labor market - increase of working places, decrease the number of discouraged workers and rapidly raising wages – during the 2003-2008. Specific factor is related with retired people's tax obligations. Increase of pension's level made many of them "PIT eligible". That's one of the reasons, why in the low income groups provide significant amount of declarations, however, with rather low total income presented by them.

⁴ As the brackets were initially in Estonian kroons, the conversion to euro made tax brackets "non-rounded" numbers

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³ It is a long lasting Estonian tradition to measure personal income in a monthly basis

 $^{^{5}}$ It should be emphasized, that the particular income group includes different number of taxpayers in each year

Another reason, which is supporting increase of tax declarations number, is related with widening various items of tax deductions (e.g. child benefits). To explore those various benefits, which declining tax burden, the taxpayer had to fulfill tax declaration

Third reason is related with the increase of tax culture and progress of labor relations. Employees have realized that "envelope wages" are very harmful for their future social guarantees and therefore, the income earners have abandoned "black" wage payments.

As presented in the Table 2 figures, Estonian society became clearly richer and declarations "moved" to higher income brackets during the period. In 2003, about half of income receivers earned less than 266 EUR per month. In 2009, a median income earner received more than 523 EUR per month. One third of income earners receive income from 532 to 1065 EUR per month. In 2003 only 16% of declarations announced such an income level.

In following Table 3 declared revenues are distributed by the income groups. The Table shows also the general dynamics of total declared income. During the period 2003-2009 total declared income more than doubled. Severe economic crises year 2009 has cut down earnings and lowered declared income with comparison a year earlier.

Table 3. Declared annual income, million EUR

	2003	%	2004	%	2008	%	2009	%
Less 266	298.5	14.2%	307.6	12.1%	175.0	3.0%	162.3	3.1%
266-532	565.2	26.9%	667.4	26.2%	611.2	10.5%	629.6	12.1%
532-1,065	569.4	27.1%	739.7	29.0%	1802.0	30.9%	1704.0	32.9%
1,065-1,600	316.4	15.1%	411.0	16.1%	1290.1	22.2%	1123.7	21.7%
1,600-2,130	126.5	6.0%	164.4	6.5%	671.7	11.5%	570.9	11.0%
2,130-2,670	42.2	2.0%	54.8	2.2%	355.6	6.1%	304.3	5.9%
Over 2,670	182.2	8.7%	203.7	8.0%	916.9	15.7%	688.7	13.3%
Total	2 100.4	100.0%	2 548.5	100.0%	5 822.6	100.0%	5183.5	100.0%
Weighted average of declarations	412.2		498.8		1 024.0		938.4	
Average (work) wage ¹	407.3		443.1		825.2		783.8	

Source: ETCB data and author's calculations; 1. Statistics Estonia.

During the period 2003-2008, groups' total incomes have shifted rather significantly towards higher income brackets. In the year of acute crises - in 2009, incomes fell down in total figures and lower income groups' earnings became relatively higher. Such an outcome completely correlates with GDP developments during the

considered years. Most of declared income during the period is concentrating on income bracket from 532 to 1,065 euros.

About 95-97% declared individual incomes during the period are received from wage earnings. Interesting is the fact, that structure of declared incomes continues to shift even more towards wage income (figures are given in ETCB Homepage http://www.emta.ee/). It is explained by the specific characteristics of Estonian profit taxation system. If income is earned by the business entity, it is not taxed until that profit is distributed in form of dividends. Therefore, practically all non-wage incomes, over which a taxpayer has an opportunity to define the type of earnings (that is – as personal income or as legal entity revenue), are shifted away from personal income taxation reach⁶. Differently from the personal level incomes, revenues receive on the company level are not automatically taxed with the profit tax. Therefore, such non-neutrality channels incomes from personal to company level.

Table 4 summarizes distribution of declarations and earnings by the income groups cumulatively. As usually, taxpayers share in a particular group is different from the share, which that group earns from the total incomes. However, in 2009 those figures 1 closely corresponded (Table 2 and 3).

Table 4. Distribution of PIT declarations and incomes, %

	PIT declarations, cumulatively				Declared incomes, cumulatively				
	2003	2004	2008	2009	2003	2004	2008	2009	
Less 266	48.6%	41.9%	20.0%	21.4%	14.2%	12.1%	3.0%	3.1%	
266-532	76.9%	72.4%	42.2%	45.3%	41.1%	38.3%	13.5%	15.3%	
532-1,065	92.6%	91.2%	75.6%	78.1%	68.2%	67.3%	44.5%	48.2%	
1,065-1,600	97.1%	96.5%	89.9%	91.1%	83.3%	83.4%	66.6%	69.8%	
1,600-2,130	98.9%	98.7%	95.1%	95.7%	89.3%	89.9%	78.1%	80.8%	
2,130-2,670	99.3%	99.2%	97.3%	97.6%	91.3%	92.0%	84.3%	86.7%	
Over 2,670	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: ETCB data and author's calculations.

Comparable cumulative summarizing of tax declarations and incomes quantity demonstrates unsynchronized distribution of taxpayers over income groups and corresponding proportion of total income earned by them. In 2003 about half of declarations fell into first income group or those taxable earnings were less than 266 euros per month. Altogether that group earning were 14.2% of total income. Significant part of low income earners are retired persons, whose pension is increased over general tax free allowance level.

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 $^{^6}$ E.g. individual investments or professional services are pronounced examples of such incomes, which preferably received on legal entity level.

Roughly, more than 1000 euros per months earned 7% of taxpayers. In 2009, lowest income group covered only 21% of all tax declarations and earned only about 3% of total sum. Over 1000 euro earned 22% of taxpayers and they received 51.8% of total incomes.

Therefore, one can say that there is clearly visible taxpayers' shift to the higher income brackets during the period. Does that mean also equalization of incomes in society? Not necessarily. The Table 4 does not allow make reliable conclusions about income disparities trends in society. As was already mentioned above, many (high)incomes has moved away from personal level to the company level earnings. Not taking into consideration such a practice, we cannot make trustworthy conclusions about income disparities or equalization dynamics in the Estonian society.

4. Distribution of PIT burden

In the following Tables 5 and 6 will be assessed tax obligations burden across different income earners groups. The problem with calculating of effective tax burden over various income groups is related with estimating amount specific of deductions for each income group. There is no available detailed data about specific deductions sum for the each particular income group. Therefore, there is calculated average deductible amount for the declaration and that figure is deducted from the declared income. In the next section will be in more detailed way explained deductions dynamics during the period.

Table 5 presents calculated amount PIT "obligation" for the each particular income group and the group's proportion in total PIT payments. The PIT calculations by the income level groups are calculated as net revenue after deductions multiplied by the nominal tax rate, effective on the current year. Therefore, to receive taxable income, the declared incomes are modified with deductible sums.

Table 5. Calculated PIT obligations by income brackets, EUR

	2003	%	2004	%	2008	%	2009	%
Less 266	13.0	3.1%	0.0	0.0%	0.0	0%	0.0	0%
266-532	109.4	26.5%	99.3	23.5%	32.3	3.8%	45.4	5.9%
532-1,065	127.2	30.8%	140.0	33.2%	234.4	27.9%	238.4	31.0%
1,065-1,600	76.3	18.5%	87.9	20.8%	209.1	24.9%	188.7	24.6%
1,600-2,130	30.5	7.4%	35.2	8.3%	118.3	14.1%	103.0	13.4%
2,130-2,670	10.4	2.5%	12.1	2.9%	65.4	7.8%	57.0	7.4%
Over 2,670	46.5	11.2%	47.3	11.2%	180.7	21.5%	135.9	17.7%
Total	413.3	100.0%	421.8	100.0%	840.1	100 %	768.4	100 %

Source: Source: ETCB data and author's calculations.

As the table presents, during the whole period most of PIT amount is burden of the income group, which receives 532-1,065 euros per month. In 2003 that group covered only 15.7% of all presented tax declarations, but in 2009 was it share high as 32.8%. Steadily have increased also other higher income groups calculated tax obligations.

Another clear trend is related with of lower income earners, which shows significant decline of their calculated tax burden. By the calculation less than 266 euros earning taxpayers tax obligations in 2004-2009 are zero! At the same time, that income group presented in those years more than 20% of all tax declarations (Table 2). Significantly has lowered also the second income group (266-532 euros) calculated tax burden. Cumulatively two lowest income groups presented 45% of all taxpayers and 15% of incomes (Table 4), but in accordance to calculations pay only 6% of total tax obligations. As was mentioned earlier, many of low incomes are pensions, which are slightly over tax free exemption income level.

There are three factors, which are influencing such trends. First, the general increase of society's revenues, as was mentioned earlier.

The second reason is an outcome of decreased personal income tax rate. In 2003, the PIT nominal rate was 26% and was steadily lowered down to 21% during the period 2008-2009.

Third, significantly have increased impact of various tax deductions and increase threshold of tax exempted incomes. In 2003 annual standardized tax exemption was 767 EUR, during 2008-2009 the threshold was increased up to 1726 euros annually.

As a result, lower income earners benefitted the most from deductions and their tax obligations decreased significantly or disappeared at all. As table 5 demonstrates, the deductions provided to lowest income nullified their calculated tax obligation at all. Even the standardized tax exemptions were bigger than the groups' total income! In accordance with increase of total revenues the total tax burden has shifted toward higher income earners, as their tax obligations are relatively lesser influenced by the tax deductions. Logical outcome in the such situation is a much higher marginal tax rates in case of lower income level in comparison with higher income earners.

In following is constructed effective personal income tax rate among income groups (Table 6). Based on the tax obligations provided in Table 5 are calculated effective tax rate by the groups⁷. It is not an individual's tax rate schedule, but a group's calculated tax obligation compared with their income declared.

As table 6 presents, effective tax burden has decreased throughout the period 2003-2009. Calculated average tax rate is decline from 19.7% down to 14.8%

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 $^{^7}$ Term "effective tax rate" may be used in different ways. In this case it is calculated as income group tax obligations divided by the tax sum declared.

There are two main reasons behind that – decrease of nominal PIT rate and increase of available tax deductions. Nominal PIT rate has decreased during the period from 26% to 21% Deductible sums has increased almost 3.6 times - from 558 million euro in 2003 up to 1,734 million euros in 2009. Declare income increase about 2.5 during that period.

Certain deductions were cut in 2009, which caused slight increase of average effective PIT rate.

Table 6. Calculated effective average tax burden¹, %

	2003	2004	2005	2006	2007	2008	2009
Less 266	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
266-532	19.4%	14.9%	13.0%	10.5%	9.0%	5.3%	7.2%
532-1,065	22.3%	18.9%	17.8%	15.9%	15.2%	13.0%	14.0%
1,065-1,600	24.1%	21.4%	20.6%	19.1%	18.0%	16.2%	16.8%
1,600-2,130	24.1%	21.4%	21.3%	20.2%	19.2%	17.6%	18.0%
2,130-2,670	24.6%	22.0%	22.1%	21.1%	19.8%	18.4%	18.7%
Over 2,670	25.5%	23.2%	23.3%	22.1%	21.0%	19.7%	19.7%
Average	19.7%	16.5%	16.7%	15.9%	15.7%	14.4%	14.8%

Source: ETCB and author's calculation.

To summarize, despite the fact that Estonia is using proportional (flat) rate income tax regime - the effective tax rate by the income groups is rather different. The effective PIT burden is very significantly modified by the various tax deductions, which add progression on effective tax rates. Particularly significant impact is visible on the lower income levels, there tax deductions decline efficient tax rate town to zero.

Shortly, various deductions made effective tax rate rather progressive for lower income earner. There is a broad consensus about the need to give tax schedule some progressivity. The *rationale* for progression stands on fiscal and redistribution needs. However, the progression may be achieved using different instruments - *e.g.* graduated tax rates, deductions or tax credits. Very often the countries are using mix of those various instruments in designing their tax system

Therefore, it is accurate to make difference in terminology to characterize Estonian tax system – it is not graduated, but effective tax rates are rather progressive.

5. Tax deductions

In following is given overview of tax deductions for Estonian taxpayers (Table 7). Amount of various deductions is about one third of declared incomes.

Table 7. Deductions from the tax base, EUR

	2004	%	2008	%	2009	%
Standardized allowance	587.0	70.6%	1 157.6	48.7%	1 120.3	64.6%
Standardized allowance per person (annual), EUR	1,074		1,726		1,726	
Additional allowance (pension)	120.2	14.5%	337.7	14.2%	374.5	21.6%
Work accident expenditure			2.3	0.1%	2.7	0.2%
Child allowance	17.3	2.1%	401.2	16.9%	140.0	8.1%
Living subsistence			6.1	0.3%	5.7	0.3%
Residential housing interest	50.7	6.1%	225.9	9.5%	153.6	8.9%
Educational expenditure	55.1	6.6%	84.6	3.6%	81.4	4.7%
Educational loan interest	7.2	0.9%	9.0	0.4%	9.5	0.5%
Trade union fee			4.7	0.2%	3.6	0.2%
Donations and gifts			5.0	0.2%	5.5	0.3%
Voluntary retirement insurance contributions (III)	23.1	2.8%	44.2	1.9%	33.3	1.9%
Unemployment insurance contributions	20.1	2.4%	26.9	1.1%	65.1	3.8%
Voluntary retirement insurance contributions (II)	24.2	2.9%	71.5	3.0%	27.7	1.6%
Deductions used	831.6	100.0%	2,058.6	86.6%	1,733.6	100.0%
Non-used deduction, % of total statutory deductions		8.8%		13.4%		14.3%
Percentage of declared revenues	32.6%		35.4%		33.4%	

Source: ETCB and author's calculations.

Tax deductions are defined as a particular sum or expenditure, which reduce taxable income⁸. However, they modify considerably effective tax rate. For instance, even in the circumstances the nominal flat PIT rate; various deductions are adding significant progression to the actual tax rate schedule.

There are two principal kinds of tax deductions. First - standardized amount of tax allowance, which is available for the every person, who is covered by the tax

⁸ Tax exemption defined as particular income item, which is not considered as "taxable income". E.g. in Estonia, interest income, received from the credit institution, is exempted from income tax base

declarations. The main meaning of the tax deductions is to provide a tax burden relief for low income earners. Such an allowance covers broadly more than half of all deductions in Estonia. As Table 7 presents, its percentage in total deductions has fluctuated in rather wide frames – from 49% to 71% of all deductible sums. In 2003 standardized general allowance per taxpayer was 767 EUR annually. Since that allowance has steadily increased and in 2009 the allowance was per person 1,726 EUR annually.

Second, specific kinds of deductions, which lowering tax burden to particular income earners. Such deductions are depending on individual characteristics or specific expenditures made by taxpayers during a year. List of different deductible items is presented on Table 7. Specific deductions are focusing more for supporting certain activities (*e.g.* personal investments to housing or education) or demographic groups (retired persons). Increase of pensions has forced also the augmented of pensions related deductions. There is usually established an upper limit for specific deductible expenditure items, which in Estonia was 3196 EUR person.

As mentioned earlier, tax deductions shift the tax burden significantly over the earners groups. During the years of fast economic growth also tax deductions tend to increase. A way around, sharp economic crises and budget deficit situation also declined the benefits to the members of society in a form of smaller tax obligations.

Another issue with tax deductions is related with allocation of those benefits among taxpayers with different incomes. If the standardized deductions are available to every single taxpayer, then the itemized deductions are related with actual spending power or incomes earned. Therefore, in the first case the more favorable situation are lower income earners, in a latter case more benefits are received by the higher income groups. In Estonia, the widening the extent of tax deductible items has created a weird situation. In 2009, more than 14% of statutory tax deductions were not used because in many cases actual income was lower than deductions available. Consequently, the benefits from tax deductions are more full scale explored by the higher income taxpayers. Therefore, such an outcome goes to controversy to the main idea of tax deductions – decrease tax burden of low income earners. The deduction system actually provides benefits to those, who actually not necessarily need such a support!

6. Summary

Estonian personal income tax system has maintained its main principles during the two decades. A flat tax rate, combined with basic allowance and other deductions are still characteristics of Estonian PIT system.

However, amendments which define the tax base and changes of the tax rate have modified the system rather significantly. In accordance with the increased incomes, the actual tax burden is shifted to higher income earners. Despite the fact, that PIT system had maintained nominal flat rate to all income earners, the actual effective rates became rather progressive. Various tax deductions, therefore, have deformed

very significantly meaning of proportional PIT system and made efficient PIT rate rather progressive.

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